2015

Improving Community College Student Success through Investment of a Community Capitals Framework: A Multi-case Study

Gregory T. Busch

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**Improving Community College Student Success through Investment of
a Community Capitals Framework: A Multi-case Study**

Gregory T. Busch

**Dissertation submitted
to the College of Education and Human Services
at West Virginia University**

in partial fulfillment of the requirements for the degree of

**Doctor of Education in
Higher Education Administration and Leadership**

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**Morgantown, West Virginia
2015**

**Keywords: community college, student success, barriers to student success,
student success initiatives, community capitals, Appalachia**

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ABSTRACT

Improving Community College Student Success through Investment of a Community Capitals Framework: A Multi-case Study

Gregory T. Busch

The purpose of this dissertation is to understand how community colleges invest in a wide range of resources to achieve student success and how that investment can be better understood through the roles of the constructs found in the Community Capitals Framework. To address these questions, the top two Ohio community colleges demonstrating the greatest positive percent growth in overall student success from 2012 to 2015 were analyzed through case studies. From these inductive inquiries, success initiatives and college interventions to overcome barriers to student success were grouped into strands. The strands reflected a collection of similar themes helpful for understanding student achievement. The strands were then synthesized and viewed through the lenses of the Community Capitals Framework. This analysis revealed that the framework serves as an effective model which may provide a perspective for maximizing the execution of a student success agenda, developing a healthy academic environment, creating sustainable economic structures, and fostering a culture of social inclusion through supportive academic and student services. The findings offer insight into a tool which community college leaders may choose to employ as they focus on implementation of initiatives, interventions, and actions to improve student success.

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Chapter One

Introduction

At the heart of every college mission beats a drive for student success. Yet today, for many students achieving higher education is an elusive dream. In fact, “For nearly a decade, a chorus of higher education pundits, policy makers, and politicians has been sounding the alarm regarding the relatively low productivity of U.S. colleges and universities in producing students with certificates and degrees” (Handel, 2013, p. 5). At the same time, the Organisation for Economic Cooperation and Development (OECD) observed the United States decline to “near the bottom of developed nations in the percentage of students entering college who completed a degree program” (Handel, 2013, p. 6). Echoing the global concern, President Barack Obama (2011) declared,

In just a decade, we’ve fallen from first to ninth in the proportion of young people with college degrees. That not only represents a huge waste of potential; in the global marketplace it represents a threat to our position as the world’s leading economy. (p. 11)

As a result, higher education leadership has mobilized to implement strategies to restore the nation’s educational and economic global standing, while attempting to address the ever changing needs of students. The College Board Advocacy and Policy Center has warned, “If America is to regain its status as the leader in educational attainment, we must make an investment in higher education access, admission and success for all students” (Lee, Jr. & Rawls, 2010, p. 15). Furthermore, they contend, without reinvention of American higher education, the United States will continue to fall in standing on the global stage.

Statement of the Problem

Community colleges as vehicles of change. Important to the restructure of the American higher education system are the nation's community colleges. Community college advocate, professor, and the nation's Second Lady, Dr. Jill Biden (2011) proclaimed,

Today, community colleges are the largest, fastest-growing, most affordable segment of America's higher education system and for more and more people, community colleges are the way to the future. They're giving real opportunity to students who otherwise wouldn't have it. They're giving hope to families who thought the American Dream was slipping away. They are equipping Americans with the skills and expertise that are relevant to the emerging jobs of the future. (p. 8)

Building upon Dr. Biden's comments at the White House Summit on Community Colleges, President Barack Obama (2011) declared,

Community colleges aren't just the key to the future of their students. They're also one of the keys to the future of our country. We are in a global competition to lead in the growth industries of the 21st century. And that leadership depends on a well-educated, highly-skilled workforce. (p. 11)

Highlighting the role that America's community colleges play in meeting global economic challenges, Georgetown University economists Carnevale and Rose (2011) propose, "Adding an additional 20 million postsecondary-educated workers to the economy and increasing degree attainment rates will ... not only [allow the United States] to fill job requirements" but will also shrink "the growing disparity in earnings between those with a college education and those without" (p. 8).

As a result, President Obama (2011) challenged community college leadership by announcing that, “By 2020, America will once again lead the world in producing college graduates. And I believe community colleges will play a huge part in meeting this goal, by producing an additional 5 million degrees and certificates in the next 10 years” (p. 12). The President further called for mutual cooperation and investments from all sectors of the nation in support of improving community college education. Underscoring the need for collaboration, the President stated, “It’s so important that we work together on behalf of community colleges – and an education system that harnesses the talents and hard work of every single American” (2011, p. 12).

To reject the President’s call to action would further lead the United States into global economic and educational peril. Among the world’s mostly developed nations, the United States’ income gap continues to increase to a vast chasm second only to Chile (Desilver, 2014). Without intervention, the growing income inequality will continue to pose numerous global and domestic economic concerns (Sonin, Acemoglu, Sumner, Thoma, Varian, Heise, & Saint-Paul, 2011). Further, intergenerational mobility, which has been a hallmark of the United States’ socioeconomic system, would roughly become equivalent to that of Nepal and Pakistan (Isaacs, 2008). In response, Cruz and Haycock (2012) warn,

Inaction is not an option. Academic leaders and faculty must own the effort to improve student success, and reformers and policymakers need to calibrate and modulate the ‘productivity’ message, translating it into language that is consistent with the ideals of excellence and the commitment to institutional missions that characterize our public higher education institutions. (p. 52)

Therefore, formulating a well-developed plan focused on initiatives to improve student success and goal completion is essential for America's community colleges.

Meeting the national call. In response, the American Association of Community Colleges (AACC) organized the 21st Century Commission on the Future of Community Colleges. Charged with charting a path for the nation's community colleges, the commission responded with a national challenge for leadership "to increase the rates of completion of community college credentials by 50% by 2020, while preserving access, enhancing quality, and eradicating attainment gaps across groups of students" (AACC, 2014, p. 3).

Meeting the goals requires colleges to examine institutional policies, practices, and initiatives established to support student access and success. Further, institutional leadership is called upon to develop a greater understanding of the vast student diversity typical of community colleges and how that multiplicity creates an array of challenges in executing an effective student success agenda. In fact, Hughes (2012) declared, "The U. S. still has much ground to cover to align the many aspects of our education system toward increased postsecondary attainment, particularly in groups historically underrepresented in higher education" (p. 4). Responding to the national call for collaboration, completion, and accountability, educational stakeholders including legislatures, accrediting bodies, communities, administrators, faculty, and students echo the demand to refine efforts of improving learning outcomes and dedicating resources to assure increased levels of student success (Ewell & Jenkins, 2008).

The defining challenge of student success. Adding to the elusiveness of achieving student success has been the challenge of how to define it (Cruz & Haycock, 2012). In May 2007 the National Postsecondary Education Cooperative in conjunction with the National Center for Education Statistics and United States Department of Education attempted to do just that. A

three-day national symposium of more than 400 researchers, teachers, policymakers, elected officials, administrators, and students was convened to address the question, “What is student success?” The symposium was a culmination of an initiative which brought together educational scholars to address the central question and begin to define what, at first glance, seemed to be a simple concept, but resulted in a multifaceted and ill-defined phenomenon (Ewell & Wellman, 2007). Upon synthesis of the ideas brought forth from the symposium, they declared,

Student success is thus a generic label for a topic with many dimensions, ranging from student flow across the entire educational pipeline (high school graduation, college enrollment, retention, and degree completion), to the quality and content of learning skills achieved as a result of going to college, to positive educational experiences (such as student engagement or satisfaction. (p. 2)

Yet, in its simplest form, student success can be defined as “getting students into and through college to a degree or certificate” (p. 2).

However, to define student success as “degree or certificate completion” would be a misnomer and present an incomplete picture of meeting community college students’ goals (Jones-White, Radcliffe, Huesman, Jr., & Kellogg, 2010). In fact, it is important to recognize that, for many community college students, degree and certificate completion may not represent the student’s individual goal at all. Zarkesh and Beas (2004) suggest that while degree and certificate completion is an appropriate indicator, “to measure the success of a university, it does not similarly reflect the value of a community college due to the many two-year college students who take classes for reasons other than simply to attain a degree” (p. 64). For other populations of community college students, goals may include obtaining coursework for transfer to a four-year college or university, remediation of foundational skills in mathematics, reading, English, or

English as a second language, obtaining new skill sets for continued application in the workforce or job advancement, early admission programs for high school students, or simply completing coursework for personal educational enrichment (Wells, 2008). When embracing the multiplicity of goals, defining student success in community colleges is exceedingly complex (Dougherty & Townsend, 2006).

In response to a growing demand for institutional accountability and to meet the call for increasing the number of successful students, states have begun to tackle the question of improving student achievement, taking into account the wide spectrum of student goals in combination with the diversity of the student population when defining community college student success (Ewell & Jenkins, 2008; Jones-White, et al., 2010; Outcalt & Rabin, 1998; Zarkesh & Beas, 2004). State legislatures, boards of regents, and community college leadership are integrating the expansive definition into state funding models for public community colleges along with internal and external measures of accountability (Ewell & Jenkins, 2008; Jones-White, et al., 2010; Zarkesh & Beas, 2004;). Further, support from states to advocate for student success is critical and the partnership between states and colleges must be deliberate, strategic, and focused on improving student outcomes across each element of the institution's mission (Ewell & Jenkins, 2008). Therefore, for the purposes of this study, community college student success will be more broadly and comprehensively viewed as a cumulative expression of individual course completion, successful navigation through developmental education sequencing with ultimate success in college gateway courses, completion of academic milestones including transfer of earned credit to a baccalaureate institution or completion of a technical or transfer degree or certificate and successful transitioning through the academic experience of at-risk populations including minority, first-generation, and nontraditional age students. Simply

stated, this study defines student success broadly as helping students achieve their goals whatever they may be.

From access to success. According to Myran (2009),

Adding the element of student success to the open-door model has been a major development in community colleges during the past two decades, although being truly evaluative about the degree to which student learning outcomes match stated education goals is still a work in progress. (p. 7)

Building upon Myran's observations, O'Banion (2010) explains,

For more than 100 years, the Student Access Agenda has been the driving force of the community college movement ... the Student Success Agenda has (recently) emerged and become the single most important goal for community colleges. As it evolved, it has morphed into the Completion Agenda, a more sharply focused goal of student success that has become a national imperative. (p. 1)

Although the demand for student success is high, the scholarship as it relates to community colleges remains sparse. According to Bailey, Calcagno, Jenkins, Kienzl, and Leinbach (2005), "While there is a growing literature on this topic for baccalaureate institutions, few researchers have attempted to address the issue for community colleges." As a result, "There remain open many methodological and conceptual issues" (p. i).

However, for decades educational research has revealed that a myriad of internal forces, including family and financial responsibilities, student engagement, a sense of connectedness to the college, and academic preparation each have an impact on student success (Ishitani & Snider, 2006; Jones-White, Radcliffe, Huesman, Jr., & Kellogg, 2010; Perkhounkova, Noble, & McLaughlin, 2006; Tinto, 1975; Wells, 2008). As a result, the call to reimagine how these

elements affect students remains loud and clear. According to the Lumina Foundation (Applegate, personal communication, November 13, 2012), “To succeed we [higher education leadership] must focus on 21st century students,” and address the challenges “of the 17.6 million undergraduates (of which) 75% are juggling work, family, and school.”

Leadership is challenged to look holistically at the educational experience and address obstacles traditionally believed to be beyond the college and student’s control but, none the less, weigh heavily upon student success and achievement (Applegate, personal communication, November 13, 2012; Dougherty & Townsend, 2006). In fact, “Debate has swirled around the relative importance of factors external and internal to the community college, and within that, the relative importance and meaning of business demand” (Dougherty & Townsend 2006, p. 8).

Among the extrinsic forces confronting community colleges are funding streams, governmental involvement, and characteristics of the institutional service area including economic development, natural resources, and community structure. Additionally, leaders are challenged to look more closely at intrinsic aspects including human resources, institutional culture and values, and the physical facilities (Dougherty & Townsend, 2006). Integrating external and internal factors through the mission, practice, and a framework to address issues of student success remains the leadership challenge for the nation’s community colleges (Applegate, personal communication, November 13, 2012;).

Purpose of the Study

The purpose of this study was to discover the relationship, if any that exists between institutional investment of college resources and student success at select Ohio community colleges. Student success was measured based upon the Ohio’s state-established student success model which encompassed broad indicators of success including course completion, successful

transition through developmental education sequences, and a series of completed milestones. These benchmarks included transfer to a baccalaureate institution and degree and certificate completion (Ohio General Assembly, § 363.190, 2014). The model further addressed success for at-risk students including minorities, first-generation college students, and nontraditional students (Ohio General Assembly, § 363.190, 2014).

Conceptual Framework of the Study

To achieve the purpose of this study, an overarching framework integrating both sociological theory of communities and the community development and sustainability concepts of the Community Capitals Framework (Flora & Flora, 2004) was implemented. The combination of these perspectives facilitated a deeper insight into how community colleges maximize their resources for the benefit of student success. The college resources, aligned with community capitals, were applied through the lenses of the Community Capitals Framework (Flora & Flora, 2004). Specifically, the structure examined natural, cultural, human, social, political, financial, and built capitals and how each were represented singularly and integrated in the collective. The work of Dougherty and Townsend (2006) suggests that from a thorough exploration of intrinsic and extrinsic factors a comprehensive understanding of student success may be developed. Those factors directly correlate with the resources of the community college and when maximized become capital which fosters a healthy, vibrant, productive sociological community (Flora & Flora, 2004). The sociological communities, for the purpose of this study, were the cases generated at select Ohio community colleges.

Research Questions

From the voices of students, staff, faculty, and administrators at Ohio's top performing community colleges, this research discovered, through case studies including observation,

interviews and document analysis, the unique investments in each of the community capitals which have made these schools statewide leaders in student success. In fact, the colleges in this study shined among Ohio's community colleges as the top institutions with the highest aggregate positive percent change of student success points as determined by state metrics of the Ohio Board of Regents. In an effort to develop a deeper understanding of the exemplary practices at these institutions, the research centered on the following key inductive question: What is the role of the constructs found in the Community Capitals Framework in supporting community college student success?

Important to developing a comprehensive understanding of the role necessary to answer the central question, the following inquiries were explored at select Ohio community colleges.

1. How do college representatives describe institutional efforts of executing a student success agenda?
2. How do college representatives describe institutional investment in each of the constructs, as proposed by the Community Capitals Framework, including natural, cultural, human, social, political, financial, and built capitals?
3. How do college representatives describe how institutional investment in each of the community capitals has improved student success?
4. How do the constructs of the framework interact with each other to form a healthy academic environment, sustainable economic structures, and a culture of social inclusion with supportive academic and student services at each of the community colleges?
5. In what ways do the constructs at each of the colleges contribute to the overarching framework between the two colleges?

Method of Inquiry

To address these questions, the researcher must consider a variety of methods of inquiry and determine the most appropriate for the study. Yin (2014) suggests that when selecting methods of inquiry, that the researcher question three existing conditions. First, what type of research questions are being asked? If the study is seeking to learn how or why something happens it is deemed exploratory and conducive of a case study approach. Second, does the study require the researcher to control the behavior of participants? If the study is not designed to manipulate the participants, but rather inquire and observe people, events, activities, or patterns, then the method of inquiry supports a case study approach. Finally, is the focus of the study directed at what is currently happening or is it seeking historical analysis? He contends, if the researcher is attempting to discover current practices and actions, the inquiry bolsters a case study approach. Therefore, based upon the propositions of Yin (2014), the inductive nature of the research questions seeking how community colleges support student success combined with the desire to learn what is currently happening suggest that a case study approach was appropriate for this study. As a result, this study embraced a case study approach by discovering how exemplary community colleges in Ohio were effective in executing a student success agenda through the lenses of a community capitals framework.

Inspiration for the Study

The inspiration for this study was derived from personal experience as a first-generation community college student from rural Appalachia. Raised by a single mother who worked hard to make ends meet and a grandmother with an eighth-grade education but rich in wisdom, education had always been impressed upon me as the path to break through the challenges that I and so many around me experienced. Facing educational, community, family, and personal

barriers were a real part of my life and educational journey. The local community college became the door to a brighter future.

My personal experience is invaluable in understanding the needs of students. I confronted many of the barriers faced by students. Like 60% of today's full-time community college students (American Association of Community Colleges, 2015b), I also worked full-time while enrolled in college. Like many college students, I was married throughout my college career and, consequently, had additional family responsibilities. Raised in government housing, like nearly two-thirds of community college students, I was a Pell Grant recipient and classified as low-income. Like many community college students, I struggled with dependable transportation that was additionally complicated by the rugged West Virginia terrain, substandard infrastructure, and a roundtrip commute of more than 40 miles each day. Also like many students, I bucked a culture that placed little value on higher education and faced regular discouragement from secondary education leaders who advised me that my future would best be spent as an "encyclopedia salesman."

Today, I am an academic dean of a community college and in a position to bring about change and help the students achieve their goals. My focus is always on ways in which the college can assure a sound and rigorous curriculum while assisting the students in being successful in whatever their educational goal may be. I am sensitive to the needs of both the student and the college and understand that it is a collective effort to effectively execute a student success agenda. As I entered this study, I brought with me the philosophy that student success is not only a student or faculty member's responsibility but it is a shared obligation by every individual on the campus in cooperation with the greater community. I embraced the belief that collaboration, coordination, teamwork, consensus-building, partnership, and investment in

capital resources are all critical to student success. I believed that diversity presents multiple solutions for problems.

As a former professor of sociology, psychology, and philosophy, I viewed the community college through multiple sociological paradigms. As a functionalist, I recognized the vital role the college has in balancing consensus for higher education attainment among an array of social institutions. As a conflict theorist, I acknowledged the inequality of attainment, access, and success of higher education and a range of barriers that prevent students from achieving their goals, especially students of color, poverty, first-generation, and those having experienced substandard secondary education. As a symbolic interactionist, I understood the culture, dynamics, and communication between the stakeholders.

The community college changes lives; it changed mine. My commitment to community colleges has been unwavering and personal. In fact, beyond my education the community college has continued to play an important role in my family. As my children entered college they attended and received associate degrees from community colleges and they ultimately used their community college experience to lay the foundation for eventual undergraduate, graduate and postgraduate degrees.

I have dedicated my career to community college education. The community college is the engine driving economic development and an important educational institution embracing diversity and providing high-quality education for transfer students. The community college mission of access and success are real to me. I have had the privilege of witnessing first-hand how community colleges have facilitated success in students like me. Dedicated to student success is a mission built from a passion for changing students' lives and improving the communities in which we live. These experiences, together, formed who I am today: an advocate

for community college education, a proponent of hard work and a stick-to-itiveness, a believer of strong, vibrant communities, and a leader of equality, social justice, and fairness. It is clear that these qualities shape how I view the world and helped define the perspective that I applied to this study. I believe that community college stewardship is more than offering programs and classes. It is also a calling to be an agent of social change. I have responded to this personal calling and, from it, came the inspiration for this study.

Significance of the Study

This study sought to result in practical and useful findings to assist leaders of community colleges in achieving the institutional mission of advancing student success. This was accomplished through the synthesis of data that related to effective methods of investment of capitals made at select Ohio community colleges. Further explored was how the capital investment related to the community colleges' mission of student success. This was important for several reasons.

First, no scholarly research had been solely devoted to enhancing the effectiveness of community colleges by integrating the structures and functions of the college through the lenses of a community capitals framework. Second, the practice of the arts and sciences of educational leadership in community colleges had been largely void of a systematic approach to utilization of a wide spectrum of community resources toward the goal of student success. Third, there had been little research to indicate that community colleges could employ a community capitals/resources model to address student success through a lens that viewed the community college as a sociological community. Fourth, the findings serve as a framework for policy, procedure, and practice development to enhance student success through a community capitals paradigm in community colleges that have been traditionally challenged by below average

educational attainment, completion, and retention rates. Finally, as a national priority conveyed in the first White House Summit on Community College Education in 2010 and the subsequent summit in 2012, emphasis must be redirected by educational leaders to progressive, innovative, creative, and successful measures to improve student completion, graduation, and retention in the nation's community colleges. As a result, this research proved to be foundational in support of the national Completion Agenda envisioned by the White House and the national campus compact advocated by the American Association of Community Colleges.

Organization of the Study

This study is organized in five chapters in addition to references and appendices. Chapter Two reviews the literature and scholarship surrounding the key strands of this study: student success and the overarching conceptual framework. Chapter Three focuses on the research design and the methodology of the study, research justification, data management, protocol, and perspectives of the researcher. Chapter Four reports the data analysis and the results of the case studies at the participating Ohio community colleges. Chapter Five reports the cross case analysis between the individual case studies, the conclusions, implications, and recommendations of the study.

Chapter Two

Literature Review

Today, more than at any other time in the modern community college era, the student success agenda is driving the direction of America's two-year institutions (O'Banion, 2010). Yet, the rates of student success remain low and the national standing on the global stage in educational attainment continues to decline. This chapter explores the roots of community colleges and how the student success agenda has evolved to become the overarching theme in the missions of community colleges. Additionally, it examines student success and barriers confronting students and presents community college student demographics. Finally, this chapter will examine the paradigm of the Community Capitals Framework and how this perspective provides increased importance and emphasis through multiple resources when utilized in colleges to advance student success. The synthesis of these key strands of literature informing the study resulted from investigating a wide array of resources including online databases, peer-reviewed journals and scholarly publications, a variety of published resource texts and materials, and, when necessary, web documents from organizational sources.

Keywords: community college, student success, barriers to student success, student success initiatives, Appalachia, and community capitals

Historical Review of Community Colleges

The first half of the 20th century brought massive expansion to American higher education (Cohen, 1998; Lucas, 1994; Thelin, 2004). Out of this growth, an increased demand for postsecondary education developed and the birth of a uniquely indigenous sector of American higher education, the two-year college. From the beginning, the United States' two-year colleges introduced educational opportunities to those encountering barriers to success

including students from poverty, those with limited exposure to higher education, and individuals who found themselves place-bound for a variety of reasons and unable to relocate to obtain higher education. With the advent of community colleges, the American higher education system provided the depth and breadth necessary to meet evolving educational needs as represented by the vast diversity of skills and academic demands of students. In fact, Lucas (1994) suggests, “Without them [community colleges], American higher education could scarcely have accommodated the phenomenal increase in college enrollments registered between 1920 and 1940” (p. 221).

By the 1960’s community college growth was exploding at a rate of one new college opening its doors every week of the decade (Lucas, 1994). Positioned to be the recipients of the influx of baby boomers’ children “coming of age” in the 1970’s, the community college mission was shaped by an education-for-all philosophy key to embracing an access agenda and an open enrollment policy. At the same time, the definition of the colleges’ roles diversified and the institutions began focusing on transfer functions, vocational and technical education, recreational or community-interest courses, credit and noncredit options, continuing education, remedial education, and grantors of associate degrees. Thelin (2004) further suggests, “This proliferation of missions and constituencies was fueled by a state funding formula that provided a per capita subsidy for each student enrolled in a course” (p. 333). The combination of open enrollment, diverse missions, and state funding models created to reward colleges for moving students through the door and into classrooms, became the foundation of the student access agenda; this agenda became the prevailing emphasis in community colleges for the next 30 years. However, with increasing demands of accountability placed on community colleges over the last two decades and a growing number of states linking student success with state funding models, the

community college mission has intensified to place greater emphasis on the student success agenda, while attempting to balance the college's historical roots of broad access to all who seek a higher education (O'Banion, 2010).

Understanding Student Success and its Barriers

The first step to achieving student success is to understand the barriers that prevent it (Jones-White, et al., 2010). Over time, educational research has revealed a myriad of well-defined hurdles to student achievement: student engagement and interaction (Tinto, 1975), financial barriers (Bragg, Kim, & Barnett, 2006; Jones-White, et al., 2010; Poole & More, 2001), family and work responsibilities (Bailey, Calcagno, Jenkins, Leinbach, & Kienzl, 2006; Eller, Martinez, Pace, Pavel, Garza, & Barnett, 1997; Poole & More, 2001), pre-college knowledge of higher education (Jones-White, et al., 2010; Poole & More, 2001), secondary education preparation (Bragg, et al., 2006; Jones-White, et al., 2010; Poole & More, 2001), educational aspirations (Poole & More, 2001), family support (Bragg, et al., 2006; Eller, et al., 1997; Poole & More, 2001), first-generation student (Bragg, et al., 2006; Poole & More, 2001), a member of a minority category (Bragg, et al., 2006; Eller, et al., 1997; Poole & More, 2001; Zarkesh & Beas, 2004).

The scholarship on student success has been expansive and has engaged a variety of approaches including quantitative, qualitative, and mixed methods. For example, Jones-White, et al. (2010) applied different multinomial regression techniques to reveal that student success could be more appropriately defined beyond simply graduating from the institution of entry. Their work took a quantitative approach to understand student success for students who chose to transfer to complete a degree at a subsequent institution and explored barriers students experienced.

While research remains limited on student success and retention in community colleges, it is not entirely absent. Braxton, Hirschy, and McClendon's (2004) research concentrated on student attrition in community colleges and the importance of both the internal campus community (i.e., the academic and institutional environment) and surrounding community which supports the student life aspect of commuter students. In some cases, the literature on student success has been established by pioneers in educational research. Tinto's (1975) work on the student integration model is landmark scholarship contributing to the understanding of the value of student engagement. His subsequent revisions to the model addressed how other factors (e.g. work, low-income, family responsibilities and attitudes) affect students and concluded that barriers to student integration also become barriers to student success. Tinto has continued to be a significant contributor to educational scholarship particularly with regard to student success for more than last three decades and is frequently cited by educational researchers throughout student success literature.

Large national studies and multi-state student success initiatives have been valuable sources for understanding student success and barriers confronting students. For example, Bragg, Kim, and Barnett (2006) in conjunction with the Lumina Foundation's *Academic Pathways to Access and Student Success Initiative* explored academic transition from secondary education to post-secondary education and the hurdles facing students, especially at-risk students (minorities, first-generation, low-income, and students with inadequate secondary preparation). Further, several national student success initiatives have generated a plethora of educational research and have been responsible for collecting vast amounts of student success data; much of which has been contributed by the nation's community colleges. These initiatives include Achieving the Dream (2014a), Completion by Design (2014a), Complete College America (2014a) and a

variety of efforts led by the American Association of Community Colleges including the *Voluntary Framework of Accountability* (2015a). The national student success initiatives are financially supported by grants from a variety of philanthropic foundations (Bill and Melinda Gates Foundation, 2014; Carnegie Foundation for the Advancement of Teaching, 2014; Kresge Foundation, 2014; Leona M. and Harry B. Helmsley Charitable Trust, 2014; Lumina Foundation, 2014; USA Funds, 2014). Appendix B describes the missions and functions of the three major national initiatives: Completion by Design, Achieving the Dream, and Complete College America.

Other significant studies have focused on success in states or regions and conducted by higher education associations and volunteer professional affiliations. For example, the Ohio Association of Community Colleges (2014a) has worked closely collecting data and conducting research throughout Ohio's 23 community colleges including the *Community College Student Success Center* (Ohio Association of Community Colleges, 2014b), *Driving Success Initiative* (Ohio Association of Community Colleges, 2014c), and the *Americorp Completion Coaches*. Appendix C describes the success initiatives led by the Ohio Association of Community Colleges.

Likewise federal and state governments not only have been developing measures of accountability but also heavily involved in collecting data, conducting research, and implementing student success initiatives. The Ohio Board of Regents (2014a), for example, has introduced several statewide efforts including *One Year Option* (Ohio Board of Regents, 2014b), *PLA with a Purpose* (Ohio Board of Regents, 2014c), *College Credit Plus* (Ohio Board of Regents, 2014d), *Complete College Ohio* (Ohio Board of Regents, 2014e, 2014f), *Credit When It's Due* (Ohio Board of Regents, 2014g), and *Three-Year Degree Plan* (Ohio Board of Regents,

2014h). A description of each of the Ohio Board of Regents student success initiatives is found in Appendix D.

The literature on student success targeting a specific demographic or category of students is vast and includes, not only disaggregation by ethnicity and race, but also population diversity including urban, suburban, small town, and rural students. Poole and More (2001) concentrated their work on rural students with transferable applications to students in other settings. Their emphasis on factors affecting participation in higher education, strategies to remove barriers, and innovations to increase participation has shed light on challenges students encounter and provided valuable insight for educational leadership (Poole & More, 2001). In fact, Poole and More (2001) suggest that, in an effort to maximize student success, institutions must strive to remove the challenges for students and, through their research, have identified four categories in which these barriers may be classified.

The first category includes the barriers presented as a result of a breakdown of the overall educational system. They include substandard academic preparation at the secondary level, unavailability of college and career planning information, and the rising costs of higher education. The second category includes barriers resulting from community factors that include the lack of college-educated community role models, inadequate community and peer support for higher education, and geographic barriers including the lack of colleges in rural areas. Third, familial factors are identified as having a profound impact on student achievement. They include low parental expectations, the educational attainment levels of students' parents, the lack of knowledge regarding educational resources, and insufficient financial planning necessary to prepare for the economic challenges of attaining higher education. Finally, a wide range of personal factors affects the level of success. These include the student's lack of confidence in his

or her ability to attend college, the student's aspirations which are closely attributed to their socioeconomic status, gender issues especially facing women, ethnicity, minority inequality, and culture shock experienced when transitioning from rural areas to a more urbanized college (Poole & More, 2001).

The significance of community colleges addressing these barriers is clear (Engstrom & Tinto, 2008; Ewell & Jenkins, 2008; Jones-White, et al., 2010; Tinto, 1975; Wells, 2008).

According to (Eller, et al., 1998),

By removing barriers to participation in higher education in spite of financial and other challenges and by creating new awareness of opportunities –community colleges may become effective catalysts for community revitalizations” and “prevent the open door from becoming a revolving door. (p. 1)

Community College Demographics

Today, America's 1,132 community colleges serve almost half of all undergraduates in the nation with a disparate number of these students facing multiple barriers to success (American Association of Community Colleges, 2015b). True to its historical origins, these institutions represent a diverse population of students. Of the nation's undergraduate students, 61% of Native American students, 57% of Hispanic students, 52% of African American students, and 43% of Asian/Pacific Islander students are attending community colleges. Non-US citizens represent seven percent of students while four percent of community college students are military veterans (American Association of Community Colleges, 2015b).

Further, community colleges' populations represent students with unique challenges to student success. Almost 40% of community college students are first generation college students and 17% are single parents. Student demographics further indicate that 12% of the community

college student population is made up of students with disabilities (American Association of Community Colleges, 2015b).

Many low-income students turn to community colleges to receive higher education. Nearly 60% of all community college students receive financial aid (federal grants, federal loans, state aid, or institutional aid) and more than a third of federal aid and Pell Grants are received by community colleges (American Association of Community Colleges, 2015b). Additionally, nearly 60% of entering community college students require remediation of basic skills in English, reading, or mathematics before entering college-level courses. Despite the dedicated efforts of developmental education, of the students requiring remediation, 91.5% fail to graduate within three years (Complete College America, 2011).

Adding to the complexity, significant numbers of community college students are faced with the economic need to be employed while attending college. As a result, 61% of students enroll part-time. More than 70% of those part-time students are employed while attending college and more than 60% of full-time students also support a job outside the college (American Association of Community Colleges, 2015b). With economic and other factors forcing students into part-time enrollment, the success rate for these students is bleak. In fact, nearly 90% of all part-time students do not complete a four-year degree in eight years (Complete College America, 2011).

From these demographics it is clear that community colleges face multiple challenges to achieving a student success agenda. Simply stated, community college students are far more likely to be attending part-time and to be employed while enrolled in college. They are more likely to come from socioeconomic conditions of poverty and to possess additional extrinsic responsibilities of caring for a child or other family members. Community college students are

more likely to be representative of a category that has been historically at higher risk of being unsuccessful (minority or first-generation students). They are more likely to be unprepared for college-level courses and require remediation. They are more likely to be seeking higher education, skilled training or technical preparation without a high school diploma and are more likely to require support for English as a second language.

Despite serving a large population of at-risk students confronted with multiple barriers to success, community colleges are graduating a record number of students and continue to be an important component of the American higher education system. In the academic year 2012-2013, the nation's community colleges conferred 750,399 associate degrees and 459,073 certificates (American Association of Community Colleges, 2015b). At the same time, in the 2014-2015 academic year community colleges provided an affordable alternative to higher education with average community college (public, in district) tuition and fees at \$3,347 compared to four-year colleges (public, in state) at \$9,139 (American Association of Community Colleges, 2015b). Ironically, even with a record number of graduates and affordable tuition supporting low-income students, the number of successful students is woefully low and the number of graduates continues to fail to meet the national and global workforce demand.

Sociological Community Theory and the Community Capitals Framework

Community colleges as sociological communities. Educational and sociological researchers suggest that student success is best explored through multiple lenses and within the context of the culture and values of the community (Cruz & Haycock, 2012; Wells, 2008). This begs the questions, are community colleges *sociological communities* and can these social institutions also be studied through a sociological lens as distinct sociological communities?

Sociologically, a community is a group of interacting people, living in some proximity, either in space, time or relationship having things in common, be it shared geographic location or shared interest where they experience a feeling of connectedness and common similarities (Ferris & Stein, 2008; Henslin, 2006; Macionis, 2005; Robertson, 1989). Further, the nature of communities includes that they are sociological constructs with fuzzy boundaries and can exist embedded within other communities. Thus, communities form on multiple levels with communities nested in communities, nested in even larger communities but each sharing in the sense of belonging, participation, culture, and fellowship (Bartle, 2014).

The sociological study of communities and the interaction within and between communities dates back more than 100 years with the foundational sociological theory built upon the work of German sociologist, Ferdinand Tönnies. Tönnies described *Gemeinschaft* (human community) as the social fabric of daily life, interaction, and commonality bound by interpersonal relationships and a sense of collectiveness (Macionis, 2005). In his theories of modernization, Tönnies further described *Gesellschaft* as the impersonalization of society as a result of urban growth and industrialization and that *Gemeinschaft* was in direct threat from the growth of *Gesellschaft* (Macionis, 2005). However, contemporary sociologists have challenged the theory by pointing out that “Modern life, though often impersonal, is not completely devoid of *Gemeinschaft*” and modern societies are rich with “bonds of family, neighborhoods, and friendships” (Macionis, 2005, p. 631).

Bartle (2012) acknowledges that, “While our society is getting more formal, more regulated, more cold, more *Gesellschaft*, we are inventing new ways to make our lives to more resemble *Gemeinschaft*.” He further suggests, “Along with that, we find the creation and development of constructed communities” which “often are voluntary associations where

members share a common interest or goal” (n. p.). Further, with the advent of the Internet, constructed communities form and geographic boundaries may not exist (Bartle, 2012; Berg & Lune, 2012). As society becomes more complex and combined with the human innate demand for a greater sense of personal community, the response has been *Neo Gemeinschaft*, thus constructing a simpler, more personal community in the face of living on a dynamic global stage (Bartle, 2012).

Today, community colleges are bursting with complex bureaucracy in response to increasing regulation, oversight, and accountability. Yet, these institutions excel in delivering individualized, focused and personalized attention through academic programs and student services. Community colleges are unique assemblages which bring together engaging and interactive diverse populations with disproportionate numbers of students who represent minorities, first-generation, veterans, and nontraditional age students in comparison to four-year college and university demographics (American Association of Community Colleges, 2015b). Combining these distinctive institutional qualities, community colleges, as sociological communities, are prime examples of *Neo Gemeinschaft*.

Supporting this premise, Hampton and Heaven (2013) declare that an education community is counted among a plethora of sociological communities. Additionally, Hampton and Heaven (2013) describe the qualities of a community to include physical aspects, infrastructure, patterns of settlement, commerce and industry, demographics, history, community leaders (formal and informal), community culture (formal and informal), existing groups, existing institutions, economics, governance and politics, social structure, attitudes and values.

Applying the community qualities criteria of Hampton and Heaven (2013), the community college is itself a sociological community comprised of a population of students,

faculty, staff, and administrators with a common sense of being and purpose (student success) within a defined geographical region, with shared values and attitudes, and a defined social, fiscal, and economic structure. Each community college has an exclusive history, cultivates leaders and supports an infrastructure for higher education. At the same time, the community college is a vital member of the larger academic community and, as such, community colleges are vital components to the larger community of American higher education (Handel, 2013; Obama, 2011). The bonds of connectedness and collective purpose combined with the elements of commonplace and mission clearly distinguish a community college as a sociological community.

Therefore, community colleges may be examined through a variety of sociological models, paradigms, and frameworks developed for better understanding sociological communities. Based upon the understanding of embedded communities, any approach to improving student success may also be viewed holistically through the implementation of a community building framework and the investment of community capitals at each level of the sociological academic community.

Embracing the Community Capitals Framework. “Every community ... has resources within it. When those resources, or assets, are invested to create new resources, they become capital” (Flora & Flora, 2008, p. 17). In an effort to better understand the interplay between various forms of community capital and sociocultural community development, the Community Capitals Framework was developed (Flora & Flora, 2004). With the purpose of bringing about positive change and supporting communities and institutions to maximize and balance resources, the framework focuses upon seven forms of capital (natural, cultural, human, social, political, financial, and built) and how “they come together to create sustainable communities with healthy

ecosystems, vital economies, and social inclusion” (Flora & Flora, 2008, p. 19). Because the nature of community colleges is that of a sociological community, the Community Capital Framework (Figure 2.1) introduces a paradigm to explore how community colleges may invest in a range of community capitals to maximize the mission of student success resulting in a healthy academic environment (i.e., healthy ecosystem), sustainable economic structures (i.e., vital economy), and a culture of social inclusion with supportive academic and student services (i.e., social inclusion).

Figure 2.1. Community Capitals Framework. Illustrates the interconnectivity of the seven community capitals and the collective role each play in contributing to a vital economy, social inclusion, and healthy ecosystem. Adapted from “Rural Communities: Legacy and Change,” by C. Butler-Flora and J. L. Flora, 2008, p. 19. Copyright 2008 by Westview Press.

The Community Capitals Framework has been successfully utilized by researchers for over a decade to develop a comprehensive, holistic insight that has led to improving communities, organizations, and a variety of resource-driven entities (Emery & Flora, 2006; Flora, 2011; Flora, Bregendahl, & Fey, 2007; Flora & Flora, 2013; Flora, Livingston, Honyestewa, & Koियाquaptewa, 2009; Rasmussen, Armstrong, & Chazdon, 2011). In fact,

according to Flora and Bregendahl (2012), “The Community capitals framework has proven useful ... (and) forces a 360 degree examination of potential assets that can improve long-term resiliency of the organization or community” (p. 332). With a wide range of applications from economic and community development, agriculture, studies of biodiversity, and community assessment projects, there has been no known application to date for the purpose of improving institutions of higher education. Yet, according to Cornelia Butler-Flora (personal communication, January 12, 2015), “I think it is ideal for comparing community colleges... It just makes so much sense to compare institutions [through the Community Capitals Framework].”

The Community Capitals Framework is becoming a widely used instrument for analysis of communities and organizations (Flora & Bregendahl, 2012). In fact, “The Community Capitals model has become an invaluable tool” (Flora, Emery, Fey, & Bregendahl, n.d., p. 1) because it “reveals the interactions between different parts of a community ... (which are) systems that have inflows and outflows, ups and downs, progression and regression” (Jacobs, 2011, p. 1). Further, “Communities actively looking to the future can use community capitals to measure current resources and identify the potential for improvements” (p. 1). As a result, a three phase matrix has been developed to examine the context, observe the process, and to discover the outputs and outcomes (Flora, Emery, Fey, & Bregendahl, n.d., p.1). Specifically, the context allows the researcher to evaluate each of the community capitals through pre-existing conditions and applying them to the unique conditions of the study. The process phase identifies the actions, investments, and interventions by asking who, what, when, and how with regard to each of the capitals. The final step of the analysis (outputs and outcomes) examines the results and becomes a point of question when investigating how the capitals are being invested and integrated for maximum effect (Flora, Emery, Fey, & Bregendahl, n.d., p. 1).

However, an alternate form of evaluation, the Appreciative Inquiry Approach, is suggested by Flora and Flora when the goal is to not focus attention on the what is not working but “build on what is there and what is working” (Flora & Flora, 2008, p. 361). This study focused on what is working at select Ohio community colleges with regard to improving student success and, therefore, in the final analysis I employed the Appreciative Inquiry Approach. Summarizing the application of the Community Capitals Framework, Emery, Fey, and Flora (2006) declare, “Quite simply, the Community Capitals represent the things we have to work with; Appreciative Inquiry defines how we will work with them” (p. 1).

To develop a better understanding of how the community capitals relate to college resources, Table 2.1 was developed. Table 2.1 defines each of the community capitals (Emery, Fey, & Flora, 2006) and provides the link with the resources of community college.

Table 2.1

Context: Alignment of Community Capitals with College Resources

Capital Definitions (Emery, Fey, & Flora, 2006, pp. 5-6)

Community Capital	College Resources
Natural capital: “Those assets that abide in location, including resources, amenities, and natural beauty.”	Natural Capital includes community college service areas and districts, physical location of the college within the area served by the college, the diversity of the area served by the college, the campus setting and maintenance, or the demographics and geography of the area served.
Cultural capital: “Reflects the way people ‘know the world’ and how to act within it.”	Cultural Capital includes institutional values, beliefs, behaviors, and material objects that together form the college’s or the service area’s way of life. A value is “culturally defined standards by which people assess desirability, goodness, and beauty and that serve as broad guidelines for social living”

	(Macionis, 2005, p. 655). A belief is “a specific statement that people hold to be true” (Macionis, 2005, p. 650).
Human capital: “Include(s) the skills and abilities of people, as well as the ability to access outside resources and bodies of knowledge in order to increase our understanding and to identify promising practices.”	Human Capital includes the skills and talents of the people of the campus community. It includes the experience, education, professional development, and knowledge-base of employees. It may also include identification, understanding and application of promising practices.
Social capital: “Reflects the connections between people and organizations or the social glue that make things happen.” Social capital may be <i>bonding social capital</i> , “Refers to those close ties that build community cohesions,” or <i>bridging social capital</i> , “Involves weak ties that create and maintain bridges among organizations and communities.”	Social Capital includes college structure and hierarchy, teamwork, internal collaboration, partnerships between individuals and units of the college, and how these individuals work together. Further it includes interpersonal relationships and concepts of shared governance.
Political capital: “Reflects access to power and power brokers, such as access to local office of a member of Congress, access to local, county, state, or tribal government officials, or leverage with a regional company.”	Political Capital includes the reputation and external relationships the college has with the community, government leadership, other colleges and universities, and participation in sponsored success initiatives.
Financial capital: “Refers to the financial resources available to invest in community capacity building, to underwrite businesses development, to support civic and social entrepreneurship, and to accumulate wealth for future community development.”	Financial Capital includes financial and capital resources, the budget, or financial investments by the college directly related to student success and its other various resources.
Built capital: “Refers to the infrastructure that supports the community.”	Built Capital includes the physical infrastructure of the campus; buildings, grounds and the organization of the campus. It includes social infrastructure such as services available on campus to students, faculty, and staff.

Integration of the capitals. The Community Capitals Framework proposes that, for maximum benefits to the community, each of the community capitals requires investment and

that capitals must mutually support the other (Flora & Flora, 2004). In fact, when a community capital is ignored, unused, or not fully invested it begins to deteriorate and affect the other capitals. As a result, the “Current state of equilibrium in any community setting will likely begin a slow decline unless there is activity to change direction. Change, after all, is constant; our shaping of it determines our future” (Emery, Fey, & Flora, 2006, pp. 1-2). This study explored how the integration of capital investment and the interaction between the capitals has led to student success at exemplary Ohio community colleges.

The demand for student success has never been greater (O'Banion, 2010; Obama, 2011) and the review of literature has illustrated how every corner of higher education is responding to the public calling for greater accountability and demonstrated student success. While the mandate is great, the challenges facing community colleges to deliver and effectively support a student success agenda are substantial. Vast diversity of student needs and demographics along with a wide array of barriers contribute to the challenges colleges confront in helping students achieve their goals. The responsibility to identify the barriers, assist students to success, and rebuild the American workforce has largely fallen upon higher education leadership to find solutions, develop strategies, and implement interventions (Cruz & Haycock, 2012; Dougherty & Townsend, 2006). This study did just that. Using the Community Capitals Framework provided the lenses, it explored the practices at proven community colleges in an effort to develop a deeper understanding of potential solutions, operative strategies, and successful interventions. Chapter three will open the door of inductive inquiry by exploring the methodological approach embraced for this study.

Chapter Three

Methodology

In this chapter, I will explain the methodological approach in addressing the key question of this study: What is the role of the constructs found in the Community Capitals Framework in supporting community college student success? This question required gathering deep knowledge from the emic (insider's) perspective as it is the participants' perspectives that provided the answer to the study's question.

The View through an Inductive Lens

The nature of the inquiry called upon the participants to describe, interpret, characterize, assign meaning and apply concepts to their institutional activities. Further, it elicited participants to express their understanding subjectively and respond to not only to campus activities but also to the outcomes and qualities of the initiatives. Berg and Lune (2012) explain, "Quality refers to what, how, when, where, and why of a thing – its essence and ambience" (p. 3). It was this essence and ambience that I strived to discover. Further, qualitative research "refers to meanings, concepts, definitions, characterizations, metaphors, symbols, and descriptions of things" (p. 3). Through interviews, probing inquiries, and a focus on the insider's perspective these key findings through an inductive approach were revealed. Dabbs (1982) suggests that the distinction between quantitative and qualitative approaches to research rests on the "notion of quality" as "essential to the nature of things (and) ... quantity is elementally an amount of something" (p. 32). Therefore, with the goal of the study to determine the essential nature of the colleges' student success agendas in combination with the inductive nature of the inquiry, it was congruent that a research design followed a qualitative methodological approach.

Strategies to accomplish the qualitative research goals have grown over recent decades and include a wide variety of approaches. As a result, researchers have expanded the knowledge base of inductive research by targeting specific forms of inquiry; authorities of qualitative research have identified a vast array of differing methodologies (Creswell, 2003). As Merriam (1998) notes, “A short review of these typologies serves to underscore the vast variety of qualitative research, as well as the lack of consensus as to major types” (“Major Types of Qualitative,” para. 1). In an effort to bring order and clarity she further suggests that, of the many approaches to qualitative research in educational settings, the five most common are “basic or generic qualitative study, ethnography, phenomenology, grounded theory, and case study” (Merriam, 1998, “Major Types of Qualitative,” para. 5). In alignment with the strategic goal of discovering effective student success practices, this research in higher education institutions embraced a case study approach.

Case Study

The use of case studies has long been held as a viable method for developing a deeper understanding of phenomena, simple or complex, within units of analysis and has been supported thoroughly throughout scholarly literature (Berg & Lune, 2012; Bogdan & Biklen, 2006; Gomm, Hammersley, & Foster, 2000; Hagan, 2006; Merriam, 1998, 2009). According to Scholz and Tietje (2002), “A case is considered from a specific perspective and with a special interest ... and always related to something in general” (p. 1). Additionally, Stake (1995) points out that cases have the quality of uniqueness, especially among other similar units or theoretical constructs. Further, cases are “subject to evaluation, because scientific and practical interests are tied to them” and “they are used for purposes of demonstration and learning, both in education and in research” (Scholz & Tietje, 2002, p. 1).

Underscoring the applicability of case studies in educational research, Merriam (1998) states,

Case study research in education is conducted so that specific issues and problems of practice can be identified and explained; researchers in education often draw upon other disciplines such as anthropology, history, sociology, and psychology both for orientation and for techniques of data collection and analysis. (Disciplinary Orientation, para. 1)

Specifically, case studies have found particular application in historical research within sociology and education. According to Merriam (2009), “Sociological case studies attend to the constructs of society and socialization in studying educational phenomenon” (Disciplinary Orientation, para. 12). Further, Merriam (1998) suggests,

Sociology, like history, anthropology, and psychology, has influenced the theory and methods of case studies in education. What makes these case studies in education is their focus on questions, issues, and concerns broadly related to teaching and learning. The setting, delivery system, curriculum, student body, and theoretical orientation may vary widely, but the general arena of education remains central to these studies. (Disciplinary Orientation, para. 13)

Therefore, it is congruent that a case study approach, applying a sociological community framework to the understanding student success in an educational setting, was appropriate for the design of this study.

Case studies assume an intensive and holistic approach and have significant potential to have an impact on how a population may be affected. In fact, Yin (2014) points out, “Case study research arises out of the desire to understand complex social phenomenon ... (and) allows investigators to focus on the ‘case’ and retain the holistic and real-world perspective” (“Salience

of Case Study,” para. 2). Further, Merriam (1998) suggests that the outcomes and impact of case studies may “directly influence policy, practice, and future research” (Case Study, para. 1).

With an increased demand to improve student success, it is hoped, as Yin and Merriam suggest, that the insight gathered from focused, comprehensive case studies at participating Ohio community colleges may help shed light on developing effective student success initiatives, practices, and policies.

Embedded Case Study in Educational Research

According to Scholz and Tietje (2002), “A holistic case study is shaped by a thoroughly qualitative approach that relies on narrative, phenomenological descriptions. Themes and hypotheses may be important but should remain subordinate to the understanding of the case” (p. 9). Further, they define an embedded case study as “(involving) more than one unit, or object, of analysis and usually are not limited to qualitative analysis alone. The multiplicity of evidence is investigated at least partly in subunits, which focus on different salient aspects of the case” (pp. 9-10).

Merriam (1998) suggests that embedded case studies “involve collecting and analyzing data from several cases and can be distinguished from the single case study that may have subunits or subcases embedded within” (Multiple Case Studies, para. 1). Further, previous studies in educational settings have supported this embedded case study approach for developing a deeper understanding of successful institutions (Merriam, 1998). For example, in Lightfoot’s work (1983), which sought to understand best practices in ‘good’ high schools, the researcher conducted six individual case studies, which she referred to as portraits, and subsequently followed-up with cross-case analysis to garner a deeper understanding of what constituted a ‘good’ high school.

Similar in design and goals to the Lightfoot study (1983), the design of this study was classified as an embedded case study whereby the phenomenon of student success was explored in select community colleges which are, by sociological definition, communities. While the central focus remained the same, the approach to achieving this goal was discovered to be uniquely specific to each participating institution. Therefore, individual portraits provided the snapshots of what each college is doing to address matters of student success. Thus, the design of an embedded case study was appropriate to collect and analyze student success data from each participating community college as individual cases under the umbrella of improving student success and, subsequently, to compare and contrast discoveries within and between the colleges.

This case study research encompassed inductive studies at two Ohio community colleges and explored these institutions as sociological communities. In particular, the sociological perspective guiding the case studies was the Community Capitals Framework introduced by Flora and Flora (2004) and involved multiple guided inquiries leading to a deeper understanding of how the colleges are integrating a community capitals approach to support student achievement. According to Berg and Lune (2012), community case studies conducted around a singular concept is an appropriate method to gain a deeper understanding of a phenomenon occurring in the community. For the purposes of this study, the singular concept, congruent with the definition by Berg and Lune, was student success initiatives and how colleges target efforts to advance student success. The communities under study were the participating institutions.

Patton (2002) explains that the primary challenge for researchers is, “describing and understanding these dynamic processes and their holistic effects on participants so as to provide information for program improvement” (p. 54). A goal of the study was to develop an insight into student success and ascertain methods, if any that may lead to improving student success

initiatives. Consequently, for this study, the dynamic and holistic effects, according to the definition purported by Patton, were the lenses of the Community Capitals Framework (Flora & Flora, 2004) through which the study was conducted.

Participant and Site Selection

An important distinction of qualitative research is that “Generalization in a statistical sense is not a goal” (Merriam, 1998, Sample Selection, para. 2). In fact, “Probabilistic sampling is not necessary or even justifiable in qualitative research” (Merriam, Sample Selection, para. 2). As a result, “the most appropriate sampling strategy is nonprobabilistic” (Merriam, 1998, Sample Selection, para. 2). Patton (2002) further suggests that one of the most appropriate forms of non-probabilistic sampling strategies in case studies is purposeful sampling. Congruent with the goals of this study, Merriam (1998) explains “Purposeful sampling is based on the assumption that the investigator wants to discover, understand, and gain insight and therefore must select a sample from which the most can be learned” (Sample Selection, para. 2). She adds, “The crucial factor is not the number of respondents but the potential of each person to contribute to the development of insight and understanding of the phenomenon” (Beginning the Interview, para. 1).

Patton (2002) explains, “The logic and power of purposeful sampling lie in selecting information-rich cases for study in depth” (p. 230). Information-rich cases provide a means to discover the greatest amount of information about the central focus of the study and, when concentration is focused on exploring information-rich cases, the result yields discoveries and in-depth context of the research interest as it relates to the cases rather than sweeping generalizations (Patton, 2002). Therefore, the sample participants of this study were selected based upon the direct roles they play in relationship to advocating student success in their

respective institutions and how they contribute to student success thus making the institution an information-rich case.

Merriam (1998) suggests that “To find the best case study, you would first establish the criteria that will guide case selection and then select a case that meets those criteria” and “For multi-case or comparative case studies you would select several ‘cases’ based on relevant criteria” (“The Sample in Case,” para. 3). For the purposes of this study, the site selection was based upon a positive deviance case sampling model. Patton (2002) explains that selecting extreme case samples provides information-rich data and “The logic of extreme case sampling is that lessons may be learned about unusual conditions or extreme outcomes that are relevant to improving typical programs” (p. 232). Further, Patton (2002) suggests that, “In many instances, more can be learned from intensively studying exemplary (information-rich) cases than can be learned from statistical depictions of what the average case is like” (p. 234). The focus of this study was on two Ohio community colleges that have been determined to be highly effective in actualizing student success based upon the state established model of determining student success and utilized for performance-based funding.

Integrating a non-probabilistic, purposeful, and positive deviance sampling approach, Miles and Huberman (1994) suggest four key aspects to further define the sampling approach; setting, actors (participants), events, and process. The setting designates the location of the research. The actors are those who will be purposefully selected to participate in the study and possess information-rich knowledge of the subject of inquiry. The events include observations and interviews regarding the research focus and the process describes the how the actors engage in the events and processes within the setting.

Setting. According to Patton (2002), “One of the strengths of qualitative analysis is looking at program units holistically” and “The program, organization, or community, not just the individual people, becomes the case study focus” (p. 228). The setting of the case studies in this multi-case analysis focused holistically on student success through a sociological framework at select Ohio community colleges. The selection of institutions to participate in the study followed two primary criteria. First, the institution must be a regionally-accredited Ohio public, comprehensive community college. Second, the participating community colleges must have demonstrated positive percent growth in each of the success factors as identified in the statewide performance-based funding model.

Upon review of self-reported data to the Ohio Board of Regents, of the 23 comprehensive community colleges in Ohio only two have shown positive percent growth in all success categories over the last three years. Both of these colleges agreed to participate in this study and are identified by the pseudonyms Buckeye Community College and Cardinal Community College. The average percent positive change across the success categories for these exemplary institutions was 20% and 7%, respectively. The overall percent change across all Ohio community colleges spanned 20% to -35%. Appendix E disaggregates the data by institution based upon course completion, success points, degrees and certificates awarded, and successful student transfer. The data demonstrates total percent change from academic year 2012 to 2014. This percent change is the key data point for determining institutions for this study. Appendix F provides deeper analysis of percent change between each of the categories.

Participants. Each college president appointed a gatekeeper from the institution to assist the researcher with gaining access to employees and students for interview, documents for analyses, and to provide a campus visit for observation purposes. The criterion for the selection

of the institutional participants was based upon a holistic view of student success including insight from administration, academic affairs, student services, administrative services, college staff, and students. Every effort was made to select college personnel with a minimum of three years employment at the institution or special expertise in student success and students with a minimum of one year enrollment at the college. All participants were adults over the age of 18.

The first tier of participants interviewed for this study included five representatives. These individuals, in their roles at the college, possess direct responsibility for advancing student success and are knowledgeable of the campus student success agenda. Specifically, the first tier participants included, when available:

1. The president or academic administration designee.
2. The student success coordinator/director.
3. A member of the faculty or faculty leadership team.
4. A senior administrator or department head of student services or student affairs.
5. A senior administrator or department head of administrative services.

According to Dexter (1970), it is appropriate for the researcher to incorporate in early interviews a flexibility that may lead to identifying key individuals for further interviews and may shed more light upon the topic. Vashistha, Cutrell, and Theis (2015) describe this recruitment of participants as snowball sampling which “reach(es) out to (the) inaccessible, excluded, or hidden populations, researchers often recruit participants based on chains of personal referrals” and “is often embraced as the only way to approach hidden or marginalized populations” (p. 1). Utilizing this technique revealed information that warranted additional interviews and included persons not otherwise anticipated to have extensive knowledge or experience with the student success agenda.

Student voices are also essential to a comprehensive understanding of achievement. Student perspectives shed light upon successful initiatives, strategies, and interventions to overcome known barriers to success. There were at least three student participants from each institution.

The criterion for selection of students was based upon state-established success factors. These categories were created by the Ohio General Assembly (2014) to monitor student progress for the purpose of allocation of success points related to the performance-based funding model. Further, the target populations identified represented categories which research has shown to be at increased likelihood of being unsuccessful and in need of student success interventions. The categories established in Ohio Revised Code include minority students specifically African-American, Native American, or Hispanic, low-income students (defined as being Pell Grant eligible), and nontraditional age students (25 years and older) (Ohio General Assembly, 2014). These students are collectively referred to as access groups based upon the fact that access to higher education is frequently a significant barrier to their success. The performance-based funding model rewards community colleges for success within the access groups with bonus success points applied toward the state share of instruction subsidy. Further, the state awards success points for assisting community college students with transfer to four-year colleges and universities (Ohio General Assembly, 2014). For this reason, this study also included interviews with students pursuing transfer to a college or university for a baccalaureate degree.

Further criterion for student selection was based upon college readiness. The state performance-based funding model rewards colleges for shepherding students who are not college-ready (in need of high school remediation) and successfully advancing them to college-level courses through developmental education (Ohio General Assembly, 2014). For this reason,

it was important to include the perspective of students who have begun at the level of remedial education and have successfully completed his/her first, sequential college-level course. The gatekeeper and researcher collaborated with faculty and student services staff to identify specific individuals for each student category. All participants were adults over the age of 18.

Based upon these criteria, the students participating in this study represented the following categories and some student participants represented multiple categories:

1. A state-defined (African-American, Native American, or Hispanic) and self-identified minority category.
2. Low-income as defined by having been Pell-eligible at any time while enrolled in the college.
3. Nontraditional age as defined as 25 years of age or older.
4. Developmental education success as defined by having begun in at least one developmental education course (remedial English, reading, or mathematics) and successfully completed the first college-level sequential course (English or mathematics).
5. Transfer seeking to another college or university for completion of a bachelor's degree.

Events. The institutional representatives (employees and students) participated in an individual interview exploring their role, experience, and knowledge of student success initiatives taking place on the campus. The purpose of the individual interviews was to develop an in-depth perspective of student success through the personal lenses of the stakeholders. Further benefit of the individual interviews was that it allowed the participant the privacy to discuss issues in a forum that does not present as a perceived threat or risk to the participant. In

fact, according to Patton (2002), “Individual interviews were 18 times more likely to address socially sensitive discussion topics than focus groups” (p. 389).

Process. The participant interviews were limited to 90 minutes and were conducted individually with each member of the representative groups. The format of the interview was guided, open-ended questions that permitted probing, follow-up inquiry. The individual interviews were held in a private office at Cardinal Community College and a conference room at Buckeye Community College. Each interviewee was provided a cover letter describing the study and the interview was recorded by digital audio recording. The cover letter is located in Appendix G and the interview protocol is located in Appendix H.

Data Collection Procedures

Excellence in qualitative research relies on multiple methods of data collection from multiple sources related to the case (Berg & Lune, 2012; Creswell, 2003; Merriam, 2009; Yin, 2003). In fact, according to Berg and Lune (2012), two essential elements must exist in case study research. First, “Case studies require multiple methods and/or sources of data” (p. 325). Engaging multiple methods of inquiry affords researchers a richness of data and information regarding the phenomenon. The most common methods used in qualitative research include participant observation, interviewing, and collection of artifacts and texts (Cohen & Crabtree, 2006; Creswell, 2003; Merriam, 1998). Second, Berg and Lune (2012) insist that there must be “...some broader category of events (or settings, groups, subjects, etc.) of which the present study is one case” (pp. 325-326). That is, an overarching concept, phenomenon, or condition must be the focus and the data collection techniques are selected based upon the types of information hoped to be obtained about the focus (Merriam, 1998). Further, Berg and Lune (2012) suggest that through case study analysis, the researcher is permitted to “capture various

nuances, patterns, and more latent elements that other research approaches might overlook” (p. 327). As a result, this researcher employed three forms of data collection (observation, interviews, and document analysis) identified as effective approaches to address the study’s research question while focusing on discovery of efforts to improve student success. Table 3.1 reviews the research questions of this study and indicates how these questions were answered through a variety of data sources. A deeper explanation of how each of these data sources were engaged in this study follows.

Table 3.1

Research Questions Linked to Data Sources

Research Question	Data Source
How do representatives of select Ohio community colleges (with a proven record of student success based upon the state-defined student success model) describe their institutional efforts of executing a student success agenda?	Interviews Observation Document Analysis (include, but not limited to): 2014-2015 Student Success and Student Completion Report; Policy Manual; Mission, Vision, Goals, and Values Statements; Employee Handbook; Student Handbook; College Catalog
How do representatives of select Ohio community colleges (with a proven record of student success based upon the state-defined student success model) describe their institutional investment in each of the community capitals, as proposed by the Community Capitals Framework, including natural, cultural, human, social, political, financial, and built capitals?	Interviews Observation Document Analysis (include, but not limited to): Marketing and media materials and publications; Mission, Vision, Goals, and Values Statements; Policy Manual; Employee Handbook; Student Handbook; College Catalog
How do representatives of select Ohio community colleges (with a proven record of student success based upon the state-defined student success model) describe how their institutional investment in each of the community capitals (natural, cultural, human, social, political, financial, and built) has improved student success?	Interviews Observation Document Analysis (include, but not limited to): 2014-2015 Student Success and Student Completion Report; Policy Manual; Mission, Vision, Goals, and Values Statements; Employee Handbook; Student Handbook; College Catalog

Interviews. According to Merriam (1998), “Interviewing is probably the most common form of data collection in qualitative studies in education” (Collecting Qualitative Data, para. 4). As a result, this study relied heavily on information gathered from individual interviews. According to Creswell (2003), interviewing is an effective tool that permits the researcher to gain information through direct communication when prolonged observation is not a realistic option. Further, interviewees serve as valuable resources for applying context to the case and an historical perspective of how the case has been previously managed. Finally, interviewing allows the researcher to control the line of questioning by directing or opening pathways for the interviewees to respond, react, or expand upon the topic.

The interviews followed a semi-structured format. Merriam (1998) suggests:

This type of interview either all of the questions are more flexibly worded, or the interview is a mix of more and less structured questions (which) allows the researcher to respond to the situation at hand, to the emerging worldview of the respondent, and to new ideas on the topic. (Types of Interviews, para. 3)

The interviews permitted probative follow-up questioning. According to Merriam (1998), “Probing can come in the form of asking for more details, for clarification, for examples” (Probes, para. 1). In fact, probative follow-up is essential for qualitative studies because it is impossible to predetermine all areas surrounding the topic or phenomenon that may arise in interviews. Glesne and Peshkin (1992) suggest that researchers must be prepared to include probing into the interview process. They recommend that “Probes may take numerous forms; they range from silence, to sounds, to a single word, to a complete sentences” (p. 85).

The participants were asked a series of guided, open-ended questions utilizing the major styles proposed by Strauss, Schatzman, Bucher, and Sabshin (1981) regarding their personal role, experience, knowledge, and insight into student success initiatives, strategies, and efforts which are taking place or have taken place on the campus. According to Merriam (1998), preparation for a qualitative research interview requires careful thought and planning with regard to the questions as they relate to type of interview structure of the study. She recommends that this is best accomplished by the creation of an interview schedule that “is nothing more than a list of question you intend to ask in an interview” (The Interview Guide, para. 1). Merriam further suggests that in a semi-structured study, the interview schedule may include:

Several specific questions that you want to ask everyone, some more open-ended questions that could be followed up with probes, and perhaps, a list of some areas, topics, and issues that you want to know more about but do not have enough information about at the outset of your study to form specific questions. (The Interview Guide, para. 1)

The interview schedule includes not only the question or area of inquiry but also a clear link to the research questions guiding the study. Table 3.2 illustrates this linkage.

Table 3.2

Interview Schedule and Linkage to Research Questions

Interview Schedule Question	Research Question
“Student success” may mean a lot of different things to different people and in different settings. For the purpose of this study, “student success” at (name of the community college) means helping students achieve their goals whether that is to earn a degree or certificate, pick up a credential, receive workforce and job skills training, transfer to a four-year college or university, take a class	How do college representatives describe institutional efforts of executing a student success agenda?

<p>based on personal interest, or build upon skills that may need improvement in English, math, reading or English as a second language. With this broad definition of student success in mind, in what ways do you see (name of the community college) contributing to the success of the students?</p>	
<p>(Name of the community college) is an important institution in the (city) area. For the college to be successful in achieving its mission, it relies on a number of relationships and strengths. I am going to ask you about some of those relationships and strengths. I would like you to describe how you see, or don't see, how these come into play at (name of the community college).</p> <p>Describe:</p> <ol style="list-style-type: none"> The campus in general. The buildings and grounds. The organization of the campus. The units of the campus. The services available on the campus for students, faculty, and staff. The physical location of the college within the area served by the college. The diversity of the area served by the college. The demographics and geography of the area served. The reputation and relationship the college has with the community, the government leaders, and other colleges. The skills and talents of the people who work here. Their experience. Their education. Their professional development. The financial resources of the college. The budget. The financial investments in the college and its various resources. The values of the college. The things that the people working here believe. The collective purpose or philosophy. Teamwork, collaboration, partnerships, and units of the college and how people do, or do not, work 	<p>How do college representatives describe institutional investment in each of the constructs, as proposed by the Community Capitals Framework, including natural, cultural, human, social, political, financial, and built capitals?</p>

together. The organizational structure and hierarchy of the college.	
As you think back to the previous question about the various relationships and strengths at (name of the community college) and the first question with the broad definition of “student success,” in your opinion how have those relationships and strengths supported the college’s mission of helping students become successful in achieving their goals?	How do college representatives describe how institutional investment in each of the community capitals has improved student success?

The individual interviews were digitally voice recorded and transcribed to a verbatim transcript. The resultant transcripts were used for analysis. The recorded data and the transcribed records were kept in a secure location under protection of the researcher and were destroyed at the conclusion of the study.

According to Taylor and Bogdan (1984), at the onset of every interview five key points should be discussed with the participant. First, the interviewer must explain the purpose of the study and the motives behind the study. Second, explanation of the use of pseudonyms will be provided along with clarification on how the link between the pseudonym and actual identity will be managed and destroyed at the conclusion of the study. Third, as an extension of the purpose of the study and how the study will be conducted, the interviewee will receive information about how the content of the study is managed and who will have final control and decision making with regard to the content. Fourth, if compensation is included for participation in the study, Taylor and Bogdan emphasize that it should be discussed at the onset of the study. This study will not include compensation for participants. Finally, logistical matters concerning locations, times, duration, and number of interviews required for participation will be explained. Each of these key points were provided along with the standard statements of confidentiality and participation agreements approved by the Institutional Review Boards of West Virginia

University, Buckeye Community College, and presidential approval from Cardinal Community College. Given the titles of some of the participants, some participant identity was unable to be masked. Participant rights under the research agreements were explained. Willing participants were required to acknowledge their understanding of the rights under the study agreements by signature. The consent form is located in Appendix I.

Observation. Through site visits at each participating college, the researcher toured the campuses and engaged with members of the campus community with special emphasis given to the areas dedicated to student success. Specifically, the researcher observed centers, offices, and departments dedicated to student success, tutoring or student assistance services and programs, and other campus-based initiatives established for the purpose of improving and enhancing student achievement.

The role of the researcher was known to the participants. According to Creswell (2003), the qualitative researcher may assume the role of both an observer and participant and the researcher may make his or her research purpose known to the participants. In fact, Creswell (2003) suggests that through observation the researcher engages first-hand experience of the participants' activities, understands new and emerging information and records it as it is revealed, discovers unique or unusual aspects of the case, and obtains information about case that participants may be reluctant or uncomfortable to disclose in an interview. Further the necessity to include observation as a key element of qualitative research is underscored by Scholz and Tietje (2002) when they declare, "All methods should employ direct and participant observations" (p. 13). Consequently, the researcher participated through interaction with employees and students and maintained observation notes. The observation notes were used in

the analyses and remained in a secure location until the conclusion of the study when the notes were destroyed.

Document analyses. This qualitative study employed document analyses and review of archival records to provide a richer context and thick description of the student success mission of the participating colleges. According to Creswell (2003), institutional documents and public records allow the researcher to gain insight into the language, words, and descriptors used by case participants. Further, document analysis allows the researcher to discover the thoughtful and deliberate nature the participants have contributed to the topic explored through the case.

Specifically, this study explored internal and external documents developed for the purpose of achieving or guiding student success. These documents may included the 2014-2015 *Student Success and Student Completion Report* submitted by the colleges' boards of trustees to the Ohio Board of Regents, campus policies and procedures, college catalogs, employee and student handbooks, and the institutional mission, vision, values, and goals statements. Other documents included press releases, media publications, information retrieved from the college website, and reports to internal and external stakeholders and other public correspondence related to student success. The purpose of document analysis was twofold. First, it was a goal to develop insight into successes that may not be revealed through observation or interviews and to expound upon information that may not have been fully discovered using other methods. The second goal was to discover the extent in which the institution enculturates the mission of student success into the foundation of the college through its governing documents.

The focus of document analysis remained on discovering information that may support answers to the research question guiding this study. As each document was reviewed the following three questions served as reflective strategies. First, how does this document share

insight into the student success agenda of this college? Second, how does it illustrate how the college invests in any of the community capitals to support the college's mission? Finally, how does it provide a connection between how the college is investing in one or more of the community capitals and also supporting a student success agenda?

Data Analysis and Interpretation

According to Miles, Huberman, and Saldana (2014, Purpose of this book, para. 1) the central question facing the task of data analysis and interpretation is, "How can we draw valid and trustworthy meaning from qualitative data, and what methods of analysis can we use that are practical and will get us knowledge that we and others can rely on?" Creswell (2003) suggests to accomplish this goal that it "...involves preparing the data for analysis, conducting different analyses, moving deeper and deeper into understanding the data, representing data, and making an interpretation of the larger meaning of the data" (p. 190). A best practice of fundamental data analyses and interpretation includes first cycle coding, pattern or second cycle coding, analysis of researcher thoughts and comments (jottings), analytic memoing, assertions and propositions, and within-case and cross-case analysis (Miles, Huberman, & Saldana, 2014). This section describes the timing of data analysis, and key methods and techniques of data analysis and interpretation adopted for this study.

Figure 3.1. Data analysis process. Illustrates the process of data analysis integrating the best practices as suggested by Miles, Huberman, and Saldana and the specific applications of the data collected of this study.

Timing. Data analysis is most effective when done concurrently with data collection (Miles, Huberman, & Saldana, 2014; Yin, 2014). Myriad collection techniques lead to information that called for further exploration and deeper understanding and, as a result, the data gathered helped shape the next steps in the collection and interpretation process. Delaying the interpretation of data until the conclusion of the collection phase or the end of the study would have resulted in missed opportunities to gain valuable insight into the case, fail to connect the findings, and missed opportunities to explore new or emerging hypotheses. In fact, failing to conduct concurrent interpretation would have resulted in an incomplete study without the revelation of competing hypotheses and challenging new assumptions. Further, logistically, the resultant mound of un-interpreted data would have become overwhelming for the researcher and, consequently, created conditions where valuable information would have be easily overlooked (Miles, Huberman, & Saldana, 2014).

First cycle coding. According to Miles, Huberman, and Saldana (2014), “Codes are labels that assign symbolic meaning to the descriptive or inferential information compiled during a study” and “is a deep reflection about and, thus, deep analysis and interpretation of the data’s meaning” (Description, para. 1). To accomplish the goals of this study, the researcher coded data revealed from observation notes, document analysis, and interviews. The data was refined and filtered through the of student success initiatives and guided by the research question and supporting questions. This approach was congruent with the recommendations of Miles, Huberman and Saldana (2014) who propose that “conceptual frameworks and research questions are the best defense against overload” (Applications, para. 2). Further, this process of code condensation resulted in prompts calling upon further investigation, the formation of pattern codes that identified reoccurring patterns of data, and a heuristic methodology of discovery which provided “intimate interpretive familiarity with every datum in the corpus” (Miles, Huberman, & Saldana, 2014, Applications, para. 4).

To aid in data organization, storage and coding, MAXQDA, a computer assisted qualitative data analysis software (CAQDAS), and standard index cards were utilized. The database created was maintained on the researcher’s personal, password protected computer with routine backup to both an external hard drive and a personal Google drive on the cloud. The use of CAQDAS has become widely accepted among qualitative researchers and a recommended means of storing data (Miles, Huberman, & Saldana, 2014). MAXQDA and standard index cards aided the researcher in organizing, sorting, and retrieving coded data. Further, the software and index cards assisted the researcher in identifying pattern codes and developing an understanding of the interrelationships between the codes. This process, according to Miles, Huberman, and

Saldana (2014), will “develop a higher level of analytic meanings for assertion, proposition, hypothesis, and/or theory development” (Applications, para. 5).

The coding process encompassed numerous approaches and coding techniques. Miles, Huberman and Saldana (2014) suggest that coding may be classified based upon the predominate methods employed. These methods include elemental, affective, literary and language, exploratory, procedural, and grammatical (Miles, Huberman, & Saldana, 2014). As a foundational approach, three elemental methods were employed focusing upon descriptive, in vivo, and process coding (Miles, Huberman, & Saldana, 2014). Affective methods include emotion, values, and evaluation coding and focus on the subjective experiences of the participants. Literary and language method includes dramaturgical coding, which explores human action and interaction and “applies the terms and conventions of character, play script, and production analysis onto qualitative data” (Miles, Huberman, & Saldana, 2014, Dramaturgical Coding, para. 1).

Exploratory methods encouraged the researcher to discover data presumed to be present before the analyses and make macro-level coding assignments. Exploratory methods included holistic, provisional, and hypothesis coding (Miles, Huberman, & Saldana, 2014). When the researcher has specific approaches in which the data must be gathered, procedural methods may be used and include protocol and causation coding. Finally, grammatical methods focus on the mechanical relationships of coding and include magnitude, subcoding, and simultaneous coding (Miles, Huberman, & Saldana, 2014). These methods of coding were instrumental to this study and selected based upon the type and form of the data discovered within and between each case. Appendix J defines the types of codes, the benefits and applicability of the code, and the methodological type.

Pattern coding. After initially organizing the data in summarized segments in the First Cycle method, Miles, Huberman, and Saldana (2014) describe the Second Cycle method as pattern coding, the reduction of larger segments into smaller categories, themes or constructs that aid the researcher in developing a micro-level perspective. According to Miles, Huberman, and Saldana (2014), pattern coding has four important functions:

1. It condenses large amounts of data into smaller numbers of analytic units.
2. It gets the researcher into analysis during data collection, so that later fieldwork can be more focused.
3. It helps the researcher elaborate a cognitive map – an evolving, more integrated schema for understanding local incidents and interactions.
4. For multi-case studies, it lays the groundwork for cross-case analysis by surfacing common themes and directional process. (Applications, para. 1)

This study explored multiple pattern codes including categories or themes, causes or explanations, relationships among people, and theoretical constructs (Miles, Huberman, & Saldana, 2014). The pattern codes were mapped utilizing MAXQDA with the goal of qualifying the pattern code for further analysis. As the pattern code process progressed new patterns and codes continued to emerge and be integrated into the study. Further, as the process progressed, codes shifted to patterns and patterns were aligned with networks. As the general patterns were revealed they were demonstrated through the use of network diagrams and matrices and the matrices began to come into alignment with the overarching thematic strands.

Jottings. Miles, Huberman, and Saldana (2014) describe jottings as an “analytic sticky note” or “piece of writing that could literally fit onto the space of a small square piece of paper” (Jottings, para. 1). The purpose of jottings is to serve as a repository of quick bursts of ideas,

reflections, commentary, or thoughts that emerge from the researcher as data is being collected or interpreted. In this study, jottings were in the form of notes added to the margins of documents, ‘comments’ inserted using Microsoft Word, ‘notes’ added to Adobe’s PDF documents, comments on standard index cards, or ‘notes’ in MAXQDA. Miles, Huberman, and Saldana (2014) suggest that jottings contribute significantly to data collection and analysis and may serve to illuminate points, reinforce coding, and support a deeper understanding of the data and the case.

Analytic memoing. In addition to field notes and jottings, this study included researcher analytic memoing. According to Miles, Huberman, and Saldana (2014), “An analytic memo is a brief or extended narrative that documents the researcher’s reflections and thinking processes about the data” (Description and Rationale, para. 1). This process enabled the researcher to gain deeper insight through higher level synthesis and organized thoughts in a deliberate way which allowed for further analysis and organization leading to thoughtful conclusions. This concept-building and concept-developing analytical process was guided by a set of overarching areas to be explored. Saldana (2003) suggests 11 detailed guides to analytic memoing. For the purposes of this study Saldana’s recommendations were summarized in three overarching themes: various perspectives at the onset of the study including the guiding research question and subquestions, the events during the study including emerging findings, and perspectives at the conclusion of the study including future application and implications.

Memoing occurred concurrently with data collection and continued to inform the final report. The analytic memos were stored on the researcher’s password-protected personal computer and backed up with all other data of the study. The interpretation of the analytic memos included comparison and contrast within case and between cases and required additional

coding. Additionally, the process of analytic memoing led to the definition of student success activities and aided in establishing parameters for including categories of data to be included in the final analysis of the study.

Assertions and propositions. As the study progressed from data collection to coding to identification of patterns to integration of jottings and analytic memoing, the researcher began to seek clarity of the study and discovered insights that began to explain and address the guiding research question and subquestions. At this point, a systematic and formalized means of organizing ideas into coherent thoughts was necessary. Miles, Huberman, and Saldana (2014) suggest it is at this point that the researcher begins to generate assertions and propositions regarding the study. They declare that an assertion is “a declarative statement of summative synthesis, supported by confirming evidence from the data and revised when disconfirming evidence or discrepant cases require modification of the assertion” (Assertions and Propositions, para. 2). Further, they indicate that, “A proposition is a statement that puts forth a conditional event – an if-then or why-because proposal that gets closer to prediction or theory” (Assertions and Propositions, para. 2).

With these definitional guidelines, the processes of establishing assertions and propositions not only occurred in the final stages of data interpretation by the researcher but throughout the study. Additionally, the researcher inquired from participants to contribute, from their perspective, assertions and propositions regarding student success and connectivity with the community capitals framework. This revealed broader insight into the understanding of phenomenon than acquired by the researcher and permitted those with rich knowledge of the subject to contribute more fully into the final conclusions of the study. This approach was congruent with development of assertions and propositions as supported by Miles, Huberman,

and Saldana (2014). In fact, they state that assertions and propositions “can range from descriptive, broad-brushstroke facts to higher level interpretations about the meanings of the study” (Assertions and Propositions, para. 3). These statements and bullet-items served to inform the study and lead to additional areas of further data collection and analysis.

Within-case and cross-case analysis. This study employed both within-case and cross-case analyses in an effort to develop a deeper, richer understanding of student success. Miles, Huberman, and Saldana (2014), suggest “The primary goal of within-case analysis is to describe, understand, and explain what has happened in a single, bounded context – the ‘case’ or site” (“Within-case and Cross-case”, para. 1). The data collected from interviews, observations, and document analysis supported within-case analyses. While within-case analysis was essential to develop the portrait of the efforts being taken at the site, a need for comprehensive understanding drove the researcher to expand analyses to include comparison and contrast between the cases. In fact, Miles, Huberman, and Saldana (2014), further suggest that cross-case analysis permits the researcher “to see processes and outcomes across many cases, to understand how they are qualified by local conditions, and thus to develop more sophisticated descriptions and more powerful explanations” (“Within case and Cross-case,” para. 2). This study engaged multiple methods of cross-case analyses.

The purpose of cross-case analysis was two-fold. First, cross-case analysis enabled the qualitative researcher to apply transfer of information gathered to other contexts. Second, it permitted deeper understanding and explanation of the phenomenon, student success in this case. While this study focused on two effective colleges, the focus of generalizability and transferability was significantly muted. However, since these colleges represent the entirety of Ohio community colleges that have demonstrated positive percent growth in student success in

all categories, findings revealed interventions for student success that correlate to the statewide definition and provided elements and explanations that other colleges may find useful when developing and implementing dynamic student success agendas. Ragin (1987) would describe this study as taking a case-oriented approach because it examined a limited number of cases for similarities and constant associations. Further, a case-oriented approach encourages comparison of different and similar outcomes and permits more general explanations rather than broad generalizable findings.

I engaged a mixed strategies methodology (stacking comparable cases) for a case-oriented approach to cross-case analysis as proposed by Huberman, Miles, and Saldana (2014). This process included analyzing and writing each within-case analysis and highlighting a set of standard variables yet providing liberty to introduce uniqueness as they emerged. This was followed by introducing each case into displays to permit a more in-depth analysis of each case. Through this ‘stacking,’ cross cutting variables evolved and provided confirmed shape to the study. At this point, a meta-matrix was applied to both cases and the data condensed which enabled systematic comparison. The processes of meta-summary and meta-synthesis ensued allowing a refined cross-case analysis. According to Huberman, Miles, and Saldana (2014), “These approaches (meta-summary and meta-synthesis) systematically synthesize interpretations across two or more cases, even if they were conducted by different researchers with different assumptions and different participant types” (Case-Oriented Strategies, para. 4).

Trustworthiness and Generalizability

While quantitative research relies on validity and reliability determined by empirical and statistical tests, qualitative research rests upon trustworthiness and verification through multiple inductive measures. In particular, the trustworthiness and value of a qualitative study relies upon

the architecture of the study, methods of data collection, how the data is organized, and a clear cut process by which the data is interpreted (Berg & Lune, 2012; Miles, Huberman, & Saldana, 2014; Yin, 2003, 2014). The organization of analysis and interpretation for this study was structured around the key fundamentals thus suggested by Miles, Huberman, and Saldana (2014): first cycle coding, pattern or second cycle coding, analysis of researcher thoughts and comments (jottings), analytic memoing, assertions and propositions, and within-case and cross-case analysis. These methods contributed to the trustworthiness of the data through application of multiple means of collection and organization. Further, triangulation of data measures between interviews, observations, and document analysis contributed to the trustworthiness of the study.

I did not seek to draw generalizable conclusions about how student success can be improved across all of America's community colleges. Rather, the goal was to discover how student success occurs and the processes in place to advance success at participating Ohio community colleges. Further goals of the study included developing an understanding of the relationships between the stakeholders at the participating institutions and how those relationships may or may not contribute to student success. Finally, the researcher gleaned a deeper insight into how student success is realized at the participating colleges through the overarching paradigm of the Community Capitals Framework.

Ethical Considerations

A variety of ethical considerations were in place to assure the protection of information, the participants and the research sites. These included matters of informed consent, honesty, trust, potential harm and risk, privacy, confidentiality, and anonymity. Participants and presidents at the research sites had the prerogative at the conclusion of the study to waive privacy, confidentiality, and anonymity. The management of these areas has received approval of

the Institutional Review Boards of West Virginia University, Buckeye Community College, and the president of Cardinal Community College. All participants were treated within the ethical guidelines of West Virginia University and the accepted standards and best practices of human subjects research.

Role of the Researcher

My role in this research was to be the instrument to discover how college resources come together to support the success of students. It is through the paradigm of my personal experiences and education that I gathered and processed the data, engaged with participants, reviewed the institutional documents, and communicated the findings. It is my lens, my perspective, and my experience.

As a researcher, my role was to remain analytical, data-driven, and focused on the purpose, goals, and inquiries guiding the study. In an effort to improve efficacy, my relationship with the participants, while friendly, cordial, respectful, and appreciative, remained professional, observant, and with a high degree of acuity. My goal, as an educational researcher, was to bring the common place into sharper focus, to honestly convey the findings from my perspective, and to discover, from the familiar, a deeper insight which may lead to greater understanding of student success.

Chapter Four

Case Studies

In this chapter I focused on the discoveries at Cardinal Community College and Buckeye Community College and ways in which these Ohio community colleges have integrated resources and built upon strengths to meet their goals of student success. As exemplary colleges demonstrating positive percent change in student success from academic years 2012, 2013, and 2014, the case studies detailed in this chapter reveal emerging themes of interventions, initiatives, and strategies which have resulted in these community colleges improving student success. The interventions and themes are organized by strands known, throughout educational literature, as best practices for student achievement and institutional success. Interviews, document analysis, and observation of campus student success efforts have led to an understanding of a wide range of activities employed to support achievement. I will provide the history and context of each case, identify the strands discovered at each community college, and describe initiatives, efforts, and activities as synthesized from the emerging themes.

Case One: Cardinal Community College

History of the college. Cardinal Community College was chartered in 1974 as an open enrollment community college as defined by the Ohio Revised Code, but the story of its distinctiveness doesn't end there (See Appendix A). Its history, function, and structure are unique and result in a one-of-a-kind institution among Ohio's community colleges. Cardinal Community College is a public two-year institution married to a private not-for-profit university, Cardinal University. The two exclusively independent institutions have coexisted for more than 40 years through agreements of shared services and clear, distinct parameters of their roles as

identified by their different objectives and goals. Structurally, each institution has separate boards of trustees but share a president who reports directly to both boards.

The evolution of Cardinal Community College as a stand-alone institution is intricately entwined in the history and development of Cardinal University. Cardinal University was founded in 1876 and over the decades since has gone through numerous mission and identity changes. In its early years it served as a normal school preparing graduates for careers in education. It has also served as a denominational college, a two-year college, a self-help student college, and a four-year liberal arts college before becoming today's university awarding certificates, associate's degrees, bachelor's degrees, and master's degrees.

In 1978, four years after the development of the community college, the name was changed from Cardinal College to Cardinal College/Community College to reflect the growing community college presence. In 1989, with the addition of graduate degrees, the name changed to Cardinal University and the community college mission was absorbed into the new university identity. However, in 2007, in an effort to again underscore the importance of the community college identity and to assist in distinguishing the private university from the public community college, the name changed to Cardinal University/Cardinal Community College. In this study, I focused on the community college aspect of this union.

The 2007 name change coincided with Ohio Governor Ted Strickland's vision of a community college serving every Ohio county. Like other Ohio community colleges, Cardinal Community College is organized to serve a district of contiguous counties. Consequently, the college district includes four counties in the Appalachian region of Ohio. However, Cardinal Community College additionally accepts students throughout Ohio but does not seek out-of-state

students with the exception of nine neighboring Kentucky counties. Cardinal University, on the other hand, recruits students throughout Ohio, nationally, and internationally.

In 1974 when the community college was created it served approximately 80,000 residents in the four-county service district. Today, the population of the service area has grown to over 100,000 people. In an effort to reach the residents of the rural four-county district, Cardinal Community College expanded an instructional presence by adding off-campus locations in 2007 and 2010. Enrollment in these locations has been steadily increasing until academic year 2014-2015 when one off-site location's enrollment declined slightly and the other location held steady. In fact, the enrollment surge from 2010 to 2012 was 123%. Today, this growth contributes 14.5 % of full-time equivalency (FTE) to the total of the community college.

By agreement, Ohio students entering either Cardinal Community College or Cardinal University are concurrently admitted to both institutions and must complete their first two years of undergraduate education through Cardinal Community College. If the goal of an Ohio student is to earn only a technical associate's degree, then the student completes his or her entire education at Cardinal Community College and upon graduation enters the workforce. However, if the student is not a resident of Ohio and seeks only a technical associate's degree, the student matriculates to Cardinal University and the associate's degree is awarded from the university, not the community college. Ohio students seeking an associate of arts or associate of science degree for transfer to a university must enroll at Cardinal Community College and complete the associate's degree. Upon conferring of the degree, the student has the option to matriculate to Cardinal University or transfer to another university of their choice.

The relationship between Cardinal Community College and Cardinal University is solidly built upon strong collaborations and partnerships. The faculty are shared between the two

institutions. The result is community college students receiving a university experience with predominately tenured, doctoral-level faculty, thus providing opportunities for research and increased student-faculty engagement. With the exception of a small administrative building for the community college, the 190-acre campus including eleven classroom buildings, a library, five residence halls, a student center, a dining hall, and an art museum are shared between the institutions. Also shared are a theatre, an athletic-recreation complex with a fitness center, a food court, painting-sculpting-ceramics lab, and a fine woodworking lab. Student services, including financial aid, admissions, records, and a variety of student support departments, are shared. Student life, including student government, fraternities, sororities, and student organizations, are also shared. Other significant partnerships within the community have led to growth and success of Cardinal Community College and Cardinal University. One significant relationship was with local businessman, who generously contributed and supported the community college and the university. Cardinal Community College and Cardinal University have a close relationship with the enterprise of the businessman. Each year, the college closes the campus and participates at a farm festival which provides fundraising opportunities for college student organizations along with valued service to the community.

With the exception of Hocking College, the Ohio Revised Code has prohibited community and technical colleges from developing residential facilities. However, Cardinal Community College has been granted an exclusion from the Code, permitting the college to require Ohio students from outside the service district to reside in campus housing. Residential housing or commuting from home remain options for students within the service district. University students arriving from outside of Ohio must reside in campus housing. The base room

and board rate is \$4,725 per semester for both community college and university students. Meal plans, commuter meal plans, and special housing requests are additional.

Cardinal Community College is supported by a permanent tax payer levy in the counties of the service district. As a result of the levy, tuition for community college students who reside in district is \$116.16 per credit hour. Tuition for Ohio community college students outside the four-county service area and the nine designated counties in neighboring Kentucky is \$136.16. In addition to tuition, all community college students may have additional fees for materials, supplies, use of expensive equipment, transportation, or rental of facilities. These fees are attached based upon the courses in which the student is enrolled. If a community college student continues beyond the associate's degree and matriculates to Cardinal University, the 'per credit hour' tuition converts to the university rate. The university tuition rate is currently \$900.00 per credit hour with no additional course-level fees assessed.

Cardinal Community College and Cardinal University are jointly accredited by the North Central Association of Colleges and Schools, Higher Learning Commission. The college and university maintain their regional accreditation through the Academic Quality Improvement Program (AQIP). The college and university also maintains several other important programmatic accreditations including International Assembly of Collegiate Business Education (business programs), Accreditation Commission for Education in Nursing (nursing program), Ohio Board of Nursing (nursing program), Council on Social Work Education (social work program), Commission on Accreditation of Allied Health Education Programs (allied health programs), National Council for the Accreditation of Teacher Education (education program), Joint Review Committee on Education in Radiologic Technology (radiological technology program), and Commission on Accreditation for Respiratory Care (respiratory therapy program).

Additionally, Cardinal Community College and Cardinal University are members of numerous professional organizations both as individual institutions and jointly.

Cardinal Community College provides a vibrant student life for its students. With four student governmental organization (student judiciary, student senate, student programming board, and all Greek council), the student body has strong voice on campus. Five sanctioned fraternities are active on the campus along with five sororities. Twenty-one professional and honor societies are available for students along with 12 co-curricular organizations. Further, the college has received approval to host 12 intercollegiate athletic programs.

Demographics. According to institutional research data, Cardinal Community College is a public community college offering one- and two-year degrees to nearly 1800 undergraduate students. The College Credit Plus Program enrolls approximately 150 early learners from area high schools. Full-time students account for 1391 of the total enrollment, while 371 are part-time students. The college offers 36 academic programs leading to an associate's degree with nursing practice, industrial production technologies/technicians, and diagnostic medical sonography/sonographer and ultrasound technician being the programs with the highest numbers of students completing. Not all programs are offered at each instructional location. The community college and university share 89 full-time and 93 part-time faculty members with a faculty-to-student ratio of 18 to 1. The faculty are members of The Cardinal University - Association which is unaffiliated with a national teachers union.

According to institutional reports, the community college student body is 35.5% male and 65.4% female with traditional aged students (24 and under) representing 64.1 % of the population. Racially, 84 % are white, 5.2 % African American, and 9.42% represent unknown or other racial classifications or more than one race. Residentially, Cardinal Community College

hosts 15.7 % of its students in campus housing. Eleven percent of Cardinal Community College students participate in collegiate athletic programs. Accreditation reports and reports to the National Center for Education Statistics are submitted in aggregate between the community college and the university and success data is not disaggregated based upon the community college enrollment.

Approximately 62 % of Cardinal Community College's students received the Pell Grant. With 71% of the students residing in the four-county district (28% are not native), this reflects the socio-economic conditions of the region. In fact, the four-county service region is 79% rural compared the Ohio average of only 13%. The four-county district along with four of the six contiguous counties are among the poorest counties in Ohio. This region suffers from poverty rates ranging between 17-33%. The Appalachian Regional Commission has designated two of the counties of the service area as *distressed*. A third county is categorized as *at-risk* with more than half of its geographical region noted as *distressed*. The county hosting the main campus is categorized as *transitional* but contains a significant geographical region identified as *distressed* (Appalachian Regional Commission, 2015a). Appendix A provides the Appalachian Regional Commission's methodology and definitions for the economic-level designations.

Participants. Twelve individuals representing each of the study's criteria participated in interviews. All of the participants were over the age of 18 and all, but one employee representatives had experience with the college for more than three years. Each student participant had more than one year of experience with college. In an effort to provide maximum anonymity to the participants, each have been assigned a pseudonym and are referenced throughout the study by the pseudonym.

Lynne. Lynne is the 44 year old chief executive officer of the college. She has been in her current role for nearly one year and has prior experience as a senior executive officer of a small southern university. She possesses a doctoral degree and has more than 22 years of experience in higher education leadership. She is Caucasian.

Susan. Susan holds a director-level position with key responsibilities including student success. She has also served on both the adjunct and full-time faculty and has 12 years of experience with Cardinal Community College. She possesses a doctoral degree and has experience at other institutions of higher education including a community college. In addition to her background and roles in student success, she is also a scholar of Appalachian culture. Susan is a 50 year old Caucasian female.

Katherine. Katherine is a 22 year old student who is completing an associate's degree in a social science discipline while simultaneously completing a baccalaureate degree in a related social science. She has been a student at Cardinal Community College for four years and successfully transferred to Cardinal University to complete her bachelor's degree. She is a native to an Appalachian Ohio community service by the college. Upon high school graduation, Katherine attended an urban university where she did not perform well academically or socially. She returned to her home community and began attending Cardinal Community College where she flourished academically and socially and became quite active serving as a student ambassador, a resident assistant, and a member of student government. She has maintained at least two jobs at all times outside the college while attending school. She has been both a commuter and residential student while attending Cardinal Community College. She is African American.

Ron. Ron is a recruitment and retention specialist having been in his role for one year. This role was created as a student success initiative. He has previous higher education experience working at a midsize Appalachian university. He possesses a master's degree and is a 27 year old Caucasian.

Eva. Eva is a 39 year old, tenured associate professor in the school of liberal studies, holds a director-level position which supports excellence in student achievement, and is active with the collective bargaining team of the faculty association. She has served on the faculty at Cardinal Community College for nearly nine years and has an additional year of experience as a visiting university professor. Eva possesses a doctoral degree and is Caucasian.

Angie. Angie is traditional-age student who began with a developmental education course and successfully completed subsequent college-level course. She has been a student at Cardinal Community College for five years majoring in an education field. Angie is a student athlete and resided on campus for the first three years of her enrollment. She is a participant in the student ambassador program, honors program, and was a student worker. She is originally from a midsize city in southern Ohio outside of the college service area and Caucasian.

Madonna. Madonna is a 49 year old enrollment management official. She is a recent alumna of Cardinal Community College with an associate's degree in a health care field. Upon graduation, she became employed at the college and transferred to Cardinal University to complete a baccalaureate degree in a health care field. She began her postsecondary education experience at 45 years old at Cardinal Community College after becoming a displaced worker as a result of a local factory closing. She is Caucasian.

Kathy. Kathy is a 22 year old community college student in a health care field and pursuing two baccalaureate degrees in health care at Cardinal University. She is from a small

town in southern Ohio outside the service district approximately two hours from Cardinal Community College. She was a residential student and served as a resident assistant. She is Caucasian.

Mary. Mary is a 37 year old senior executive officer of Cardinal Community College. She has more than 14 years with the college in roles with progressive responsibility and has served as an executive officer for almost three years. She possess a master's degree and is Caucasian.

Alex. Alex is a middle-age administrator with more than 9 years of service at the college with five of the years in a mid-level administrator's role. He joined the college after several years as a public safety professional. While employed as a public safety official, he was injured and unable to continue to perform his duties. He began attending Cardinal Community College on an athletic scholarship at 35 years old for the purpose of re-training to the workforce. While a student, he was recruited by college officials to develop a campus safety plan and he was subsequently hired to fill the role he designed as part of the plan. He is originally from a large Midwestern city but his wife's hometown is also the home of Cardinal Community College. He is Caucasian.

Elaine. Elaine is a 43 year old student services director with nearly 12 years of service at Cardinal Community College. She began her career in an administrative support role and, over time, was assigned progressive responsibility to the director level of a student services division. She holds an associate's degree from Cardinal Community College and a bachelor's degree from Cardinal University. She is Caucasian.

Ruth. Ruth is a single 48 year old returning student having earned an associate's degree in a business field after high school and now seeking a second associate's degree leading to

bachelor's degree in a health care field. She resides off campus and takes the majority of her courses through distance education. She is life-long native to the service district. She returned to Cardinal Community College after becoming a displaced worker as a result of a local factory closing. She received a Pell Grant. She is Caucasian.

Patty. Patty is a 30 year old administrative assistant at the college and has been with the college a year. She has previous experience in education and has been involved in the community. She is Caucasian.

Criteria match. The study mandated participants exemplify ten categories to assure broad representation of the campus stakeholders. Table 4.1 illustrates how the criterion of the study matches participants.

Table 4.1

Participant Criteria Match for Cardinal Community College

Criterion	Participant
President or academic administration designee	Lynne
Student success coordinator/director	Susan Ron
Faculty member	Eva
Senior administrator or department head of student services or student affairs	Susan Ron Madonna Alex Elaine
Senior administrator or department head of administrative services	Mary
Minority student (African American, Hispanic, or Native American)	Katherine
Low income, Pell Grant eligible student	Ruth

Nontraditional age student	Ruth
Student beginning in developmental education and successfully completing the first college-level course	Angie
Student seeking transfer to another college or university for a bachelor's degree	Katherine Angie Kathy

Emerging themes. As a framing structure, emerging themes were simultaneously categorized into thematic strands and success activity types: interventions, initiatives, actions, and intervention/initiative hybrids. These activity types, though not reflected in the raw emerging data of this chapter, were subsequently employed in later stages of data analysis to provide clarity and alignment with the Community Capitals Framework. Definitions of these student activity types are located in Appendix A.

Eight key strands were applied to organize the emerging themes revealed through interviews with students, staff, and faculty along with document analysis and observation of campus facilities and services. The strands include a welcoming campus environment, student centeredness, policies and procedures that promote student success, investment in student success initiatives, internal and external partnerships and collaboration, enhanced student engagement opportunities, supporting student access, and the embracing the community's culture. Within each of these strands, common themes surfaced and student success activities were discovered. Through the participant's perspective these themes came to life through experiences, stories, and vignettes.

A welcoming campus environment. Though the campus spans 190 acres and encompasses several buildings, participants describe it as warm, welcoming, convenient, unintimidating, small, and easy to get around. In fact, Ruth, a nontraditional student, sums up the feeling of many

when she states, “Cardinal feels like a home ... smaller, more relaxed ... (with a) more inviting atmosphere for learning.” Elaine, a student services director, expounded upon Ruth’s impression by pointing out that “Cardinal is a small campus with a large majority of the students coming from similar environments where it is small, quiet, and safe.”

Situated around a central green and clock tower, students find a number of facilities that are designed to make the campus welcoming and conducive for learning. The design was not by accident. As Mary, a senior executive of the college, explained,

In recent years, we have made a number of improvements to the campus and many of those decisions were informed by the students. We asked them what they wanted and how they thought the campus should be. This led to more open spaces and study areas that invited the students inside the buildings and places to just hang out.

The enhancements included a casual, relaxed café, an improved tutoring lab, and student success centers. Student and staff participants alike noted that abundant parking along with the small size of the campus and proximity between the instructional building and residence halls make moving around the campus quick, simple, and easy. Alex, a mid-level administrator, pointed out that centralized services contribute the ease of the campus operations and promote teamwork between office staff while breaking down silos of individuality of services.

The participants in this study universally agree that the students, faculty, and staff are approachable, supportive, and willing to help each other. Madonna, a 49 year old nontraditional student, described the relationship between nontraditional students and traditional age students when she said,

When I walked on campus I was terrified. I had been away from college a long time while I worked in a factory job before the plant closed and left me unemployed. Almost

immediately, I found the younger students helping me understand how to do things like log in to online classes. Yes, I was older but we quickly became friends and they looked up at me and would say, ‘I wish my mom would have the guts to go back to school.’

Angie, a traditional aged student athlete, said it was the welcoming campus community that made her choose Cardinal Community College. “It made me feel at home ... the people were immediately friendly ... (and) I knew I would get more playtime on the field.”

Student centeredness. A strong strand echoed by participants, detailed in official documents and communications, and observed in every aspect of the campus design is student centeredness. From one student to the next, the underlying positive regard for the faculty was the same declaring, “You just aren’t a number here ... faculty get to know the students by name ... professors care and they are always there for help ... the faculty are skilled at connecting with the students ... faculty will come in early and stay late just to help a student.”

But student centeredness is not just evident in faculty. Alex, a mid-level administrator, explains, “Everyone on campus has a familiarity with the students.” Katherine, a traditional age student, said, “Everyone is so helpful. If they don’t know the answer they will find someone who does.” Admissions staff, for example are frequently known to stick with a student, wherever it may take them on campus to solve the student’s issue.

Student centeredness has been enculturated on the campus of Cardinal Community College. Advisors are described as “opening doors to opportunity” and faculty have been known to routinely help students find jobs. Open lines of formal and informal communication are established to assure students are aware of events and important messages from the college. The college engages through the use of social media, email or text messaging.

The administration is responsive to student concerns underscoring the college's focus on student centeredness. Systems are in place to act promptly to prevent problems from escalating, resolve issues to the satisfaction of all parties, and respecting the student while preserving his or her dignity. Illustrating this responsiveness, Katherine, an African American student, shared her story of perceived incident of racism by a professor and the college's quick response. She talked about a professor's lecture that ended on the topic of racial profiling. In her story, she explained that the professor, a Jewish woman, declared that she was afraid to travel on planes with people of Middle Eastern descent. The student, finding the comments offensive, became emotional and, as the only African American in the class, questioned how a Jewish woman, a potential target of antisemitism, could accept racial profiling. Katherine, unsatisfied with the professor's response, continued to become more emotional and left class early. Later that evening, still upset, she emailed the professor and apologized for leaving early because she felt she had disrespected the professor by her early departure. The next day, she discussed the situation with a friend from the office of multicultural affairs who promptly had a discussion with the professor and the provost. Katherine and the professor exchanged emails where apologies were shared and the situation ended amicably. Describing the campus response, Katherine said,

I do believe that this campus is one that, if any student was to ever feel offended by a professor, faculty, or staff here on campus, I have full confidence in the provost, the dean of students, and our president that they would handle that immediately and that it's not going to be tolerated here.

The message from student participants was that Cardinal Community College's student centeredness has a heart that leads to student success. Underscoring the college's concern for students, Ruth, a nontraditional student and displaced worker, shared a story that there became a

time when she was faced with deciding between buying gasoline to commute to college or purchasing food. When a college staff member learned of her plight, he discretely introduced her to the food and clothing pantry on campus organized for the benefit of students. Ruth proclaimed,

They are so caring and nice here. While I can't say that the food made me successful, it did take my mind off of the worries of not having food so I could concentrate on my classes ... (and) I ended up getting very good grades.

Policies, practices, and procedures that promote student success. Remaining abreast of current educational research and literature continues to inform the faculty, staff, and administration in the area policy, practice, and procedure development. In fact, Cardinal Community College takes special effort to keep the campus community up-to-date through professional development and open communication regarding student success initiatives. As a result, several policies have been developed or revised for the goal of improving the student experience.

It has long been known that students who attend class regularly are more successful. Therefore, campus-wide and departmental attendance policies are in place to encourage regular participation. Other policies that create required conditions for students include mandatory attendance at student orientation for new and transfer students, mandatory enrollment in a first-year experience course, and mandatory advising prior to registration.

While many community colleges continue to struggle with mandatory orientation, according to Elaine, who has a significant role in developing and implementing orientation events, Cardinal Community College has enacted policies that has made mandatory orientation effective and appealing to students. She explained that students who fail to attend orientation

receive an orientation hold placed on their registration and they must attend an abbreviated orientation and meet with an advisor before the hold is lifted and the student is permitted to register. Further, students who opt to not attend mandatory orientation are not permitted to register until the weeks immediately prior to the start of the term. This is a deterrent to the student who procrastinates, or simply wants to skip the orientation, because it disadvantages the student when seeking special courses, prime days or times of classes.

All students are required to enroll their first term in a freshman experience course. The course prepares students for success in college. In an effort to help the student apply the content of the course to their major and chosen career, the curriculum is tailored toward the student's major. With contextualized content, the student is more engaged, enjoys the course due to its relevance to the student's major, and assists the student in understanding and preparing for his or her chosen career. Undecided students are also required to enroll in a first-year experience course, but the content is generalized and helps guide and introduce the student to a variety of career pathways. The goal with the 'I don't know' group, as described by Susan, a director associated directly with student success, is to also help them find their way and decide upon a major by the end of their first semester.

Developing rapport with programmatic faculty occurs very early at Cardinal Community College. Mandatory advising requires the student to meet with faculty in their major to develop a plan of study and assist with scheduling. It provides the student with an opportunity to share goals with their advisor, exchange ideas about their educational plan, and learn more about career opportunities. According to the policy, students will not be given permission to register until the advising session is complete.

Other policies have led to success by breaking down barriers to access. Cardinal Community College is an open-door, open-enrollment comprehensive community college. By creating a simple, one-page paper and online application, the college makes it easy for students to enroll. Additionally, the college has enacted policies that may not realize great financial reward for the college, but build solid pathways for success of at-risk students. Two examples are the summer educational experience and the summer remediation programs. The summer education program provides, free of charge, summer for up to 12 credit hours for any student from Ohio. This program is helpful to students who seek a college education but affordability present a challenge. Additionally, the summer remediation program is designed to help prepare high school students for college-level courses. It targets students who seek higher education but are ill-prepared for college-level courses.

Another important policy to help students succeed is mandatory degree audit and automatic awarding of degrees. As a student is approaching 60 hours of earned credit, a mandatory degree audit is performed and, if the student has meet the requirements for an associate's degree, the degree is automatically awarded without the student being required to petition for graduation, pay fees, or request another degree which he or she may not even be aware that he or she may be eligible. The result is an additional credential earned for the student.

Beyond policies, the practices taking place at Cardinal Community College embrace a mindset for student success. The faculty play a key role in success through faculty-student engagement at a variety of campus functions including orientation, student events, and athletics. Faculty often work with students to help them take advantage of once-in-a-lifetime opportunities by remaining flexible and accommodating with regard to deadlines and attendance. Katherine, a political science honor student, explains that she was invited to join the college president and

testify on behalf of the Association of Independent Colleges and Universities before the Ohio General Assembly regarding the need for state grant funding for undergraduate students. When Katherine realized that her testimony would be on a day when she was scheduled to have an exam, she immediately approached the professor with her dilemma. She asked if she could receive the exam early or late and the instructor explained that this would be a potential test security issue. However, the professor and the college president collaborated and agreed that, although Katherine would not make it back to campus on time for the exam, she could take the exam in Columbus and the president would serve as proctor. Katherine excitedly explained that “Dr. Marshall (the instructor of the course) is just really, really, really hands-on involved with students. He really wants to see them succeed” and “the president, by the way, I love, love, love, love her.”

The student services area works with students regarding flexibility in deadlines and, according to a staff member, use as their guide “when the situation encourages or permits student success.” Further, student services attempt to follow a ‘no phone transfer rule’ by, rather than transferring a caller to another office to answer a simple question, the staff member answers the question or stays with the caller to find the answer. Making education more affordable, financial aid officials aggressively assist students to maximize grants and scholarships and discourage loans as much as possible.

The procedures to implement policies are guided by the impact they have on students and how the procedure may help make students become more successful. Many offices and the library have extended hours and events such as orientation are designed to address only the topics of interest and needed by the students. For example, Elaine, a student services director, explained that the new and transfer student orientation is designed on a conference-style format

with plenary sessions on a variety of topics which the student or his or her parents may find most valuable. In contrast to a lecture-style format where information which is applicable to a few is provided to all, the student may choose the areas of interest or may choose to attend a session to brush up test taking skills, remedial English, reading or math to be useful for placement tests administered later in the day.

Investment in student success initiatives. Cardinal Community College has made a deliberate effort to focus on the success of all students. These initiatives are driven by every area of the college from academic affairs to student affairs to the athletic programs. Recognizing that many rural students still struggle to have reliable high-speed internet, the college has expanded open computer labs and extended hours of operation. Tutoring is available to all students and is offered as a free service. The student success center is staffed with experts in adult education and experienced developmental education faculty. In addition, these instructional specialists possess a deep knowledge and appreciation for Appalachian culture and how the culture affects student learning and success. Cardinal Community College has invested in a full-time retention specialist who links students with available campus resources and works with faculty to keep students actively engaged in class. The faculty have assumed a number of initiatives to support success including fund development to assist low income students with the costs associated with certification exams, bringing together future employers and students for one-on-one interviews in their fields of study, and after hours tutoring and special arrangements to help students be successful.

An Early Alert System has been redesigned by the retention specialist and is implemented for faculty to report, as soon as potential problems begin to arise, students who may be developing a pattern of chronic absenteeism or having difficulty with course content. The

reports are delivered to the retention specialist who reaches out to the students to counsel and advise what steps may be necessary to assure success. According to Ron, a recruitment and retention specialist, commonly students will be advised to seek tutoring or other assistance in the student success center and to resume regular class attendance. At times, the retention specialist will assist students in schedule planning to assure the student is not overextending himself or herself and collaborate with the student's program advisor on an adjusted plan of study.

Community colleges provide numerous success interventions to assist students who may present with inadequate secondary preparation for college. Cardinal Community College is no exception. Developmental education, to provide additional remediation for students to enter college-level courses, is an important success intervention at the college. Tutoring and peer support play important roles in helping developmental students become successful. At the other end of the spectrum, Cardinal Community College offers an honors program for students who excel academically. The program encourages increased faculty-student engagement and requires the student develop an honors capstone to highlight his or her honors experience. The honors experience frequently includes opportunities for research and requires presentation of the honors capstone to the campus community.

Keeping student athletes focused on the academic expectations along with sports is a responsibility that coaches assume at Cardinal Community College. All student athletes are required to resolve absences for athletic events with faculty and make up their work. Students must share progress reports from their professors with coaches and students who do not maintain appropriate academic progress risk losing athletic participation. Additionally, athletes have mandatory study table hours when the team meets in the library and focuses on academic coursework. The coaches and assistant coaches are responsible for leading the tutoring at the

students' study tables. Students who miss a study table session face similar consequences to missing an athletic practice.

Cardinal Community College continues to be a participant in a number of structured student support initiatives sponsored by the Ohio Association of Community Colleges and the Ohio Board of Regents. These include annual forums, statewide student success meetings, and participation with state professional organizations to advance student success. Further, the college has participated in the Ohio Board of Regent's student success initiatives including PLA with a Purpose, Career-Technical Credit Transfer (CT²), College Credit Plus, One Year Option, and Complete College Ohio. The college has participated with the AmeriCorps College Completion Coaches, events associated with the Ohio Student Success Center, and the Ohio Student Success Symposia.

Internal and external partnerships and collaborations. The strength and efficacy of student success often lies in the partnerships and collaborations formed. Internal collaborations are seen across the campus but participants in the study report that the One Stop has been a particularly effective, customer service based model of assisting students. The One Stop provides a single point of contact for four key functions of the college: admissions, registration, financial aid, and the business office. Together behind a single counter, the front-line employees of each of these departments greet, meet, and assist students with the services of their respective offices. In most situations, issues may be resolved at the counter but when the situation requires a more in depth response or increased confidentiality, the front-line person arranges for a representative from the respective office to intercede. Frequently, students can simply move down the counter from admission through to the business office responding to the needs of each office, one after

another. If questions arise at one office that may require attention from another, the office official is immediately adjacent to help resolve the issue.

Multiple study participants reported that the reputation of Cardinal Community College is overall quite good within the community and, due to college and university longevity, has become a vital institution to the village and the rural Appalachian region. With such a prominent presence in the small town, it is no surprise that external partnerships are flourishing. The residents of the region have substantially supported the college for many years through a permanent tax levy and the campus community and the greater community have blended well. In fact, the local bowling alley and movie theatre have student nights to provide reduced cost entertainment and area faith-based organizations have supported the student food pantry and clothing closet.

Each of the college athletic programs are also heavily involved in the community. Student athletes coach youth sports, the college hosts a major regional basketball tournament, and basketball camps are held for area youth. Band camps are held on the campus throughout the summer months. The fraternities and sororities are active in the community through service and the college student ambassadors volunteer to assist with a variety of community events. Each year, a renowned farm festival is held nearby providing an opportunity for the college to be active in the community. The farm festival is a major event that attracts visitors nationally and Cardinal Community College closes the campus to permit students to volunteer at the festival, thus supporting the community and raising funds for the college clubs, organizations, and athletic teams.

Mary, a senior executive of the college, suggests that the college has maintained a strong relationship with village, county, state, and national government leaders. With these political

partnerships, Cardinal Community College has worked to secure policies and funding important to sustaining the college's mission. The college works closely with area business and industry leaders to provide specialized training and has built strong partnerships with area hospitals for clinical sites and practical experience for the health sciences programs. The college works closely with Ohio Jobs and Family Services to assist unemployed and displaced workers with educational options and the agency is kept up-to-date on academic programs and services of Cardinal Community College.

According to all participants in the study, without a doubt the most important partnership entered by Cardinal Community College is the arrangement with Cardinal University. Participants from the administration, Lynne, Alex, and Mary, each suggest that the unique blending of public and private education has served students well and is symbiotic for both institutions. The partnership calls upon the two boards of directors guided by common vision and mission to govern their respective institutions in a parallel direction, yet with distinctly different purposes. However, the partnership is not without criticism. One mid-level administrator expressed that while a small, friendly, open campus creates a climate of cooperation, the structure is conducive to silo formation between the community college and the university. Special efforts must be made to prevent the silos from become problematic and challenging to the operations for those serving in dual roles. The administrator further described the structure as 'bipolar' with 'different goals and objectives' thus creating a challenge for some directors and administrators to understand the differences while working for both institutions at the same time. Lynne, a chief executive officer of the college who works in a dual capacity daily states, "Yes, we have a common mission and vision and with that distinct angles from the university and the

community college to make it happen. But, we do an amazing job at managing it.” She continued,

Certainly, there is some truth in the fact that it could be confusing with the multiple ways in which we reach our goals but silos can happen in the smallest college and everywhere and we do a great job keeping that to a minimum.

Over the years and through a series of name changes, identity has been a challenge of the community college. Today, it remains unclear to many students if they are enrolled in Cardinal Community College or Cardinal University. In fact, according to one senior executive officer, “few students have a clue that their first two years were at the community college until they receive the bill for their first year at the university.” But, she added, “It doesn’t really make a difference to them because they are paying community college rates but receive an outstanding university education.”

Despite the challenges, the partnership provides numerous positive benefits for the community and students as well. Unlike most community colleges, the education in the first two years is hybridized with a university-style education that may include a research component. Additionally, while many community colleges employ doctoral-level faculty, especially in the area of arts and sciences, the faculty are shared between the community college and the university and, as such, includes a majority of tenured faculty with doctoral and terminal degrees. In addition, as university faculty they are expected to remain current in their disciplines. Research and publication are encouraged. As community college technical faculty, the expectation is that they remain on the cutting edge of advancements and contribute as appropriate to their technical fields. As described by one faculty member, it is a “good atmosphere with a quality team” and certainly, “the strengths presented from the faculty benefit

all students.” The partnership provides an opportunity for community college students to receive a deeper education in the liberal arts while allowing university students the opportunity to explore technical areas. Though many community colleges and universities offer collegiate athletics, arts programs, residential housing, and Greek life through fraternities and sororities, the partnership allows Cardinal Community College to stand out among Ohio community colleges as the only community college to offer all of these activities for their students.

Enhanced student engagement opportunities. Tinto’s (1975) seminal work underscored the value of engaged students and its link to success. Further, since 2001 the Community College Survey of Student Engagement (CCSSE), the national study of student engagement in community colleges, has reinforced the importance between student engagement and student success. Cardinal Community College has demonstrated a number of measures to increase engagement of the students with faculty, other students, staff, administration and the community. Beyond a wide range of student organizations, athletic teams, clubs, and societies, the college has supported excellence and engagement through the Provost’s Academic Excellence Initiatives that supports research, academic conferences, publication, and other demonstrations of scholarly excellence. Through grant support from the provost’s office, students and faculty are encouraged to work together, co-author publications, and share their academic endeavors with the campus community and beyond.

Other hands-on opportunities of engagement include shadowing, civic engagement, internships, clinical and practicum experiences. Additionally, each year a select group of students are chosen as Cardinal Community College Student Ambassadors. The ambassadors have open access to the campus and are responsible for touring prospective students and guests and serving as college liaisons to the community. Highlighting the quality of the students who

serve as ambassadors, Alex, who oversees the ambassador program, describes the students as “hardworking, dedicated, fun, and committed to the college.” Although the ambassadorship is a minimally paid position, Angie describes her experience as an ambassador as “one of the most rewarding opportunities I have had at Cardinal Community College” and Katherine said the ambassador program has given her “opportunities I never expected.”

Structured tutoring and study groups have added an important level of engagement to the college. The tutoring center, working closely with the student success center and the retention specialist, offers tutoring services free of charge to all students and provides an opportunity for students to work with other students to develop a solid understanding of course content. The Math Lab provides an opportunity to receive assistance with not only a wide range of mathematics but also chemistry, physics, biology, accounting, computer programming, and economics. The level of one-on-one and small group engagement has shown to be beneficial for Cardinal Community College students. Ruth, a nontraditional student, praised the tutoring services at Cardinal Community College stating, “I was not real strong in math and chemistry, but the people in the tutoring center helped me make it” and Kathy, a traditional age health care major, added, “I didn’t need a lot of math but my roommate used the lab a lot and she said it made a huge difference.” For the students who need the extra help but are unavailable or unwilling to use the Tutoring Center, e-Tutoring is available in a wide range of disciplines. e-Tutoring provides a free, online alternative to face-to-face tutoring and, for many students, can satisfy difficult schedule conflicts by logging on at any hour and present their questions and challenges.

Supporting student access. Before a student can be successful in college, the door must be opened. As the national focus has shifted from access to success and performance-based

funding has become dependent upon student success, many colleges have begun to redefine access or ignore it completely while focusing resources and efforts on the success of current students or students in selective admissions programs. Cardinal Community College continues to maintain an aggressive access agenda to complement its success agenda. It has done so by implementing policies and practices to make education more obtainable to a variety of students and at-risk populations.

The college has established a veterans services office to support students with transition and adjustment issues before, during, and after military service. Assistance with the GI Bill and providing emotional support for veterans suffering from post-war trauma are just two ways colleges are making higher education accessible to veterans.

Access has also been improved by opening the college for visitation days in the spring to provide prospective students and their parents an opportunity to explore the campus and ask questions about enrollment and academic programs. These events are especially important for first-generation college students who frequently do not have an understanding of college processes, deadlines, and procedures and to help their parents, who were not college students, develop an understanding of the parental role of college students, the expectations, and expenses associated with higher education.

Many times, students may consider college but low self-esteem or inadequate secondary preparation holds the student back from moving forward and taking the next step to enroll. Cardinal Community College has created Experience Days to help this group of students understand that college can be taken at different speeds and with varying intensity. During Experience Days, prospective students shadow college ambassadors through a day of classes, sitting in the lectures, and observing the labs. According to Alex, who oversees the ambassador

program, and the student ambassador participants, before the end of the day, most students realize that college is within reach and accessible to them.

Distance learning has opened education to a segment of students that might otherwise have no realistic possibility of earning a college degree. Students with conflicting work schedules, those with children or other responsibilities such as caring for an aging family member, and those from remote areas of the Appalachian region where public transportation is nonexistent find online learning a viable option. The geography, terrain, and substandard infrastructure of Appalachia Ohio has forced many prospective students to become place bound. Enrolling in courses or an entire program online is the opportunity many need to earn a degree, break the cycle of poverty, and re-instill economic prosperity to the region. According to Lynne, a senior administrator, the impact of distance learning on rural students and the economy of the region is significant. She said,

There are many rural institutions, like Cardinal, that have had the ‘lightbulb came on moment,’ to say ‘wait.’ There is a place and there is a role in developing students and impacting the economy positively as we prepare students for jobs ... Distance for us is bringing programs, whether they’re delivered through traditional distance means or we’re taking education off site, off of our main campus to increase accessibility. So, I kind of like to think of it as a broader more multifaceted definition of distance learning in that we’re breaking out beyond our campus through digital means but also making sure that we’re offering classes in places that are accessible, at times that are accessible, and with means that are accessible for our students. We have students that have needs and if they weren’t utilizing some component of distance education for how they’re getting their classes and getting through their program, they may not be able to do it otherwise.

Development of off-site learning centers for Cardinal Community College has been vital to meeting the education needs of the most rural regions of the service district. The sites have eliminated in excess of an hour of commuting each way and, according to Susan, a director-level manager working closely with student success, has given the residents of the communities a strong sense of empowerment and ownership of their future and their education. In fact, the off-site locations have developed a culture of their own from the main campus. While the main campus is often described as welcoming and friendly, the off-campus sites are generally described as a very close knit family. Those attending at off-site locations frequently already know each other having developed close friendships and ties in the community. Reinforcing the off-sites' role and value to their communities, Susan shared a story that recently the family feeling spilled over into the small town. The campus Easter egg hunt, originally planned for the children of the students, drew attention from the village leaders. In response, the local leaders proudly declared the college campus as the official site of the community egg hunt. Susan said, "It was little thing but it shows how the community has a sense of ownership and connectedness to the college." She added, "It was a good thing for everyone."

With lower enrollment at the off-site locations, the sites allow students to ease into higher education with small group experiences led by highly experienced faculty. Susan describes the off-site locations as places that can provide a little "extra hand holding and encouragement building, especially for at-risk students" and "serve as vital extensions of the main campus" providing new pathways to certificates, associate, bachelor, or master degrees for residents of the region. Further, according to Mary, who was instrumental in the development of the centers, the key to the success of the off-site locations has been the ability to handle all student services functions on-site and eliminating the need for students to travel to the main campus. The off-site

location staff serves as a liaison with the administrative and student services departments at the main campus, thus permitting the students to have a single point of contact for all aspects of their education while in their community.

Embracing the community's culture. As one senior-level employee declared, “We like to hire our own here.” A common theme discovered throughout the participants is that many have extended roots into Cardinal Community College beyond their employment. In fact, this is not unlike a strong sense of family ties common for communities nestled among the hills of Appalachia (Ergood, 1976). Jokingly, several participants shared that there wasn’t much to do in the small village and if you were seeking something to do, you must drive 30 minutes to the nearest Walmart. This self-deprecating humor is typical within the Appalachian culture (Self, 2015). As such, most working at the college are native to the area and expressed a special fondness for the region. They feel a mission and a connectedness to the college, its people, and to Appalachia. Supporting this point, Patty, a college administrative assistant, shared a story of challenge, caring, and unity among the college employees. She explained that earlier this academic year, the college faced difficult financial challenges that resulted in furloughs for employees. During the time of furloughs, the employees assumed the financial brunt and stood proudly by the college. She described feeling the pain for fellow employees like a family who was suffering. They worried about those among them who had less financial resources. Yet, “the employees,” she said, “stuck together like a family.” Many of the participants remarked that they see their work as something greater than operating a college. Rather, they see themselves as a family who is helping their own. Ron, the retention specialist, summed it up best. He said,

In Appalachia it’s more of a together, collectiveness mentality. And a lot of my friends when I was graduating grad school, they all had bachelor’s degrees, I had a master’s

degree. They would say, 'You've got a master's degree, why are you staying here?' And I would say, 'We're never going to improve Appalachia if we keep running from it.' If you want to improve where you're from, you have to stick with where you're from, and improve the existence of where we're at. It's not just me that feels like that. It's thousands of other people in Appalachia. So, that kind of mentality that we have is what makes this place strong. Education is how we improve this. If you want to see less people in poverty, less people killing and murdering each other, give them education. Give them the tools to pull themselves out of poverty.

The sense from meeting the employees at Cardinal Community College is that they are proud Ohio Appalachian people serving proud Ohio Appalachian people. Ergood (1976) described Appalachian people as having a strong sense of independence, religiously fundamental, with strong family ties, an appreciation and respect for life in harmony with nature, self-doomed by fatalism, appreciative of tradition, honorable and proud, fearless, fiercely allegiant to their beliefs, with a suspicion of government and powers of authority, and born traders understanding the sense of survival. These qualities ran true through the employees and students at Cardinal Community College. In fact, Mary, a senior executive official of the college, in describing her fellow employees, stated:

The single greatest strength is their devotion to the community. They just come and they stay. There is something about the area that just seems to draw people in. They have a devotion to the campus and devotion to the students. I think part of this is the Appalachian culture. Many of them grew up in the Appalachian culture and there is just this commitment to the region, commitment to your own people, commitment to improve your local area, and just make your community a better place. We have a lot of that. They

are here. They could go to a lot of other places and make more money but this is home. And they want to make this a better place.

Cardinal Community College has done much to accommodate Appalachian students. The practices of the college have permitted Appalachian students, known for a strong sense of familism, to tend to family responsibilities while applying a degree of flexibility with deadlines. One faculty member explained that it is not unusual for a student to announce that he or she plans to miss class while a family member is in the hospital. Upon further inquiry, the professor learns that the family member is a distant relative by most standards. However, in Appalachia, strong family ties may define a cousin as close as a brother or sister and being at the hospital for an ill cousin may be as important as an ill sibling. Katherine, a student native to the area, described a similar situation.

This past semester there was a lady that I was very close to; she was basically like my second grandmother. She passed away and it was a couple weeks before finals week, it was in April, beginning of April, and I just had a lot going on ... I had already missed some days and I was going to miss some more for the funeral ... So, we were about to have a test and a couple of my professors, I just sent them an email and I was like, 'Hey, this is what's going on. Sorry it's crazy and it's a couple weeks away from finals week, so we're down to the wire' and they were like, 'You know what, this is what you need to do. Don't worry about it. Take some time with your family. When you get back, this is what's going on. Don't worry about it,' and they were very, very helpful and supportive of it.

Katherine's example underscores the readiness and willingness Cardinal Community College has for working with people from the Appalachian culture. The staff and faculty's

response, as Appalachian people, is understanding Appalachian people and this theme was dominant throughout this case study. Following the same interview process and protocol, I transitioned to Buckeye Community College for the second case study.

Case Two: Buckeye Community College

History of the college. Buckeye Community College was founded during the 1960's frenzy of community college development in the United States. Originally chartered in 1966 as River County Technical Institute, the college was formed under the auspices of the Ohio Revised Code defining the organizational structure and mission based upon the standards and definitions of a technical college (See Appendix A). In 1977, the name changed to River Technical College to reflect the naming convention of one- and two-year colleges at the time. In 1995, the scope of River Technical College expanded to include the conferring of associate of arts and associate of science degrees for transferability and the college charter was converted from a technical college to a community college under the name River Community College.

When established, River County Technical Institute was formed to serve approximately 96,000 residents in River County, Ohio. Over the next 30 years, the population of River County declined by approximately 33,000 as manufacturing and industry left the region. In 2009, the River Community College service district expanded to include three additional counties. This was in response to Governor Ted Strickland's initiative to assure that residents in every Ohio county had community college access. With the enlargement of the service region, the population of the community college district grew from 69,709 to 626,685, based upon 2010 census data. With a vastly larger geographic region, Governor Strickland felt that the name of the college no longer appropriately reflected the redefined service area and River Community College was renamed Buckeye Community College.

Service to the River County campus from the northern region was exceedingly difficult and approximately 90 minutes on secondary roads. This complicated the commute for many students. As a result, two off-campus locations were added to serve the northern region which included midsize cities with urban and inner-city populations.

With the expansion, funding streams for the college became increasingly complicated. The main campus, located in River County, has been substantially supported by county residents through a one mill, 10-year levy which has been approved five times with the most recent renewal in 2006. The funding received through the levy is limited to supporting the River County campus. The off-site locations in the northern region were forced to rely on alternate funding streams. While the state required Buckeye Community College to serve the heavily populated northern region, funding was not appropriated to develop educational sites or create a presence in the area. In response, Buckeye Community College entered into a public-private partnership whereby a private sector partner invested in the college by funding the off-site locations and the college, in turn, would re-pay the debt over 20 years. The result was state-of-the-art facilities in the northern service region and continued levy-supported facilities in River County.

The college is institutionally accredited by North Central Association of Colleges and Schools, The Higher Learning Commission. Buckeye Community College maintains a number of programmatic accreditations including the Commission on Dental Education from the American Dental Association (Dental Assisting Certificate Program), the Ohio Department of Public Safety Services Division of Emergency Medical Services (Emergency Medical Responder, Emergency Medical Technician, and Paramedic Programs), the Committee on Accreditation of Education and Programs for Emergency Medical Services Professions (Paramedic Program), the Commission on Accreditation of Allied Health Education Programs

(Medical Assisting and Respiratory Therapy Programs), the Ohio Board of Nursing (Practical Nursing Program), and the Joint Review Committee on Education in Radiologic Technology (Radiologic Technology Program). Buckeye Community College is a member of the American Association of Community Colleges, Ohio Association of Community Colleges, American Association of Collegiate Registrars and Admissions Officers, the Ohio College Association, and is approved for veterans training.

The college has participated in a number of student success initiatives including the national movements of Achieving the Dream, National Leader College, Developmental Education Initiative, and is the recipient of three federally-funded TRiO grants (Student Support Services, Upward Bound, and Talent Search) to support student services and success. Appendix A provides a context, description, and definition of the TRiO programs. The college also participated in a four-year project with the Higher Learning Commission for persistence and completion. The college has been actively involved with Ohio Association of Community College success initiatives, namely, the events sponsored through the Ohio Student Success Center and AmeriCorps College Completion Coaches. Additionally, the college participates in the Ohio Board of Regents student success initiatives, PLA with a Purpose, College Credit Plus, One Year Option, and Complete College Ohio and has developed a number local student success advantages.

Demographics. Buckeye Community College is a two-year, public comprehensive community college offering one- and two-year certificate and associate degrees to nearly 3,200 undergraduate students (National Center for Education Statistics, 2015). Approximately 47% of the students attend full-time while 53% of students attend part-time. Nearly 600 students participate in College Credit Plus as early learners in high schools (Higher Learning

Commission, 2015). Of the more than 3000 students, 50% are exclusively enrolled at the main River County campus. The enrollment at the off-site locations has experienced steady growth of 117% in the last three years, from 576 in Fall 2012 to 1252 in Fall 2014. The degrees conferred include the associate of arts, associate of science, associate of applied business, associate of applied science, associate of individualized study, and the associate of technical study. Buckeye Community College hosts 47 programs of study, but all programs are not offered at all instructional sites. The instructional staff includes 44 full-time and 217 adjunct faculty members with a student-to-faculty ratio of 16 to 1 (National Center for Education Statistics, 2015). Sixty-six members of the full-time faculty and support staff are members of the Buckeye Community College Education Association, an affiliate of the Ohio Education Association (Ohio Education Association, 2015). Tuition for River County residents is offset by an educational levy and is currently \$111.00 per credit hour. The rate in the other three counties of the service region is \$117.00 per credit hour.

The gender distribution is 64% female and 36% male. Racially, 67% are white, 24% African American, and 9% represent other racial classifications or two or more races. Traditional aged students (24 and under) represent 57% of the student population and 96% reside in-state. The instructional delivery modality indicates that 69% of students do not enroll in distance education, while 7% enroll exclusively in distance education (National Center for Education Statistics, 2015).

Student success indicators reveal that first-time, full-time students continuing from fall to fall are 49% while part-time student, fall to fall retention is 33%. The overall graduation rate in three years for two-year degree programs is 24% and the transfer-out rate is 32%. Of the students graduating with a two-year degree in three years, 28% are female, 19% are male, 31% are white,

and 10% are black or African American. A deeper examination of overall student completion reveals that 9% of students who entered in Fall 2010 completed a two-year degree in two years. The third year increased completion by 15% to a total of 24%. In the fourth year, an additional 4% completed bringing the total completion rate for the Fall 2010 cohort to 28%. The three associate degree programs with the highest number of completers are humanities/humanistic studies, general business administration and management, and adult health nurse/nursing while the three certificate programs with highest number of completers are criminal justice and police science, licensed practical/vocational nursing, and medical/clinical assistant (National Center for Education Statistics, 2015).

Buckeye Community College serves four counties in the Appalachian region of Ohio. According to the Appalachian Regional Commission (2015a), the economic status of each of the counties is *transitional* indicating that the “counties are those transitioning between strong and weak economies.” With the decline in population and rampant closure of industry in the region, the transition in the area is moving from a strong to a weak economy. However, with anticipated growth in oil and gas production expected as a result of the discovery of the Marcellus and Utica reserves in the region, some resurgence in economic growth is anticipated. Adding to the economic challenges, 49 communities existing in the college service area are experiencing profound poverty (Appalachian Regional Commission, 2015b). This has resulted in the Appalachian Regional Commission designating these areas as *distressed*. The economic conditions of the region explain why 95% of Buckeye Community College students receive financial aid and, of those, 75% receive the Pell Grant (National Center for Education Statistics, 2015).

Participants. Nine individuals representing each of the study's criteria participated in interviews. All of the participants were over the age of 18 and all employee representatives had experienced with the college for more than three years. Each student participant had more than one year of experience with Buckeye Community College. In an effort to provide maximum anonymity to the participants, each have been assigned a pseudonym and are referenced throughout the study by the pseudonym.

Adam. Adam is a senior executive officer of the college. He has extensive experience in community college education spanning more than 35 years. He has held numerous academic leadership roles in a variety of colleges across the nation. He holds a doctoral degree and is deeply involved in all aspects of student success with regard to both academic and student affairs. He has held his executive position at Buckeye Community College for 10 years. He is African American.

Becky. Becky is a divorced 50 year old first-generation student seeking her second associate's degree at Buckeye Community College. Becky receives a Pell Grant. She entered college requiring two developmental education math courses and successfully transitioned through the sequence to college-level mathematics. After earning her first health care degree in the 1990's, she entered the workforce and, after a number of years in the field, decided to return to earn a degree in a different area of health care. She is currently enrolled in her third semester. Becky a native of the Appalachian service area of Buckeye Community College. She is Caucasian.

Beth. Beth is a 48 year old mid-level administrator responsible for student services and also serves as the administrator of three major federally-funded student success grants. She has been in her current role for three years but has been affiliated with Buckeye Community College

for more than 10 years. She holds a doctoral degree and leads several areas of the college responsible for supporting students. She is African American.

Anna. Anna is a 59 year old full-time faculty member in the Humanities, Social Sciences, and Mathematics Department. She has been affiliated with Buckeye Community College for more than 20 years as an adjunct faculty member for 12 years and a full-time faculty member for eight years. She is an experienced educator having taught for two institutions prior to joining Buckeye Community College. She possesses a master's degree and has earned 15 hours toward a doctoral degree. She is Caucasian.

Patrick. Patrick is a 39 year old, single (but in a partnered relationship), student who recently completed an associate's degree at Buckeye Community College and is currently enrolled in a certificate program. His goal is to complete the certificate program and transfer to a four-year college or university to complete a bachelor's degree as an extension of his associate's degree. He has been a student at Buckeye Community College for three years. Patrick entered college at the level of developmental mathematics and, subsequently, completed college-level mathematics. He is a military veteran having served 21 years with the United States Army. He is a recipient of the Pell Grant and is originally from a very large metropolitan area outside of Ohio and the Appalachian region. He is the father of four children including three minor children and also is involved in the lives of his girlfriend's three children. He now resides minutes from the college and within the Appalachian region. He is African American.

James. James is a 36 year old, single first-generation student completing an associate of arts degree for transfer to a university engineering program. He has been a student at Buckeye Community College for four semesters and is a student worker at the college. He began in developmental mathematics and has advanced through the sequence to Calculus II. He is a

member of Phi Theta Kappa, academic honor society for two-year colleges. As a result of an accident, James is partially disabled. Prior to his accident, he was a laborer in a factory. Upon encouragement from his physicians, he entered college with a goal of returning to the workforce. He recognized that his disability would not permit him to continue his previous lineman but made the decision to build upon his skills and seek a career in engineering in an effort to continue in industrial work but at a higher level of responsibility. He is native to small, rural Appalachian community approximately 30 minutes from the college. He is Caucasian.

Elizabeth. Elizabeth is a 60 year old student services administrator responsible for a number key areas of the college. She has been with Buckeye Community College for 38 years and held a wide range of roles throughout her tenure. She is Caucasian.

Deborah. Deborah is 54 year old a senior executive officer of the college in the area of administrative services. She has been in her current role three years and is an alumna of Buckeye Community College. She holds a doctorate in juris prudence degree has a long history of practicing corporate law and healthcare. Her position at Buckeye Community College is her first employment in higher education. She is Caucasian.

Kimberly. Kimberly holds multiple director-level responsibilities with regard to student success, disability services, tutoring, and leadership of the student success center. She has been with Buckeye Community College for more than five years. She is a 30 year old Caucasian female.

Criteria match. The study mandated participants exemplify ten categories to assure broad representation of the campus stakeholders. Table 4.2 illustrates how the criterion of the study matches participants.

Table 4.2

Participant Criteria Match for Buckeye Community College

Criterion	Participant
President or academic administration designee	Adam
Student success coordinator/director	Kimberly Beth
Faculty member	Anna
Senior administrator or department head of student services or student affairs	Elizabeth Beth Adam
Senior administrator or department head of administrative services	Deborah Elizabeth Adam
Minority student (African American, Hispanic, or Native American)	Patrick
Low income, Pell Grant eligible student	Patrick Becky
Nontraditional age student	Patrick Becky James
Student beginning in developmental education and successfully completing the first college-level course	James Patrick Becky
Student seeking transfer to another college or university for a bachelor's degree	James Patrick

Emerging themes. Similar to Cardinal Community College, the case study of Buckeye Community College utilized identical key strands through inductive data collection and analysis techniques. Those strands served as a method of organizing the emerging themes. Like Cardinal,

the themes represented activities to improve student success in the form of interventions, initiatives, and actions.

A welcoming campus environment. “As soon as you walk in the school it seems like you get encouragement from everywhere and from everybody.” This is how Becky, a nontraditional age, first-generation student, describe her perception of the campus climate. She was not alone. In fact, each participant shared stories and experiences of how Buckeye Community College takes great strides to make the students feel welcomed and wanted. Becky, who was returning to Buckeye Community College 20 years after earning her first associate’s degree, explained,

In the 1990’s, River Community College was the place to go. Now, it is even more positive than it was before. People focus on getting an education. People enjoy coming here. They like the school. They like the tuition rate.

Elizabeth, a senior student services administrator, suggests that the pervasive feeling of being at home in the college is due to the fact that “we’re small enough that people think of this as a family” and James, a nontraditional student, attributes it to employee attitude noting that “the faculty go the extra mile.”

In addition to the warmth expressed by faculty and staff, the campus has been developed to create an inviting environment. The campus hosts a health and fitness center, food service, an outreach center with available space for use by community organizations, and a convenient, easily accessible location along the public transportation system and near eateries and shopping. Many of the participants discussed a sense of pride in the facilities noting its cleanliness, maintenance of facilities particularly in inclement weather and the manicured grounds. The main campus location and the location of the off-site centers were frequently credited as important

factors influencing students' decisions to attend Buckeye Community College. Adam, a senior executive officer of the college, pointed out that,

Everything is appropriately situated. We have sufficient classrooms, we have sufficient labs, and the labs/computers I try to change out every three years ... We have renovated biology and chemistry labs and installed new labs at our off-site locations.

Student centeredness. Students describe the faculty and staff as supportive, approachable, and willing to always put the student's best interest first. James, a first-generation student, says, "I feel very supported by faculty and staff." While Becky, another student, adds,

My goal is their goal. They want me to be successful. They'll do anything they can.

They'll take the time to help me ... give me extra help. I think that's one big things about being here at this school is everybody is focused on the same thing. They want you to be successful. Other students, instructors, (and) administrative people upstairs ...

everybody's looking at the same goal. And they're all willing to help you achieve that.

Repeating the caring theme expressed by the students, James, a nontraditional student, said, "My professors encouraged me to come to their offices and talk ... this school has opened me up." Elizabeth, who has nearly 40 years of administrative experience working with the college, proudly proclaimed, "The faculty here take a personal interest (in the students) beyond the classroom." Supporting Elizabeth's observation, Adam, a college executive officer, stated, "We have a lot of flexibility, a lot of highly educated people and a lot of skilled people who are passionate about serving students."

The student centered philosophy does not stop with faculty. Beth, a mid-level administrator responsible for student services, explains that success comes down to "everybody

having that common goal to help serve a student. The student is our number one concern.” She added,

A student can get advice, a student can get information, not only from me, ... but a student can get information and talk to one of the maintenance persons. They can change a person’s life. Somebody can be going through something and maybe the maintenance person was the only person that actually listened ... They refer students and I like that.

Kimberly, a director-level manager, pointed out that student centeredness with an emphasis on total wellness is important to student success. As an example, she highlighted the health and wellness center and noted that “wellness is pushed for faculty, staff and students,” adding that “students are reminded to take of themselves physically to be successful.” Further, “when we help students we will try to help the whole student.” In fact, the college has taken several steps to not only help students academically, but emotionally and psychologically as well. Beth, a mid-level administrator, explained that resource guides were developed by Buckeye Community College to assist students in crisis. In particular, one area of the college that has been become an impromptu resource center is the tutoring lab. Students often stop in the tutoring center seeking a variety of types of support. Kimberly said,

Without us having counseling services on campus, it seems like the tutoring lab sometimes is the venting spot ... we’re like unlicensed counselors. We’ll just sit and listen. Sometimes you have to be as good of a listener as you are a talker. Sometimes all a student needs is somebody to listen. And that’s when those frustrations are coming out. You gotta learn to listen – hear what they’re saying – cause you might be able to pick something out. You’ll go, ‘wait a minute ... wait a minute ... that’s what’s going on? We may not be able to help you in-

house, but this group can.’ So, we can make a referral and we have all that information at our fingertips.

Beth, a student services administrator, further suggests that this helping attitude motivated by student centeredness is pervasive throughout the campus community. She said, “Overall everyone is starting to see that the student is our customer, and in order for us and them to be successful, we have to have those customers.”

Policies and procedures that promote student success. According to Elizabeth, a senior student services administrator, the fiscal operations climate has been well managed through conservative practices of the board of trustees, the college accountant, the chief financial officer and extraordinary leadership. She suggests that prudent and student-centered oversight has prepared a path for policies that have led to the college’s and students’ success. Further, she pointed out that focusing on student success is not only in the best interest of the students, but the college must consider student success for its ability to sustain operations. She explained, “The subsidy model (Ohio performance-based funding model) has forced a look at policies for the past five years and how those policies can be improved to support student success.” Echoing the need to be cognizant of the impact of student success on funding, Anna, a faculty member, admitted, “I’m very careful, I think now more than ever because of the way we’re being funded. I’m being very meticulous in grading. Going over and over just to make sure I’ve given the student every opportunity.”

As a result, a number of policies have been implemented in recent years including policies regarding first-year experience courses, student advising, student registration, class attendance, placement testing for developmental education, developmental education in the sequence of the student’s plan of study, prerequisite requirements, and new faculty orientation.

Further, reflecting upon how the success initiatives combine to create a strong student support services department, Adam, a senior executive officer of the college, stated, “The problem with it (student support services) is that those who need it most, seek it out the least. So, some things need to be mandatory.” As a result, policies have been instituted to require students to follow certain procedures known to be in the student’s best interest regarding their success.

College Success, also known as the first-year experience course, is mandatory for all students and no new student schedule will be approved without the course. Additionally, according to a student services administrator, the course has become “a web-based course to make sure they (the students) get the information as well as become acclimated to all technology associated with learning.” Further, the delivery of the course has been modified to a compressed model, whereby the student completes the course over two weeks, Monday through Friday, prior to the start of the semester. According to Kimberly, a director-level manager of student success, this decision was based upon empirical evidence that the full-semester version of the course experienced poor retention and, as a consequence of the conversion, the condensed format resolved the problem.

Student advising policies at Buckeye Community College have developed a clear structure to assure students are getting only the classes they need and in the correct sequence. In fact, other than transient students, all students are required to have their schedules approved by their primary faculty advisor or secondary professional staff advisor before the schedule may be submitted and the registration completed. This is a change from the past. According to Elizabeth, a senior administrator, the former policy only required approval for the first 30 credit hours of the student’s enrollment. With the increased focus on improving student success, the policy was revised to encompass all students including those beyond the 30 credit hour benchmark.

Noting research indicating that students who are most likely to succeed are those who attend the first day of the scheduled class, Buckeye Community College has implemented an attendance policy that mandates that if a student is absent for the class's first meeting, the student will be automatically withdrawn from the course and the student will be required to select a different course.

In an effort to improve success rates of remedial students, policies governing developmental education required a number of changes. It became mandatory that students with placement test scores below college-level, must enroll in the required developmental course. Further, developmental education must be taken on the 'front end' of the student's plan of study before pursuing college-level courses. Similar to *College Success*, developmental education has been redesigned to include a web-based component for the purpose of introducing and improving students' computer competency, a vital skill for the 21st century. This is accomplished with the assistance of five academic coaches who tutor, support, and aid with technical issues. Beth, a student services department supervisor, explains,

We look at the courses that most of our students struggle in and we look at our web-based courses because a lot of our students are low income, first-generation, non-trad and they don't have the experience with working a computer. Some of them do not even know what a mouse is, or how to get the computer on. So, we have those academic coaches in there helping them get acclimated with that. It's almost like you have to teach them to navigate the system in order for them to be able to do the work. So, one teacher in a class is not going to be productive. Having an academic coach in the class and then somebody that the students can go to after class or before and still get help is there for them.

Acknowledging that some prerequisite courses offer only minimal support or content for the subsequent course, Adam, a senior executive administrator, indicated that careful review of prerequisite courses has been undertaken and many prerequisites removed. The result is helping students complete their degrees quicker and with less expense and, at the same time, not compromising the quality of the subsequent course. Additionally, programs were reassessed to determine if the proper courses for the degree or career were in the program. Under the same premise, programs were re-adjusted with courses removed, thus creating a faster, more cost effective pathway to degree completion. Adam adds, “Trying to get rid of the ‘credit creepin’ and giving students exactly what they need to be skillful and to be qualified in the workforce is our goal.”

To be certain that new faculty are abreast of the policies and practices of the college and assure their understanding of the success agenda, a mandatory policy was created that requires new faculty to attend a special one-day orientation. The college provides additional compensation for new faculty attendance. Similarly, all faculty are required to attend a week-long in-service at the start of the term. Long-time administrator Elizabeth pointed out that Buckeye Community College recognizes the value of this professional development and the nature of professional development has evolved over recent years from presentations from internal departments to inviting talented experts from outside of the college to lead important programs including student success. Kimberly, a director-level manager, describes the collective working together as a result of widespread support for student success through professional development. She said, “It’s one big giant machine and we all work different parts of that machine. But, we all have the one end product which is graduation.”

Investment in student success initiatives. It is clear from participant interviews, review of institutional documents, and observation of campus activities that student success is at the heart of the actions, initiatives, and interventions occurring at Buckeye Community College. Anna, a 20 year professor at the college, declared,

My colleagues and I would agree that Buckeye is very committed to student success.

Absolutely, every meeting, every opportunity, every gathering is focused on that. Lately it's been a lot of numbers that we've been focusing on, but I think overall we have dedicated passionate teachers here who are just doing everything they can to help the students succeed.

In fact, Buckeye Community College has a long history of trying to help students succeed through a wide range of national, state, and local initiatives which have helped students and supported workforce and economic conditions in the Appalachian Ohio region.

Notably, Buckeye Community College joined the Achieving the Dream Network in 2002 and, due to the college's documented record of success, Buckeye was invited in 2009 to become a National Leader College, a prestigious ranking of the top and most successful Achieving the Dream institutions. The college has since maintained its National Leader College status. The Achieving the Dream interventions target academic advising, College Success course, developmental English redesign to modular, self-paced, developmental math redesign to modular, self-paced curriculum, and gateway courses. Regarding the college's participation in the Achieving the Dream Network, the president said,

In its commitment to student success, Buckeye Community College implements programs, services and procedures to support and improve retention of students within the classroom as well as from one class to the next through to graduation and/or transfer.

Guided by outcome data, the college believes better data leads to better learning. This ultimately is reflected in our motto: ‘Better Education. Better Life.’

As an extension of the Achieving of the Dream success, Buckeye Community College was one of only 15 recipients nationwide to receive the Developmental Education Initiative (DEI) grant. The three-year grant from 2009 to 2012 was to “scale up community college programs to help underprepared students get on the credit-earning and completion track” (Achieving the Dream, 2015). The focus areas included workforce preparation, college readiness, equity, scaling change, state policy reform, and student-centered supports. According to Elizabeth, a senior student services administrator,

The DEI grant revamped models for developmental English and math resulting in policy changes that established mandatory placement and required first semester enrollment in developmental classes. It also led to the development of some bridge courses for developmental education and provided a way to retest students for placement.

The DEI grant is not the only major student success grant received by Buckeye Community College. The college continues to be a recipient of three student support grants awarded by the United States Department of Education for TRiO programs: Student Support Services, Upward Bound, and Talent Search. According to the United States Department of Education (2015c), the Student Support Services grant is “awarded to institutions of higher education to provide opportunities for academic development, assist students with basic college requirements, and to motivate students toward the successful completion of their postsecondary education.” Further, the Department (2015c) requires that,

Projects must provide: academic tutoring, which may include instruction in reading, writing, study skills, mathematics, science, and other subjects; advice and assistance in

postsecondary course selection, assist student with information on both the full range of student financial aid programs, benefits and resources for locating public and private scholarships; and assistance in completing financial aid applications. Education or counseling services designed to improve the financial and economic literacy and assist students in applying for admission to graduate and professional programs; and assist students enrolled in two-year institutions and applying for admission to, and obtaining financial assistance for enrollment in four-year programs.

Discussing the value of the grant to Buckeye Community College students, Beth, an administrator who works closely with the Student Support Services grant, said,

The Student Support Services grant included request for an educational psychologist to work with students on those non-cognitive factors ... helping them have the grit to complete. You know they start but they don't finish. So they're going through some barriers or they have some forks in the road, now we're going to have this individual to help them with some of those issues.

Buckeye Community College is also the recipient of TRiO's Upward Bound grant. The purpose of this grant, according to the United States Department of Education (2015d), is to "provide fundamental support to participants in their preparation for college entrance ... and serves high school students from low-income families ... (and) high school students from families in which neither parent holds a bachelor's degree." To accomplish this goal, the Department (2015d) supports projects that,

Provide academic instruction in mathematics, laboratory sciences, composition, literature, and foreign languages. Tutoring, counseling, mentoring, cultural enrichment, work-study programs, education or counseling services designed to improve the financial and

economic literacy of students; and programs and activities previously mentioned that are specially designed for students who are limited English proficient, students from groups that are traditionally underrepresented in postsecondary education, students with disabilities, students who are homeless children and youths, students who are in foster care or are aging out of foster care system or other disconnected students.

The third major TRiO grant received by Buckeye Community College is Talent Search. The program description, developed by the United States Department of Education (2015e), of the Talent Search grant states,

The Talent Search program identifies and assists individuals from disadvantaged backgrounds who have the potential to succeed in higher education. The program provides academic, career, and financial counseling to its participants and encourages them to graduate from high school and continue on to and complete their postsecondary education. The program publicizes the availability of financial aid and assist participant with the postsecondary application process. Talent Search also encourages persons who have not completed education programs at the secondary or postsecondary level to enter or reenter and complete postsecondary education. The goal of Talent Search is to increase the number of youth from disadvantaged backgrounds who complete high school and enroll in and complete their postsecondary education.

To fulfill this purpose, the Department (2015e) seeks projects that,

Provide tutorial services, career exploration, aptitude assessments, counseling, mentoring programs, workshops, information on postsecondary institutions; education or counseling services designed to improve the financial and economic literacy of students; guidance on and assistance in secondary school reentry, alternative education programs for secondary

school dropouts, entry into general educational development programs or postsecondary education; and programs and activities previously mentioned that are specially designed for students who are limited English proficient, students from groups that are traditionally underrepresented in postsecondary education, students with disabilities, students who are homeless children and youths, students who are in foster care or are aging out of the foster care system or other disconnected students.

The three TRiO programs have been universally praised by the participants of this study. James, a nontraditional, first-generation, disabled student, said, “TRiO helps ... they help a lot ... I especially get great service from them (TRiO) with scheduling ... they seem genuinely caring.” Kimberly, a student services manager, expressed that the outcome of the combination of the TRiO grants and a myriad of other initiatives and interventions is that “success has been redefined. The grants have called for data tracking changes including grades, grade point average, retention, success in tutoring, and disability services.” She adds, “with increased amounts of data in these areas, student success can be more empirically measured.”

The student success center was established to provide tutoring and a variety of support services including disability services. In describing the center, Kimberly said, “In the success center, service personnel interact with students individually on a daily basis ... (and) we all have a common larger long-term goal of student success.” Becky, a nontraditional student who entered college requiring remediation and progressed to college-level work, said, “I have received tutoring in anatomy and physiology and math and I passed! The tutors are great and very helpful.” James, a student tutor, expressed that one problem he observed with the success center was that it had an all glass front. He indicated that students were not using the center because they felt there was a stigma attached to seeking tutoring. This information was shared

with management. In response, the center simply installed curtains over the front of the center and now the center is seeing an increased number of students seeking services.

In an effort to improve success rates among developmental mathematics students, Buckeye Community College participated in the Emporium Model supported by the National Center for Academic Transformation. The Emporium Model of math redesign permits students to complete developmental mathematics on a self-paced basis and is supported by a computer-based platform. Appendix A provides requirement and context of the Emporium Model. Adam, a senior executive officer, said the model was “implemented with limited success due to the students not having as much familiarity with computers and technology as it was assumed.” However, James, a nontraditional student, is counted among the model’s success. He indicated he did well with the Emporium Model, stating, “It was self-paced and I finished two classes very quickly within one semester. I could’ve finished a little faster but I liked the format, so I just sorta took breaks along the way.”

The college has taken a number of other steps to support a culture of success on campus. In many cases it was simple changes in the classroom or instructional practices. Anna, a long-time professor, said, “In every class I teach my focus is to move away from the ‘sage on the stage’ and be the ‘guide on the side.’” To support improving instruction, the college supports faculty professional development. Anna added, “The school has been very cooperative in sending us to conferences and I’ve been doing a lot of that on my own as well.” Encouraging the faculty to increase the role of technology in their courses has been a focus academic administration. Anna said,

Clickers – personal response systems, more online work – web enhanced, online classes.

Looking to be as engaging as possible because we feel a strong pull from our students ...

our students pulling away from just sitting there and listening. They are media oriented, so we have to have some of those bells and whistles.

In fact, Adam, a senior executive officer of the college, points out that “all classes are in Blackboard and all students in Blackboard and for the past two years, we had an instructional specialist to help with Blackboard.” Anna, a professor, added that the instructional specialist was “fantastic” and “an invaluable resource ... not just a technology person.” She further suggests that a growing number of faculty are using technology and “for the first time even public speaking is taught entirely online.” She continued, “It’s not just the newbies that are coming in using the technology. A professor in a different discipline that was not teaching online at all is now doing it.” She suggests that mandatory Blackboard orientation for students has helped students be success but also feels that “the human element is key. And that’s what we bring to our online teaching.” “In many cases,” she said, “I have gotten to know my students better through my online courses than I did in my regular classes.”

In other areas, Buckeye has also sought to improve success. The college hired a transfer advisor to assist students seeking transfer to a baccalaureate institution. The college has added open computer labs with extended hours. The program faculty have built employment databases to assist students seeking a job at the end of their programs of study. A new computer system has permitted the development of an Early Alert System to identify at-risk students before they are unsuccessful and, according to Adam, the new Early Alert System has resulted in increased student retention. The developmental education area has embraced new options for students so that a one-size fits all approach is not the norm. For example, students who, through placement testing, score at the level of developmental English but are close to the cut score are placed in English Composition I with an additional one-hour supplemental lab component. This eliminates

the need to enroll in a semester-long developmental English course and will allow the student to progress through a program of study one semester faster, thus saving the student time and money. For developmental math students who struggle with the computer component of the Emporium Model, traditional face-to-face options are also available.

Adam, an executive officer, pointed out that sometimes it is “simple old-fashioned ways” in which the faculty have managed their classrooms that, when brought to faculty’s attention, have led to the greatest change. Illustrating this point, he said,

Our students – mean age is 28 – they’re gonna have family and life issues ... those life issues sometimes make them late for class and some faculty had (sic) gotten used to having their doors locked ... too often, students would get here and couldn’t get in the class. It’s crazy to lock your class door. Whatever the hell you’re doing is not that important. If a student has struggled to get here, let them in or post your notes on Blackboard, so if a student missed class they can go right there and get the information.

Expanding upon Adam’s point, Anna, a long-time faculty member, said,

So many of our students again have complex lives. I never would have been able to deal with what they have to deal with at their age. And they don’t have anybody that has their back. And so, when something happens in their life – a crisis – any type of family crisis – to them, to somebody in their family, immediate family or their grandmother, what seems to be least important is school, because they’re in the moment. I don’t lose them because they are not engaged in the classroom. My gut says that students walk because they have complex lives. And they can do the work, but it takes a lot of effort. They need somebody on their side at home and they don’t have that.

Many of the participants, employees and students alike, remarked about the caring feeling

conveyed at Buckeye Community College. They said over and over that it was concern for the student, the whole student, that they attribute to student success. Anna, a professor, proposed, “The bottom line is, our faculty ... we really do care. Over 90 ... 97%, we care.” Deborah, a senior executive officer of the college agreed that the sense of caring is pervasive but with some students, especially those coming from the urban environment of the northern service region, it sometimes becomes a challenge for the college. She explained,

One of the issues that I have to, in my role, deal with in the northern region is talking about appropriate boundaries. Because some of the student stories break your heart and so your inclination is to go above and beyond and sometimes you walk very close to that professional/personal boundary. We have some students who have an extreme need for attention and affirmation because they’ve not had it. And so even though an instructor or a staff member may be doing everything the way that they should be, they have to be very careful to reinforce that this is their professional attempt to get the student through. Because I’ve had more issues in the northern region with students – almost with a transference for lack of a better word – a psychological transference - that suddenly because somebody cares about them so much to help them out, that it means something beyond what that professional relationship is.

However, many times boundaries are not violated and the college is the support system the student needed to be successful by lending a helping hand. Anna, a liberal arts faculty member, revealed the story of a struggling student, Karen, who faced extraordinary challenges not unlike many other students and the college’s response to help her. Anna shared,

Karen, a nontraditional student in the public speaking class. Self-doubt – so much doubt. Meticulous though in her preparation. Always stayed after – “Am I doing this right?” I

can still hear her voice. Had trouble with outlining, had trouble focusing on “How do I develop this thesis statement?” She was seeing some success in some of her other classes. I think she was taking an English class as well as the speech class, together, and they really do blend well. She would come in and say, “Hey, we talked about this in English Comp.” And she would just light up when she saw the connection. And Karen was succeeding, succeeding, doing well, and then her son had some issues, legal issues, and that really, really threw her for a loop. And she missed some days – and I’m trying to recall now – ultimately she did come back. I don’t know if it was because a response from my email. I think what I did was I contacted Beth (a mid-level administrator for student services). TRiO – she was a TRiO student. So, that was the first time that we connected – it was Beth and I – and I think she was the one who told me that it was her son who was having some difficulty. He moved back in. There was chaos in the house. And then Karen, also that semester, said that she lost her house. She was renting, and the landlord was going to get more money from some of the oil riggers. She was out on the street. She worked as hard as she could to not fall behind. Ultimately, I believe that Beth wasn’t able to get her housing, but was able to get her in touch with someone who was. Ultimately, Karen, she just, I believe she ended up with an A. She was one that was not going to stop. She and I had built a relationship and she felt she could talk to me and she felt very comfortable with Beth. I know she graduated. I believe she is working on her bachelor’s.

Anna suggested, “If we just listen to students, our time, our precious time, listening to their overwhelming life challenges, then we can resolve a problem.” “We strive to offer comprehensive services,” Adam pointed out and “our goal is to change lives.”

Internal and external partnerships and collaboration. In the spirit of the African proverb, it takes a village to raise a child, educational leaders today know that it takes partnerships and collaborations to sustain a college and deliver excellence in education. In fact, Adam, a senior college executive, sums it up as “Collaboration is the tune of the day.” Buckeye Community College has been very active in building partnerships and relationships both internally among the constituents of the campus community and externally with the greater community.

Internally, the campus community works well together in supporting the college mission and delivering instruction and services to the off-site locations. According to Deborah, a senior executive officer of the college, the deans travel on a rotating basis to the off-site locations to provide academic administration and support to the site vice presidents. Although the support staff is primarily based out of the River County campus, the staff routinely visits the off-site locations to provide services. Not only is the main campus collaborating services with the off-site locations, the two off-site campuses coordinate services as well. For example, according to Deborah, the exchange of text books works very well between the two off-site locations with the bookstore at the larger campus delivering books and assisting the smaller off-site location.

Externally, the college is very involved in the service region and the reputation is quite good. Kimberly, a student services manager, explains that the college makes a deliberate effort to get employees off campus and engaged in community events, boards, and committees. She said, “The president advocates community involvement and keeps a master list on who is involved in what ... (and we) are permitted to attend meetings during the work day.” Not only are employees encouraged to serve on community committees and boards, but the employees are heavily involved on state-level committees and boards as well.

It is clear that the community appreciates the education and service that the college employees return to the community. Since its origination, the River County residents have steadily supported and passed an operations levy for the college. According to Elizabeth, a senior college administrator,

The people of River County are very invested in the college, and, with the recent name change required by the state some have felt hurt and upset that the county name is no longer reflected in the name of the college. But, to the vast majority of people here (on the main campus), it is and will be River Community College.

As another example of excellence in partnerships, Elizabeth points out the relationship with the area high schools. “We have a great relationship with the high schools and they really appreciate what we provide. In, at least one high school, we receive as much as 40% of their graduates.” She indicated that participation in College Credit Plus and serving select high schools in West Virginia has contributed to the continued growth in early enrollment. Further, reciprocity agreements have been established with a number of high schools and colleges in West Virginia and numerous four-year colleges and universities throughout Ohio and beyond have established transfer and articulation agreements for student seeking a baccalaureate degree.

The college encourages the use of its facilities by community organizations and, as Kimberly, a director-level manager of student services, suggests, “The physical address is a definite plus – everybody knows where we are. Happy to share space and allow use by many community groups, so many of the community are familiar and comfortable in our surroundings.” One community group which has developed a strong relationship with the college is the International Brotherhood of Electrical Workers (IBEW). The IBEW has partnered on a

number of projects, according to Elizabeth, a college administrator, and the union leadership serves on the college board of trustees.

An important partnership to support students with very low English, reading, and math skills was established with the Adult Basic Education and Literacy (ABLE) program. ABLE provides remediation and GED preparation and is a state-funded program available for free to all Ohio residents. Buckeye Community College's collaboration with ABLE resulted in ABLE relocating their instructional site to the Buckeye campus. When the college administers placement exams and the student scores below the level of college developmental education, the student is referred to ABLE for remediation to the developmental education level. With ABLE managing the earliest remediation, the student is not incurring financial expense at the college and the student may remain in the ABLE program as long as necessary to reach either the developmental education level at the college or receive a GED. Appendix A provides additional context regarding the ABLE program.

When the service district grew in the late 2000's, the college was faced with a difficult financial situation as it related to serving the expansive region. At that time, Buckeye Community College entered into a private partnership to support development of the off-site locations in the northern region. Beth, a student services administrator, said, "Since we could not build our own buildings or get our own building because of funds. They (the private partner) funded the site and the utilities to be paid back over 20 years." While the move to include the district put the college in an extended financial commitment, Beth argues that "if we had not expanded, we would probably not be here today." However, as Deborah, a senior executive officer of the college, shared the partnership with the private partner is opening new and exciting doors to the northern service region. She explained,

I look right now at the initiative we have going on with our private partner in the northern region and reaching out, you know trying to really kind of look at the dynamics of the community and how we pull students in and provide them the level of support that they need when sometimes that level of support exceeds what we can do as a college. And so we have an initiative that we're working with our partner on where they're using community based organizations. Because those community based organizations, whether it's a church, whether it is a social service agency, they are already providing a high level of support to the individuals that are part of their group. They know those individuals. They know what kinds of challenges that they have – they know what kind of strengths they have. And so we have been working through our partner to identify some of those groups that are willing to provide almost the social work case management to support the students going in.

Each of the participants from the administration, spoke about strong relationships with the political leadership in the service area, state, and nation. They pointed out that, in the situation of the federal grants, the Appalachian Regional Commission grants, and state grants, that strong partnerships with Congressional and state leaders have been instrumental in successfully building pathway for student achievement through grant-funded initiatives.

Enhanced student engagement opportunities. Each student participant became excited and animated when asked about their relationship and engagement with faculty members. They spoke about the respect they have for their professors but more importantly about the respect their professors demonstrated toward them. The students spoke about how the professors inspired them and pushed them to work harder and do better. Patrick, a nontraditional student, said, “Most of the professors that I’ve had here became my friends and one of them actually

became a family member through my girlfriend's family ... they drove me and pushed me hard but succeeded thanks to them."

James, a student seeking transfer to a university engineering baccalaureate program, found himself in a difficult situation whereby he needing Calculus II to complete his mathematics requirement but the course was subject to cancellation due to low enrollment. James said,

The faculty really want you to succeed and prevent anything from coming in your way.

When the professor realized that the course (Calculus II) was going to be cancelled, he volunteered and gave his time without pay to teach two of us the course over the summer.

That's an incredible thing to do and I'm still on track.

Becky, a nontraditional student who had not been in college for many years, pointed out that the faculty never left you feeling alone. She shared a story of needing help and the professor staying late after class on a regular basis and answering her questions. She said, "He is just amazing like that. He's willing to stick around for as long as it takes."

Patrick, a nontraditional student, indicated that the faculty went "above and beyond." He said that "the guidance he (his professor) gave ... I've never seen that coming from a professor or any kind of teacher I ever had." He added, "All of the professors at this school are excellent. If you're doing really good (sic) they'll ask you to help out somebody that's not." As Patrick pointed out, it wasn't just faculty-student engagement that helped students succeed. Becky, a nontraditional student, indicated that, she was much older than many of her classmates and at first felt frightened and nervous but before long felt welcomed and appreciated. She explained, "I felt too old to come back to school ... concerned that I couldn't keep up with the other students ... (I) have found it to be exactly the opposite." In fact, she said, "Younger students treat me as

better educated and farther along in life. I ended up moving them along ... helping them along, however I can.”

Supporting student access. Identifying barriers to student success by creating access pathways has been important work at Buckeye Community College. Based upon knowledge of challenges which at-risk students face, Buckeye has implemented a number of strategies to make higher education accessible for the population of the Appalachian Ohio service region. At-risk students include low-income students, minority students, students with inadequate preparation for college-level courses, and nontraditional age students. Other students who may require special assistance with access to college include working students, students with children or other family responsibilities, students who face transportation issues, and students with disabilities.

Low-income students, defined as having been eligible to receive the Pell Grant during at least one term of enrollment, face numerous challenges. According to Elizabeth, a senior college administrator, Buckeye Community College has taken actions to support these students. Adam, a senior college officer, suggests that those include expanding computer access by opening more computer labs with extended hours, redesigning curriculum to remove hidden or unnecessary prerequisites that may inhibit students from achieving their goal, and refining programs of study to enable students to complete a degree with less expense or debt. Further, he highlights additional forms of financial support are made available to students including the Horizon Grant, Gateway Grant, Hope Grant, and tuition waivers for those not eligible for the Pell Grant. The Horizon Grant is reserved for students from River County while the Gateway Grant is open to students from the other three counties of the expanded service region. The Hope Grant, which is due to expire in fall 2015, has offered economic support to students seeking healthcare careers

and offered assistance for State Tested Nursing Assistant (STNA) Tuition Assistance, emergency funding, gas cards, and linkage to community support services. This grant was available to students in all four counties of the service area.

Numerous student access initiatives have been developed to support minority students and those not academically college ready. Many of these interventions result from the elements of Achieving the Dream, DEI, and TRiO. These include flexible times for placement testing, the partnership with ABLE to create an entry point to higher education by supporting the development of a solid educational foundation, and institutional policies, practices, and procedures that required mandatory steps including advising, orientation, and distance learning orientation. Further, supported by the Carl D. Perkins Vocational and Technical Education Grant, the student success center provides free one-on-one tutoring on a 'by appointment' basis.

Access for nontraditional students is often complicated by the other events in their lives including work, childcare, or other family responsibilities. Additionally, due to many of these external barriers, nontraditional students at community colleges have difficulty fitting classes into their schedules. Buckeye Community College has responded by offering courses over a broad schedule. Adam, a senior officer, explained, “We try to make sure things are scheduled sufficiently and across the day to address our students.” Patrick, a nontraditional student and parent, was thankful for scheduling options noting “many courses were scheduled during public school hours which permitted me to pick up the kids from school and be with them in the evenings.” For the students who still face challenges with scheduling, Deborah, a senior executive of the college, encourages students “to do independent studies to make sure they get what they need” or take advantage of distance learning. This often empowers students by allowing them to take the classes based upon their scheduled availability. Adam pointed out that

scheduling to meet student needs has become more challenging in recent years. He suggests that, while evening courses were popular just a few years ago, today evening classes are becoming increasingly difficult to fill. He surmises, “Our night programs just don’t work well anymore and I think a lot of that has to do with the lack of support from industry that used to pay all that – that’s just not available anymore.”

For students facing childcare concerns, Buckeye Community College hosts a childcare center on campus with students given first priority for child placement and reduced cost. Other available vacancies in the childcare center are open to the general community. For the nontraditional student who cannot commit two or more years to completing a program, Adam suggests career ladders. These special pathways have been built to permit students to reach their goal one step at a time with stop out points along the way. At each stop out point, a certificate or credential is earned that will permit the student to seek employment at that level. When the student is ready, he or she may return to school at the stop out point to complete their ultimate educational goal. Further, career ladders allow the student to spread the expense of higher education over a longer time, thus easing the financial impact.

Whether it is unreliable transportation, costs associated with travel, or substandard infrastructure, many students at Buckeye Community College experience transportation challenges. According to Kimberly, a student services manager, financial aid has collaborated with the managers of the bookstore to permit students to use financial aid to purchase gas cards. Additionally, Beth, a student services administrator, discussed a popular partnership between the college and the local bus line to allow purchase of bus tickets with financial aid awards. Kimberly and Beth echoed the theme that supporting students’ transportation needs is critical to the student’s success at Buckeye Community College. Kimberly explains,

We can work on the academics all day long, but if there's something going on in the student's life impeding them from getting here, whatever that reason is, if we don't offer to handle that or make some sort of referral to handle that, guess what – they're not in our building any more so we can't do the academics. You've got to see them here – and the biggest one we hear all the time is transportation issues. Carpooling is not always ideal, so I really like that they did the gas card thing for the students on the outskirts that don't have access to a bus or cab. The off-site campuses – a whole different story. Inner city and campus right downtown.

Providing access for students with disabilities is not just a federal mandate, it is a solid commitment at Buckeye Community College. Supported through Carl D. Perkins Funds, disability services is conveniently located near the bookstore, student center, and within the student success center, according to Kimberly, sending a strong message that the college is fully invested in assuring students with disabilities full participation in the campus life. She adds,

Screening – pushed from day one – Every form – plastered all over it – how to register for disability services – every syllabus. Instructors are required to go over it. Health forms screened and any with the box checked for disabilities are considered self-disclosure and forwarded to the disability office. They reach out to these students for documentation, so we can help them and assist with accommodations to facilitate their success.

Serving more than a half million people over a vast geographical area of northern Appalachia creates a number of access issues, particularly for those in the most rural areas of the service area and those in the inner-city. According to Deborah, a senior administrative officer, the early years after expanding the service district were challenging and difficult to deliver

service and assure access to students from the farthest regions. The original structure was to establish sites located in career centers throughout the region. While the relationships with the centers was successful and ongoing, the locations were not successful. With the private partnership, four years ago the first off-site location opened in the downtown area of a midsize city with urban conditions atypical of the main campus location. A state-of-the art facility, it quickly became very popular and very well embraced by the community, according to Elizabeth, a senior student services administrator. With an on-site staff and faculty dedicated to the off-site centers, students in the region have full-service support for accessing college services. The second off-site location opened in fall 2014 and is a smaller facility but offers the same access features as the other off-site facility.

Embracing the community's culture. The students, faculty, and staff of Buckeye Community College share a common culture of northern Appalachian Ohio and, according to Adam, an executive officer, the leadership of the college continues to work with the campus community to develop a deeper understanding of many of the issues facing northern Appalachian people. While central Appalachia is characterized by profound poverty, northern Appalachian Ohio is slightly more prosperous but transitional (Appalachian Regional Commission, 2015b). The *transitional* characterization of the area is one of a region experiencing a decline from prosperity to *distressed* with numerous mills, factories, and industries closing and leaving the region. The result is widespread poverty. In response, Adam discussed the steps taken at Buckeye Community College. One of the most significant actions was to educate the campus community on the culture of poverty. Adam shared that leadership embraced Dr. Ruby Payne's Framework for Understanding Poverty and the campus participated in the Bridges Out of Poverty Training and Workshop. Further, Adam suggested that the methods learned of "reducing

the social costs of poverty, strengthening the workforce, and building a more prosperous and sustainable community” were integrated in the culture of the college, in the curriculum, and social services (Aha! Process, Inc., 2015). Adam suggested that the college has made great strides through these professional development opportunities but some work is still ahead in order to better serve the students and help them become successful. He said,

The majority of the people want to see people succeed and do better. There’s still some cultural issues that we are trying to eradicate. If you’re poor – they have a different attitude to a poor person, and they themselves are just one paycheck away from being that person, but they don’t see it that way. So having to change that culture.

Elizabeth, a long-time administrator, declared that “Students (from depressed areas of the service region) like to come to the campus because it’s nice, well-lit, and attractive ... they enjoy the campus and they respect it and take good care of it.” Each of the students and staff discussed the campus as having a sense of family and support. In fact, Kimberly, a student services director, pointed out that we are “without a doubt deeply family oriented.” This sense of familism is an extension of what many of the students experience at home. James, a 36 year old student, described his relationship with his family. He shared that in the rural area of his home, his family established several homes on the same plat of land. He discussed the strong family bonds that existed between he and his father and the respect he has for his father and grandparents. He described that his grandparents were the first to build a home on the estate and added a garage with an apartment to the rear. Soon, his father built a house next door and while James lived in the apartment, his father and mother next door, his grandparents live in the original home. James remarked that he had no interest in leaving his family and he was concerned how he could manage the long commute to the midsize university to complete his

bachelor's degree in engineering. Although he will have completed two years of his bachelor's degree upon transfer, he is not willing to relocate from the family estate for even a short time to complete the last two years of his degree. His solution was to "crash on a friend's sofa on the days when the weather makes it so he can't make the drive home." This is the familism that Ergood (1976) described. The challenges formed from the culture produce an impact on access and success in higher education.

The pattern of youth in Appalachia is seen in the Buckeye Community College service area. Kimberly, a student services director, suggests that "rural students seem to have more family support ... (and) more traditional age students want out of the area ... but 'we all come back.'" As an Appalachian 30 year old, when asked if she left, she laughed and said, "of course, I did, but, like I said, 'we all come back.'" She suggested that this pattern explains why students seem to be at the college one semester and disappear for a few years before they return and finish their degrees. She also suggested that "college is more often an escape (for city students) from a bad family situation."

The powerful sense of home, a fierce independence, honor, allegiance to our community, traditionalism, guarded respect for authority and a touch of fatalism are cardinal characteristics of Appalachian people (Ergood, 1976). Each of these qualities were seen in the students, faculty, and staff at Buckeye Community College. Several participants of this study revealed local concerns over identity when state officials from Columbus pontificated the name be changed and the service district expanded. But, the participants in the study shared their appreciation for the change while always reminding that "others" continue to hold to the past when the River campus was the college. Anna, a faculty member, explained and the Appalachian characteristics showed when asked, "What is the culture?"

I think the community is the college itself. We call ourselves the college community. And I think overall there is a nice solidarity. We're small town and we know it and we're comfortable with that. I think that we deal with change pretty well. Some may say no, but I think that we roll with the changes. I think we see that because we're so small and we see sometimes our enrollment, at least here, dwindling down, I think we realize that we needed that change ... that we needed to head up there to the upper counties. But we're still feeling that we are us and they are them. I still think there's that.

Conclusion

In this chapter I illustrated the portraits of Cardinal Community College and Buckeye Community College while highlighting the actions, initiatives, and interventions used to make these institutions models of student success in Ohio. In the final chapter, I will explore how these themes relate to each other and can be better understood using a Community Capitals Framework as a tool to improve student success.

Chapter Five

Cross-case Analysis, Implications of the Study, and Recommendations

In this chapter, I will review the final process of analysis through an Appreciative Inquiry Approach. I will explore the relationship between the actions, initiatives, and interventions taking place on the campuses of Cardinal Community College and Buckeye Community College which support a student success agenda and each of the capitals associated with the Community Capitals Framework. This will be followed by a cross-case analysis of the invested resources within each capital. From this final analysis, the overarching question of the study will be answered. This chapter will conclude with limitations of the study, recommendations for use in higher education, and recommendations for further research.

Analysis through the Appreciative Inquiry Approach

Flora and Flora (2008) endorse multiple approaches for final analyses of communities through the Community Capitals Framework. One strategic method particularly valuable to understanding success is the Appreciative Inquiry Approach (AI). They (2008) explain, “AI began as a tool for transformation of business leadership to build more effective organizations based on discovering the positive core of enterprise and building assets around it” (p. 361). Focusing on the positive qualities and what works in the organization, the Appreciative Inquiry Approach engages participants to determine what are the factors that make the community successful. The researcher follows a three step process: “discover assets and what is working best, dream about how what is working could work even better, and design how to build on current assets and what works to get to desired future conditions” (Flora & Flora, 2008, p. 361). Further, they (2008) submit, “Appreciative Inquiry demands that the change agents approach

community development as co-learners to co-construct both expert ‘know-what’ knowledge and the wisdom that emerges from locally specific tacit, or ‘know-how’ knowledge” (p. 361).

Flora and Flora (2008) propose, “Identifying the assets, at times using the Community Capitals Framework, it attempts to build transformative change by taking into the future what works best in the present and what has worked for community well-being in the past” (pg. 362). They further explain that,

AI emphasizes the importance of learning from others by emphasizing the power of storytelling, the need to recognize the wisdom of others, the importance of curiosity in our quest for doing better, the value of hearing stories, and the primacy of conversations and dialog. (2008, p. 362)

Flora and Floral also suggest that implementing the Appreciative Inquiry Approach used in conjunction with the Community Capitals Framework provides a means of contextualizing the study in a way that the data can be easily viewed, understood, and structured for detailed review and analysis, and that it affords insight into areas that might not otherwise have been recognized.

I have embraced the Appreciative Inquiry Approach by focusing on the actions, initiatives, and interventions taking place on community college campuses of highly effective institutions with regard to executing a student success agenda. Through inductive techniques, information-rich data were gleaned from participant interviews, document analysis, and observation of the campuses and the campus activities. I engaged with the participants and gathered perspective from a broad range of individuals of the campus community. The participants shared their insight from their worldview and contributed to the findings from multiple roles and points-of-view. This process satisfied the first step of the Appreciative Inquiry Approach.

However, since this is a multi-case study and not an exploration of a single case, thorough implementation of the second and third steps with the aggregate data of the combined cases is beyond the scope of this study. With that said, it should not be assumed that the second and third steps of the AI Approach possess no consideration and do not inform the study. It is clear from the inductive inquiries at both institutions that the second and third steps of AI (dreaming about how what is working could work even better and design how to build on current assets and what works to get to desired future conditions) are taking place routinely and widely on the campuses. In fact, Anna, a professor at Buckeye Community College, pointed out that in every faculty meeting success is discussed, data is monitored, and ideas are shared about how the faculty can help raise the bar and improve student success. Ron, a manager with duties related to retention at Cardinal Community College, shared that the discussions to improve student success do not only take place informally on campus but that the college has structured, organized committees which have as their goal the monitoring of success data, proposing improvements, and implementation of new and improved success measures. Therefore, while the goal of this study is not to execute the second and third steps of the AI approach with the regard to the aggregate data, it is evident that these activities of Appreciative Inquiry are taking place.

Themes in Relationship to the Community Capitals Framework

Flora and Flora (2008), point out that, “The Community Capitals Framework provides fuzzy boundaries for the capitals, which all overlap with each other” (p. 19). When exploring the relationship between capitals it is important to note that these constructs may either contribute to or detract from other capitals. In fact, the actions, initiatives, and interventions may be associated with multiple capitals simultaneously as a result in different outcomes from the perspective of other capitals. As a rule, when an action, intervention or initiative is emphasized in multiple

capitals it is providing a powerful contribution to the overall ecosystem, economy, and inclusiveness of the community.

In the following sections, each of the community capitals is examined within the context of three guided steps of analysis. First, how is the capital defined within the context of this study? Second, what does the cross-case analysis of student success activities between Buckeye Community College and Cardinal Community college reveal about the level and types of investment in the capital? Finally, why is investment in the community capital important to student success?

In chapter four, emerging data were organized into eight key thematic strands. These strands reflected the commonality between the themes and provided a means to consolidate the emerging data in a way that spoke to student success activities taking place on the campuses. Concurrently, the success activities were analyzed for the type of contribution made to student success. A typology was created by the researcher for use as a filter to determine the applicability of themes to be included in the capital analysis. This system required that a student success activity must be categorized as at least one of four types to be included in the analysis: an intervention, initiative, action, or intervention/initiative hybrid. To provide clearer understanding of the activities, tables were created for each capital at Buckeye and Cardinal Community Colleges and included the qualifying activity along with the working definition of the capital. With each activity, a relationship to the capital is provided along with the determinate factor explaining the justification for the inclusion of the activity for analysis. Appendix K contains the community capitals tables for each of the institutions.

Natural Capital. According to the International Institute for Sustainable Development (2013), “Natural capital is the land, air, water, living organisms and all formations of the Earth’s

biosphere that provide us with ecosystem goods and services imperative for survival and well-being.” Refining the definition for a community capital’s perspective, Emery, Fey and Flora (2006), describe natural capital simply as “those assets that abide in location, including resources, amenities, and natural beauty” (p. 5). The functional definition for the purposes of this study assumes the nuances of the Emery, Fey, and Flora definition with application of natural capital to community colleges. It includes the demographics, geography, topography, and natural resources of the community college service areas and districts, physical location of the college within the area served by the college, the diversity of the area served by the college, and the campus setting and maintenance.

Cross-case analysis. Cross-case analysis reveals that Cardinal Community College and Buckeye Community College have many similarities within this construct. Both are situated in the Appalachian region of Ohio and, as a result, the regional influences of poverty, rugged geography, high unemployment, limited racial and cultural diversity, and common socio-cultural characteristics have a direct impact upon student success and how the colleges develop student success efforts. Both campuses serve rural communities with characteristic rural problems including substandard infrastructure, limited public transportation, and scarce social resources such as inaccessible health care and limited educational and cultural opportunities.

A distinction between Cardinal Community College and Buckeye Community College is in the settings of the main campuses. Cardinal Community College is located in a small village with limited recreational, social, or transportation services. Buckeye Community College is located in a small to medium size city with multiple shopping conveniences, eateries, and public transportation amenities. This distinction has resulted in the institutions responding differently in developing and implementing student success activities.

While little can be done by the colleges to change the geographical landscape of the service area, both institutions have taken special efforts to work with geographical limitations in their districts to maximize natural capital. They have created well-maintained campuses complementing the natural beauty of the region. With limited resources available in their respective communities, the colleges have opened campus facilities for community use for non-college events. They have addressed transportation and infrastructure barriers by establishing off-site centers in the outer most areas of their service regions and expanding distance education. These off-site centers serve as both interventions and initiatives for the college. As an intervention, the sites deliver education to students who are place-bound in their communities and may face transportation challenges. As an initiative, the centers also serve all students and help form valuable relationships and partnerships with the distant communities.

The significance of natural capital investment to student success. Natural capital plays an important role in lives of community colleges. From the birth of community colleges, the focus has been on providing higher education, skills development, and workforce training to a designated service area. Natural resources have defined the curricula of the colleges through development of specialized programs in response to community needs and, frequently, those needs have been guided by what is happening with natural resources within the region. These programs have not only been a reaction to employer needs but also the needs of students within the region seeking higher education and a career. With the discovery of expansive natural gas reserves in Ohio, Pennsylvania, New York, and West Virginia, community colleges in these areas have rapidly responded to employer demands through programs in geoscience, engineering, and well tending.

Integration of diversity, a natural capital of the region, into the community college experience enhances learning, fosters a climate of inclusion, and prepares students for academic and workforce success. In fact, researchers at the University of California at Berkeley (2013), suggest that diversity facilitates specialization with strengths and varied interests, invigorates problem solving, and balances biases. Further, embracing diversity within the service region reduces barriers of access for minorities and other categories of historically at-risk students. As a form of natural capital, community colleges invest in diversity initiatives and interventions and target steps to improve student success. National student success initiatives, including Achieving the Dream and the Developmental Education Initiative, call upon community colleges to integrate strategies to improve student success rates for students of color and other at-risk student populations.

While natural capital has informed curricula and program development, at other times natural resources of the service region have presented as barriers to student success. Delivery of higher education in rural areas, especially those regions with substandard infrastructure, remains a challenge for community colleges which rely on commuter students. Understanding the influences natural capital has on student success is an imperative for academic leadership. Administrators must recognize barriers to access and success which are directly related to natural resources. Proactive measures to assist students in overcoming barriers to access is essential to executing an effective student success agenda. Both institutions in this study face geographical challenges associated with location in the Appalachian foothills. Each of the colleges has taken aggressive steps to deliver education to students who are place-bound and, as a result, unable to attend programs on the main campuses. The creation of off-site centers and robust distance learning programs has opened doors for access and created pathways to student success.

Cultural Capital. Emery, Fey, and Flora (2006) declare that cultural capital “reflects the way people ‘know the world’ and how to act within it” (p. 5). The functional definition of cultural capital for this study is adapted from the works of Macionis (2005) and Emery, Fey, and Flora (2006) to include institutional values, beliefs, behaviors, and material objects that together form the college’s or the service area’s way of life. Values are “culturally defined standards by which people assess desirability, goodness, and beauty and that serve as broad guidelines for social living” (Macionis, 2005, p. 655). A belief is “a specific statement that people hold to be true” (Macionis, 2005, p. 650).

Cross-case analysis. An analysis of cultural capital requires review of student success activities as they relate to institutional values, beliefs, and behaviors. Further, cultural capital analysis seeks to understand how values, behaviors, and beliefs, together, shape the way of the life of the college and community and how they positively affect student success. Analysis requires an understanding of the context in which the student activities are applied and how cultural capital shapes implementation.

Cultural commonality exists between the colleges with regard to the socio-cultural characteristics of Appalachian people. Both institutions represented strong personal traits in the employees and the students as established in Appalachian scholarly literature (Ergood, 1976). Those characteristics have shaped the types of activities the colleges have implemented for student success. Many of the activities dealt directly with cultural qualities and reflected behaviors based upon values and beliefs. These included collective conscience, loyalty and allegiance to the community, and concern for fellow employees akin to a strong sense of familism. Additionally, neighborly qualities associated with close knit, rural communities were

evident in common themes including caring, supportive, encouraging, and approachable faculty and staff, and a climate of inclusion.

Distinguishing factors with regard to cultural capital are related to subtle differences in the service regions. Although both colleges are in the Appalachian region, they demonstrate slightly different qualities based upon the fact that Cardinal Community College is located in central Appalachia and Buckeye Community College is located in northern Appalachia. Although Appalachia has a common set of unique characteristics that are experienced across all three regions of northern, central, and southern Appalachia (Ergood, 1976; Jones, 2002), the variety, intensity, and dynamics of factors between the regions, especially with regard to poverty and county-level economic conditions, differ and produce conditions with varying degrees of influence (Couto, 2002).

The service region of Cardinal Community College is more rural and has greater transportation and infrastructure concerns than the region served by Buckeye Community College. Further, the county-level economic conditions are more distressed with more people per capita living in poverty. However, the region has shown dramatic growth in population over recent years. On the other hand, the service area of Buckeye Community College is transitional as related to its county-level economic status and getting worse with more and more communities being designated as distressed by the Appalachian Regional Commission, thus indicating that the number of people living in poverty is increasing. Further, the northern area of the district has introduced an additional cultural component by its service to urban and inner-city populations, a component absent from the Cardinal Community College district. The decades of steady decline in the Buckeye Community College district as a result of mills, factories, and business closures has created poverty conditions and those poverty conditions have a direct

effect upon the culture. Together, the dynamics and nuances of poverty among other cultural factors inform how to best serve students and shape the student success activities.

The significance of cultural capital investment to student success. Embracing cultural capital is essential to student success given that cultural capital provides the foundation of understanding that shapes, motivates, and influences students toward achieving their goals. In fact, research has shown that cultural capital plays a significant role in student persistence leading to student success (Berger, 2000; Wells, 2008; Yourke & Longden, 2004). The values and beliefs of a community mold attitudes toward education, perseverance, and persistence. Understanding the culture of students enables college leaders to create initiatives and respond with interventions to advance student success.

Educational leaders must seek ways to blend the culture, traditions, and symbols of the college with the cultural code of the community to create a welcoming, learner-centered environment conducive to academic excellence. Wells (2008) suggests, “Colleges of all types must begin to recognize alternative forms of capital and develop ways to exploit those nontraditional assets” (p. 42). Understanding the nuances and outside influences of belief systems upon education is critical to developing strategies for student success. For example, when college leadership understands the strong role of family in an Appalachian student’s life, the policy makers may elect to respond with non-punitive guidelines that do not force students to choose between important family responsibilities and college functions. Cardinal Community College exemplified this in the development and implementation of attendance policies that recognizes the native culture of the students and their attempt to balance family obligations and school. This blending of cultural capital and the promising practices of human capital produces conditions which support student success.

It must not be assumed that the culture of a community will parallel that of the community college. While the mission of community colleges is to help students achieve their goals and thus be successful, the culture of communities include competing interests that may result in student success not being held at a high-level of importance or as a top priority. In fact, at times cultural standards within a community may place little value on education and, consequently, offer minimal assistance or support systems for students seeking higher education. As a result, varying levels of encouragement from family and the community frequently present as barriers to student success (Bragg, et al., 2006; Eller, et al., 1997; Poole & More, 2001). College leadership must understand the cultural influences, values, and beliefs, and, through the lenses of the community culture, develop initiatives and interventions that support student success within the parameters of the cultural standard. Recognizing this incongruence between cultures, Buckeye Community College sought ways to ways to extend higher education to students with parental responsibilities. The result was a realignment of the academic schedule to meet the competing needs of students. They offered programs that could be completed during public school hours thus enabling students with children to attend college while their children were in school. Additionally, through a blending of cultural, built, and financial capitals, Buckeye and Cardinal Community Colleges created on-site childcare centers to provide support that may otherwise be lacking from the community for students with children. Therefore, when community colleges invest in cultural capital they seek to integrate the community's values, beliefs, traditions, and symbols into the way of life of the college in such a way as to create an academic and student services environment that reflects and respects the student's culture and results in student success.

Human Capital. According to Emery, Fey, and Flora (2006),

Human capital is understood to include the skills and abilities of people, as well as the ability to access outside resources and bodies of knowledge in order to increase our understanding and to identify promising practices. Human capital also addresses leadership's ability to 'lead across differences,' to focus on assets, to be inclusive and participatory, and to be proactive in shaping the future of the community or group. (p. 5)

In an effort to refine this definition for the purposes of application to community colleges as sociological communities, human capital includes the skills and talents of the people of the campus community. It includes experience, education, professional development, and the knowledge-base of employees. It may also include identification, understanding and application of promising practices.

Cross-case analysis. Cardinal Community College and Buckeye Community College are rich with human capital. Both institutions invest heavily in the professional development of the faculty and staff and engage in policy development based upon promising and best practices for student success. These include policies regarding advising, attendance, first-year experience, and developmental education. Beyond policies, the colleges have invested in campus services known to support student success. These include childcare services, veterans support, tutoring, early college for high school students, distance learning, and financial support through scholarships, grants, and counseling regarding fiscal literacy.

The distinction between Cardinal and Buckeye Community Colleges lies in approaches in which they invest in human capital. Cardinal Community College concentrates its efforts on promising practices that are internal initiatives, interventions, and actions. They include policies that mandate degree audit, new and transfer student orientation, and automatic awarding of

degrees. Buckeye Community College, while enacting similar policies, invests in large scale national student success initiatives and interventions, such as Achieving the Dream, TRiO programs, and the Developmental Education Initiative. While all of these initiatives, interventions, and actions are based upon promising practices and comprise human capital, the differences lie in the scale of the activities and the amount of financial investment necessary to sustain them.

The significance of human capital investment to student success. Parcel and Dufur (2001) speak to the importance of human capital when they note, “Teachers with greater knowledge or more experience may do a better job in the classroom, thus facilitating student achievement” (pp. 885-886). Placing an emphasis on well-educated faculty and staff ensures a solid academic foundation and establishes the expectations for student success. However, investment in continuing education, professional development and skills enhancement in community colleges is often limited by lack of resources and financial challenges (Goldrick-Rab, 2010). The result is an inadequate investment in human capital resulting in a disproportionate number of courses taught by part-time or adjunct faculty, insufficient professional development, and shortages of faculty in key academic departments. Correlational studies have linked these conditions to student outcomes (Brock, et al., 2007; Calcagno, Bailey, Jenkins, Kienzl, & Leinbach, 2008; Goldrick-Rab, 2010).

Implementing promising and best practices through institutional policies is an important form of human capital and establishes a framework for student success. Over recent years, Buckeye Community College and Cardinal Community College have enacted a number of policies for the purpose of driving student success. These policies include mandatory advising, orientation, placement for developmental education, attendance, and sequencing of academic

programs. Many of these policies have been informed by research conducted by national student success initiatives including Achieving the Dream, Completion by Design, and Complete College America. The emphasis has been on reducing remediation, increasing course load, structuring schedules and plans of study, and establishing benchmarks and milestones to assess progress (Complete College America, 2014a). As a result, focus is placed on making higher education more affordable for students and reducing student debt, receiving only the content necessary for the degree or program, and moving through a program of study quickly to completion and success.

Social Capital. Emery, Fey, and Flora (2006) suggest that “social capital reflects the connections between people and organizations or the social glue that make things happen” (p. 6). Adapted for this study, social capital includes college structure and hierarchy, teamwork, internal collaboration, partnerships between individuals and units of the college, and how these individuals work together. Further it includes interpersonal relationships and concepts of shared governance.

Cross-case analysis. Cardinal Community College and Buckeye Community College have similar investments in social capital with regard to shared governance, college social structure, and hierarchy. Both have strong faculty unions and student senates that inform and participate with the administration in decision-making. The colleges have engaged in major structural initiatives stemming from recognized social needs. These include establishment of off-site centers, student success centers, and on-site childcare. Day-to-day management of these initiatives requires extensive teamwork, collaboration, partnerships, and relationship building. These social constructs are characterized by an approachable, mutually supportive faculty and staff, and include high levels of faculty-student engagement.

Cardinal Community College has an extensive social network built largely from informal relationships. In contrast, Buckeye Community College's social network has been greatly influenced by student success activities driven by external partnerships. For example, Buckeye has, by virtue of several large student success initiatives and interventions (e.g. Achieving the Dream, TRiO programs, Developmental Education Initiative), shaped a number of its internal relationships based upon what is necessary and required to meet the expectations of these partners.

The significance of social capital investment to student success. Investment in social capital in the form of organizational structure and teamwork are essential to student success. In fact, the interplay between structure and function shape the institution as it strives to fulfill its goal of student achievement. Bolman and Deal (2003) explain, "Every group evolves a structure as its members work together" (p. 108). The members form relationships, partnerships, collaborations, workgroups, and teams. Especially significant to student success are increased levels of faculty-student engagement and the relationship the student forms through a sense of connectivity with the college. Tinto (1975) underscored these attachments as pivotal for student persistence and success.

Building networks and empowering student engagement are important investments of social capital. In fact, Pascarella and Terenzini (2005) suggest, "Because individual effort and involvement are the critical determinants of impact, institutions should focus on the ways they can shape their academic, interpersonal, and extracurricular offerings to encourage student engagement" (p. 602). As a result of these investments in social capital, "Grades, persistence, student satisfaction, and engagement go hand in hand" (Kuh, 2009, n.p.). In fact, according to Kuh, Cruce, Shoup, and Kinzie (2008),

Student engagement in educationally purposeful activities is positively related to academic outcomes as represented by first-year student grades and by persistence between the first and second year of college and ... engagement has a compensatory effect on first-year grades and persistence to the second year of college at the same institution. (p. 555)

Shared governance, a form of investment in social capital, fosters a campus climate of academic freedom and participation in the scholarly destiny of the college. It enables the college's social networks to collaborate in support of the college mission and focus efforts on student success. In fact, "A college or university in which all the components are aware of their interdependence, of the usefulness of communication among themselves, and of the force of joint action will enjoy increased capacity to solve educational problems" (American Association of University Professors, American Council on Education, Association of Governing Boards of Universities and Colleges, 2000, p. 86). Fully engaging students in the operations of the campus is an important investment of social capital and strengthens the connectivity, as described by Tinto (1975), between the students and community college and "incorporates the strength, freshness of view and idealism of the study body" (American Association of University Professors, American Council on Education, Association of Governing Boards of Universities and Colleges, 2000, p. 90). Cardinal Community College takes extra strides to incorporate student engagement in shared governance of the college and supports several platforms to encourage student participation in campus operations, thus building strong ties between the college and the student. As Tinto's (1975) seminal work suggests, strong ties to the college results in persistence and success.

Political Capital. “Political Capital,” according to Emery, Fey, and Flora (2006), “reflects the access to power and power brokers such as access to local office of the member of Congress, access to local, county, state, or tribal government officials, or leverage with a regional company” (p.6). Reformed for this study, political capital includes the reputation and external relationships the college has with the community, government leadership, other colleges and universities, and participation in sponsored success initiatives.

Cross-case analysis. In nearly every instance, Cardinal Community College and Buckeye Community College are similar in the methods for building strong, external partnerships emphasizing relationships with government leadership, regional employers, faith-based organizations, and state agencies. Both also rely on strong community relationships to support ongoing tax levies, high school partnerships, and clinical internships and practicum sites. Both extend services to their communities through an open campus policy that encourages community organizations to use the campus facilities free of charge. The colleges support their employees and students to contribute to their communities to service on boards, involvement in community events, and participation in fairs and festivals. Both institutions are very dependent upon public-private partnerships. Cardinal Community College’s partnership with Cardinal University is critical to the existence of Cardinal Community College. Buckeye Community College has relied exclusively on the public-private partnership that funded and secured the northern off-site locations for the college.

The significant external partnerships with the major national student success initiatives are distinguishing factors between Buckeye and Cardinal Community Colleges. Buckeye’s relationship with Achieving the Dream, TRiO and other national initiatives have distinguished the college from Cardinal Community College, which relies more heavily on local and state-level

partnerships to support their student success agenda. For example, Cardinal's relationship with the village businesses has fostered a welcoming environment for the college through recreational discounts for students and a hospitable 'town and gown' relationship.

The significance of political capital investment to student success. Similar to social capital, political capital relies on investing in relationships. However, unlike social capital which is reliant on internal collaboration, investment in political capital is dependent upon external partnerships between the college and community, state, and nation leaders. According to Bolman and Deal (2003), "Every significant organizational process is inherently political" (p. 238). Investment in political capital is frequently associated with investment of financial capital because it is often through these relationships that funding streams are formed. In each of the cases of this study, the public community colleges entered into external, private partnerships which benefited the colleges across each of the community capitals. Both colleges also aggressively invested in political capital within their communities and, as a result, the communities returned the investment to the colleges through renewed funding through tax levies.

The resources developed as a result of political capital investment support student success. Buckeye Community College's relationship with Achieving the Dream has resulted in the college receiving the Developmental Educational Initiative Grant which supported students requiring remedial education through enhanced services and expanded instructional opportunities. Buckeye's relationship with state and congressional leaders led to endorsements which aided in successfully receiving United States Department of Education TRiO grants which supported student success for minority and at-risk students. Cardinal Community College's relationship with Cardinal University has introduced an academic university experience at the community college level and thus empowered student learning through research and scholarship.

Financial Capital. Emery, Fey, and Flora (2006) refer to financial capital as the “resources available to invest in community capacity building, to underwrite businesses (sic) development, to support civic and social entrepreneurship, and to accumulate wealth for future community development” (p. 6). The functional definition for this study includes financial and capital resources, the budget, or financial investments by the college directly related to student success and its other various resources.

Cross-case analysis. The investment of financial capital is nearly identical between the two colleges. Both rely heavily on public-private partnerships to support capital resources (the northern off-site locations for Buckeye Community College and the shared campus for Cardinal Community College). Each college is supported by educational levies and is reliant upon performance-based state funding subsidy, tuition, fees, federal financial aid, grants, and scholarship to form revenue and build capital. Cardinal and Buckeye Community Colleges have aging main campuses in excess of 40 years old requiring expenditures for maintenance. At the same time, both colleges have new, modern off-site locations requiring less current expense for sustainability. Cardinal Community College and Buckeye Community College have made investments in personnel to support a student success agenda. Cardinal has hired a retention specialist whose employment is solely focused on measures to improve student retention and persistence. Additionally, Cardinal has a full-time director of the student success center and the tutoring and math lab facilities. Buckeye has employed instructional specialists and instructional technologists to serve as support staff for the faculty to venture into new educational approaches for student success. Further, Buckeye employs academic coaches, a student success center and tutoring director, and is hiring an educational psychologist to assist students with non-cognitive

issues. Both campuses have invested in capital resources including health and fitness centers, childcare centers, and food services facilities.

The distinguishing difference is in the way that resources are focused on student success activities. Buckeye Community College makes significant investments in the national student success initiatives such as Achieving the Dream. However, it was because of the college's participation with Achieving the Dream that it was the recipient of the Developmental Education Initiative Grant. Buckeye seeks to build on student success through grant-funded interventions such as the TRiO programs. Cardinal, on the other hand, has targeted its capital expenditures toward local initiatives such as the Provost's Academic Excellence Initiative and academic programs of excellence. Additionally, Cardinal has invested heavily in creating the complete college experience for its students through student life and athletics, not typical of most community colleges and not present at Buckeye Community College.

The significance of financial capital investment to student success. Nearly every aspect of student success requires investment of financial capital. According to Flora and Flora (2008), "Capital is any resource capable of producing other resources" (p. 175). With regard to student success, financial capital is not merely the investment into a student success activity or another community capital. Rather, for the investment to represent financial capital the contribution must produce the desired outcome or resource: student success. The investment of financial capital, therefore, requires prudent and responsible planning with an intentional goal of measureable student success. The community colleges in this study heavily invested financial capital in initiatives, interventions, and physical resources to support student success. The efficacy of those investments resulted in measureable outcomes in persistence, completion, or graduation rates along with other measures to determine if the student accomplished individual goals set forth.

Additionally, the role that financial capital has with regard to the other community capitals is significant. Responsible investment of financial capital is necessary to balance and support each of the other capitals. When financial capital is underinvested in the other capitals, the values of the other capitals are diminished and the capital goals are hindered. Likewise, if the financial capital is overinvested in other community capitals, the solid, fiscal foundation of the institution is at risk. A practical example of underinvestment of financial capital and its effect on student success includes retaining excess funds in the college's reserve account. Without reinvesting in human capital to provide tutoring and other vital student services targeted and assisting students, students will not be successful and fail to achieve their goals. In contrast, if the college overinvested financial capital in the purchase of built capital such as land or buildings without maintaining appropriate levels of institutional funds in the college's reserve account, the solvency of the institution comes into question and services to other areas that support student success are compromised. Student success relies on prudent management and investment of financial capital.

Built Capital. Emery, Fey, and Flora (2006) describe built capital as “the infrastructure that supports the community” (p. 6). Building upon this definition with application to community colleges, built capital includes the physical infrastructure of the campus, buildings, grounds and the organization of the campus. It also includes social infrastructure such as services available on campus to students, faculty, and staff.

Cross-case analysis. Cross-case analysis reveals that both colleges have invested in built capital through a wide range of physical structures. These include well-maintained campuses, expanded computer labs, student success centers, health and fitness centers, on-site food service, and on-site childcare. Equally valued are the social structures and services available to support

students, faculty, and staff. These include distance learning, veterans support services, tutoring, disability services, student organizations, Early Alert System, and an academic processes to manage curriculum.

Cardinal Community College has invested heavily in built capital, in particular with regard to social infrastructure. These include the student ambassador program, honors program, athletic programs, Greek life, and civic engagement. Cardinal's built capital investment in physical infrastructures includes the One Stop, food pantry, and clothing closet. In contrast, Buckeye Community College's investment in built capital has been more broadly distributed to include both physical and social infrastructures combined. These include on-site ABLE, TRiO programs, Developmental Education Initiative, academic coaches, and outreach center. Additionally, Buckeye has made deliberate investments in improving the social infrastructure within built capital. They did this by engaging the campus community in an extensive cultural competency program focusing on the culture of poverty. The distinction between the investments of the two colleges rests on local and state focused initiatives at Cardinal Community College and the broader focus including local, state, and national initiatives at Buckeye Community College.

The significance of built capital investment to student success. The importance of physical and social infrastructure to support student success cannot be overstated. In fact, research has shown that investment in a variety of built capitals directly contributes to persistence and success of students (Bailey & Alfonso, 2005). According to O'Gara, Mechur Karp, and Hughes (2009),

Offering an array of services enables community colleges to meet the varied needs of their students. The prevailing philosophy is that such services can increase student

success and persistence to a degree by providing them with additional resources and opportunities that help them become integrated into the college environment. In addition, providing student services can be seen as compensatory, helping disadvantaged students overcome their potential lack of information, cultural capital, or academic preparedness. (p. 196)

The array of services proposed by O’Gara et al. are met through broad investment in a variety of built capitals. These involve the development of the physical infrastructure including student success centers, tutoring labs, easily accessible buildings, convenient parking, advanced technology centers, campus-wide internet, up-to-date instructional technology, and one stop service centers for college admissions, financial aid, and business office functions. Further, development of social infrastructure, an equally important form of built capital, includes advising, retention specialists, academic coaches, and on-site student support services such as childcare centers, food and vending services, extended library hours and expanded computer labs. Cardinal Community College and Buckeye Community College demonstrated high levels of investment in both physical and social infrastructure. In combination with broad and balanced investment across natural, cultural, human, social, political, and financial capitals, these significant investments in built capital attribute to the high levels of student success which has resulted in these colleges as exemplars in executing a student success agenda.

Cross-case Analysis Conclusion

The cross-case analysis between the combination of the capitals has revealed that Cardinal Community College and Buckeye Community College have invested heavily, similarly, and evenly across each of the community capitals. They have been deliberate and intentional to implement initiatives, interventions, intervention/initiative hybrids, and actions to advance a

student success agenda. The college's success may be attributed to a number of common factors but certainly building a culture of student success has been key. While the colleges are unique among community colleges regarding their level of success in helping students, they are surprisingly alike in what makes the two colleges stand out among the other 21 Ohio community colleges. This is their public-private partnerships and stepping outside the typical community college paradigm to solve problems and support success.

The distinguishing factor between the schools can be summarized in the overall focus that the schools have embraced to power their student success agendas. Cardinal Community College has invested heavily in its local community, its people, its culture, and the Appalachian culture. It admittedly enjoys the small village feeling and focuses its effort on locally-developed student success activities. In contrast, Buckeye Community College that is situated in a small to medium size city but serves a range of rural Appalachian students, has embraced the work taking place nationally to promote student success. Achieving the Dream, TRiO, and other national initiative and interventions have laid the foundation for success at the college. Both schools have become models of achievement and have reached this point by only slight deviations in their pathways.

Answering the Overarching Question

This study began with a simple inquiry: *what is the role of the constructs found in the Community Capitals Framework in supporting community college student success?* Because success is defined differently based upon the context in which the term is being used, it was important to adopt a universal definition familiar to the study population. With the study focused on Ohio community colleges, the definition of student success had been legislatively defined for the purpose of implementation in the state's new performance-based funding model. It then

became important identify Ohio community colleges that have a demonstrated record of student success. Referring back to the performance-based funding model implemented over the past three years, a method was in place to determine the schools with the greatest percent of positive growth. The resultant institutions, Buckeye Community College and Cardinal Community College, were first and second, respectively, among Ohio's 23 community colleges in percent growth in overall student success.

A range of participants representing the stakeholders at the participant schools were then presented with three progressively detailed questions that caused the participant to describe student success from his or her perspective. First, they were asked, "In what ways do you see this college contributing to the success of the students?" From their responses, it was clear that each of these schools approached student success aggressively and student success was a primary goal of the institutional mission. The employees described detailed numerous efforts at the college to support achievement and the student participants shared their concepts of what it meant to be successful. From this inquiry, the first subquestion (How do college representatives describe institutional efforts of executing a student success agenda?) leading progressively to the overarching question was answered.

The participants were then asked to reflect upon their respective roles at the college and describe, from their personal perspective, various resources and attributes of the college. This open-ended discussion enabled the insertion of prompts that directed the participants in the direction of attributes associated with the capitals of the Community Capitals Framework. From this dialog, significant resources were discovered which permitted the second progressive subquestion (How do college representatives describe institutional investment in each of the constructs, as proposed by the Community Capitals Framework, including natural, cultural,

human, social, political, financial, and built capitals?) to be answered. The participants described dozens of resources distributed across the capitals and, in alignment with the premises of the framework, revealed how many of the resources contribute to multiple capitals simultaneously and situations where interplay between the capitals both enhanced and detracted from other capitals.

Finally, the participants were asked to reflect upon the resources they had just identified and, at this point, discuss how those attributes have contributed to student success. This discussion revealed the rich data through storytelling, vignettes, and examples. It directly encouraged the linkage of resources to the student success agenda and the mission of the college. The dialogue encouraged a discussion regarding successes and dreams for students and exposed the passion the participants have for helping students. Their responses provided insight into the third progressive subquestion (How do college representatives describe how institutional investment in each of the community capitals has improved student success?)

At this point, the interview responses, data analysis, and site observations were synthesized through a process of triangulation to answer the fourth progressive subquestion (How do the constructs of the framework interact with each other to form a healthy academic environment, sustainable economic structures, and a culture of social inclusion with supportive academic and student services at each of the community colleges?). The data revealed that both of the participating institutions invested heavily in each of the capitals of the framework. In particular, several strong threads of activities, known to be good practices, were noted and evident across multiple capitals. This multiplicity of good practices and successful interventions and initiatives provides a solid foundation for the support of a strong community.

Exploring the final subquestion (In what ways do the constructs at each of the colleges

contribute to the overarching framework between the two colleges?) became the focus of analysis at this point. Through of the Appreciative Inquiry Approach, it was clear that both of the colleges had dedicated considerable effort to student success and, as a result, developed a strong, healthy academic environment as evidenced in their accomplishment rates reflected in the state-defined student success model. Further, with substantial investment of financial resources into student success, each of the participant institutions have positioned themselves to be leaders in achievement while prudently managing fiscal and capital resources which are driving student success. Finally, it was discovered that both colleges have invested heavily in cultural, social, and human capital and the capitals have collectively created welcoming, open, and diverse communities characterized by an atmosphere of inclusion for all students, especially those facing barriers to higher education. In particular, Cardinal Community College and Buckeye Community College have taken additional steps to develop a deeper awareness of the unique cultural aspects of their student populations and their general campus community. This insight can only serve to improve how the college responds to students and its campus employees while embracing and preserving the regional culture.

Responding to the progressively in-depth subquestions has led to inform and answer the overarching question driving this study. The role the constructs from the Community Capitals Framework plays in student success is that, through these varied lenses, a holistic and comprehensive assessment of a college's student success agenda can be developed. The capitals provide individual windows into what is being done and what can be done to improve upon the success efforts. The interplay between the capitals sheds light upon how capitals are having an impact upon other capitals, whether it be enhancing or detracting. The weakness in particular capitals can indicate a lack of investment or the over-powering by another. The premise of the

framework is that a balanced set of capitals, mutually supporting each other, fosters maximized outcomes. It is advisable to employ the framework and assess where to allocate future new investments, where to strengthen current investments, and where an over-investment may need adjusted. All of these insights into student success are brought into clearer focus through disaggregation by use of the framework.

Limitations of the Study

The limitations of this study may include key two areas, limitations from biases and interpretation and limitations of the research sites. The limitations from biases may include personal biases that may exist by the participants that may influence the answers given or biases from creators of documents, records, webpages, or reports that may have been incomplete or inaccurate beyond the knowledge of the researcher. Also, researcher presence during data collection may affect the participants' responses. The data are filtered through the researcher's lens, experience, and worldview alone. This may limit the study based upon the interpretation of the researcher. Finally, limitations resulting from the research sites may include that the participating institutions reflected only one, homogeneous region of the state that has a clearly distinct and well-defined culture. Further, the college structures, as a result of unique public-private partnerships, at both institutions are atypical of other Ohio community colleges.

Recommendations for Practice in Higher Education

Community college and student success leaders may choose to utilize the Community Capitals Framework, especially in conjunction with the Appreciative Inquiry Approach, to assess how an institution is performing with regard to maximized potential. Further, the application of

this instrument will lead to a better understanding of how and where the college is investing its resources and may suggest areas where changes may be warranted. Implementing the framework on a college-wide scale provides a foundation from which important conversations may be held regarding how a student success agenda is being implemented among the college community.

While this framework may be used to evaluate a variety of campus interests, however, this study has shown that it is particularly effective in applications seeking to develop a deeper understanding of student success. In a higher education culture driven in the pursuit of student success, this instrument and its application are important tools in the toolbox of college administrators, student success task forces, and grassroots movements.

Recommendations for Further Research

Future research is indicated for development of a complementary quantitative component that would build upon the qualitative findings of this study. The research would seek to discover how each of the capitals can be quantitatively measured and if predictive analytics can be employed through reliable and validated measures. Specifically, remaining unanswered questions include: what are the relationships between the levels of investment of each of the community capitals and student success among community colleges? What are the differences in levels of investment in each of community capitals among community colleges with high-levels of student success? Is there a significant difference between the levels of investment of each of the community capitals at community colleges demonstrating high-(or low-) levels of student success? Do high-levels of investment in community capitals lead to high-levels of student success at community colleges? Statistical analyses including multiple regression, factorial ANOVA, and path analysis may be employed to determine answers to these questions.

To address these questions the development of a quantitative instrument would be required. This instrument would be administered to college stakeholders and would aid in easy implementation of the framework on campuses. Further, the development of a quantitative instrument would permit generalizable findings that may translate to widespread best practices. These promising practices may inform educational leadership and those working in higher education to improve student success. The result of a mixed methods approach may lead to higher student success rates, improved persistence, and higher completion rates.

A second area of further research is indicated for applications with four-year colleges and universities that were beyond the scope of this community college study. Additional study would ask, “Is there a difference between the levels of investment of community capitals and student success among community colleges and student success among four-year colleges (or universities)?” Similar statistical analyses using tests to measure group differences may be employed.

Conclusion

In conclusion, I sought to explore the efforts of two community colleges in supporting student success as viewed through a multi-lens framework; it has revealed that application of the Community Capitals Framework to improve student success is a valuable tool for community colleges in executing a student success agenda. Doing so may maximize execution of student success efforts, develop a healthy academic environment, create sustainable economic structures, and foster a culture of social inclusion through supportive academic and student services.

References

- Achieving the Dream. (2014a, July 14). *About us. History*. Retrieved from Achieving the Dream:
<http://achievingthedream.org/about-us>
- Achieving the Dream. (2014b, July 14). *Our network*. Retrieved from Achieving the Dream:
<http://achievingthedream.org/our-network>
- Achieving the Dream. (2014c, July 14). *State policy teams*. Retrieved from Achieving the Dream: <http://achievingthedream.org/our-network/state-policy-teams>
- Achieving the Dream. (2014d, July 14). *Focus areas*. Retrieved from Achieving the Dream:
<http://achievingthedream.org/focus-areas>
- Achieving the Dream. (2015, July 10). *Developmental education initiative*. Retrieved from Achieving the Dream: <http://achievingthedream.org/resources/initiatives/developmental-education-initiative>
- Aha! Process, Inc. (2015, July 10). *Community*. Retrieved from Aha! Process, Inc.:
<http://www.ahaprocess.com/solutions/community/>
- American Association of Community Colleges. (2014a). *Empowering community colleges: To build the nation's future*. Washington, DC: Author. Retrieved from www.aacc21stcenturycenter.org
- American Association of Community Colleges. (2014b). *Fact sheet*. Washington, DC: American Association of Community Colleges.
- American Association of Community Colleges. (2015a, May 12). *Voluntary framework of accountability*. Retrieved from American Association of Community Colleges:
<http://vfa.aacc.nche.edu/Pages/default.aspx>

American Association of Community Colleges. (2015b, May 12). *Fact sheet*. Washington, DC:

American Association of Community Colleges.

American Association of University Professors, American Council on Education, Association of

Governing Boards of Universities and Colleges. (2000). Statement on government of colleges and universities. In M. C. Brown, II (Ed.), *Organization and governance in higher education* (5th ed., pp. 85-91). Boston, MA: Pearson.

Appalachian Regional Commission. (2015a, July 2). *Source and methodology: Distressed designations and county economic status classification system, FY 2007 - FY 2016*.

Retrieved from Appalachian Regional Commission:

<http://www.arc.gov/research/SourceandMethodologyCountyEconomicStatusFY2007FY2016.asp>

Appalachian Regional Commission. (2015b, July 2). *County economic status and number of distressed areas in Appalachian Ohio, fiscal year 2016*. Washington, DC: Appalachian Regional Commission.

Appalachian Regional Commission. (2015c, July 2). *The Appalachian region*. Retrieved from Appalachian Regional Commission:

http://www.arc.gov/appalachian_region/TheAppalachianRegion.asp

Bailey, T., & Alfonso, M. (2005). *Paths to persistence: An analysis of research on program effectiveness at community colleges*. Indianapolis, IN: Lumina Foundation for Education.

Bailey, T., Calcagno, J. C., Jenkins, D., Kienzl, G., & Leinbach, T. (2005). *The effects of institutional factors on the success of community college students*. New York: Community College Research Center.

- Bailey, T., Calcagno, J. C., Jenkins, D., Leinbach, T., & Kienzl, G. (2006). Is student right-to-know all you should know? An analysis of community college graduation rates. *Research in Higher Education*, 47(5), 491-519.
- Bartle, P. (2012, July 11). *Neo gemeinschaft*. Retrieved from Community empowerment collective: <http://www.cec.vcn.bc.ca/cmp/modules/cha-neo.htm>
- Bartle, P. (2014, January 12). *What is community? A sociological perspective*. Retrieved from Community empowerment collective: <http://www.cec.vcn.bc.ca/cmp/modules/com-wha.htm>
- Berg, B. L., & Lune, H. (2012). *Qualitative research methods for the social sciences*. Boston: Pearson.
- Berger, J. B. (2000). Optimizing capital, social reproduction, and undergraduate persistence. In J. M. Braxton (Ed.), *Reworking the student departure puzzle* (pp. 95-124). Nashville, TN: Vanderbilt University Press.
- Biden, J. (2011). The White House summit on community colleges: Summit report. (pp. 8-10). Washington, DC: The White House.
- Bill and Melinda Gates Foundation. (2014a, July 14). *What we do: Postsecondary success: Strategy overview*. Retrieved from Bill and Melinda Gates Foundation: <http://www.gatesfoundation.org/What-We-Do/US-Program/Postsecondary-Success>
- Bogdan, R. C., & Biklen, S. K. (2006). *Qualitative research for education* (4th ed.). Boston: Allyn and Bacon.
- Bolman, L. G., & Deal, T. E. (2003). *Reframing organizations: Artistry, choice, and leadership* (3rd ed.). San Francisco, CA: Jossey-Bass.

- Bragg, D. D., Kim, E., & Barnett, E. A. (2006). Creating access and success: Academic pathways reaching underserved students. *New Directions for Community Colleges*, 5-19. doi:10.1002/cc
- Braxton, J. M., Hirschy, A. S., & McClendon, S. A. (2004). *Understanding and reducing college student departure*. San Francisco: Jossey Bass.
- Brock, T., Jenkins, D., Ellwein, T., Miller, J., Gooden, S., Martin, K., . . . Pih, M. (2007). *Building a culture of evidence for community college student success: Early progress in the Achieving the Dream initiative*. New York, NY: MDRC.
- Calcagno, J., Bailey, T., Jenkins, D., Kienzl, G., & Leinbach, D. (2008). Community college student success: What institutional characteristics make a difference? *Economics of Education Review*, 27(6), 632-645.
- Carnegie Foundation for the Advancement of Teaching. (2014, July 14). *About Carnegie*. Retrieved from Carnegie foundation for the advancement of teaching: <http://www.carnegiefoundation.org/about-us/about-carnegie>
- Carnevale, A. P., & Rose, S. J. (2011). *The undereducated American*. Washington, DC: Georgetown University.
- Cohen, A. M. (1998). *The shaping of American higher education: Emergence and growth of the contemporary system*. San Francisco: Jossey-Bass.
- Cohen, D., & Crabtree, B. (2006, July). *Qualitative research guidelines project: Case study*. Retrieved from Robert Wood Johnson Foundation: <http://www.qualres.org/HomeCase-3591.html>
- Complete College America. (2011). *Time is the enemy*. Washington, DC: Complete College America.

Complete College America. (2014a, July 14). *About CCA*. Retrieved from Complete college America: <http://completecollege.org/about-cca/>

Complete College America. (2014b, July 14). *Alliance of states: Leading the college completion movement*. Retrieved from Complete College America: <http://completecollege.org/the-alliance-of-states/>

Completion by Design. (2014, July 14). *FAQ*. Retrieved from Completion by design: <http://completionbydesign.org/about-us>

Council for Adult and Experiential Learning. (2010). *Fueling the race to postsecondary success: A 48-institution study of prior learning assessment and adult student outcomes: Executive summary*. Chicago: CAEL. Retrieved from CAEL: Linking learning and work.

Council for Adult and Experiential Learning. (2014, July 16). *Prior learning assessment services*. Retrieved from CAEL: Linking learning and work: [http://www.cael.org/pla.htm#What Is Prior Learning Assessment \(PLA\)?](http://www.cael.org/pla.htm#What%20Is%20Prior%20Learning%20Assessment%20(PLA)?)

Couto, R. A. (2002). Poverty. In P. J. Obermiller, & M. E. Maloney (Eds.), *Appalachia: Social context past and present* (4th ed., pp. 217-238). Dubuque, IA: Kendall/Hunt.

Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches* (2nd ed.). Thousand Oaks: Sage.

Cruz, J. L., & Haycock, K. (2012, September/October). Occupy higher education: Why colleges should own the effort to improve student success. *Change*, pp. 49-52.

Dabbs, Jr., J. M. (1982). Making things visible. In J. Van Maanen (Ed.), *Varieties of qualitative research*. Beverly Hills: Sage.

- Desilver, D. (2014, January 7). *Five facts about economic inequality*. Retrieved from Pew Research Center: <http://pewresearch.org/fact-tank/2014/01/07/5-facts-about-economic-inequality/>
- Dexter, L. A. (1970). *Elite and specialized interviewing*. Evanston, IL: Northwestern University Press.
- Dougherty, K. J., & Townsend, B. K. (2006). Community college missions: A theoretical and historical perspective. *New Directions for Community Colleges*, 5-13. doi:10.1002/cc254
- Eller, R., Martinez, R., Pace, C., Pavel, M., Garza, H., & Barnett, L. (1997). Rural community college initiative: Access: Removing barriers to participation. In *AACC Project Brief* (pp. 1-16). Washington, DC: American Association of Community College.
- Eller, R., Martinez, R., Pace, C., Pavel, M., Garza, H., & Barnett, L. (1998). *Rural community college initiative: Access: Removing barriers to participation*. Washington, DC: American Association of Community Colleges.
- Emery, M., & Flora, C. (2006). Spiraling up: Mapping community transformation with the community capitals framework. *Journal of the Community Development Society*, 37, 19-35.
- Emery, M., Fey, S., & Flora, C. B. (2006). Using community capitals to develop assets for positive community change. (J. Gruidl, Ed.) *CD Practice: Promoting Principles of Good Practice*(13), 1-19. Retrieved May 12, 2005, from <http://srdc.msstate.edu/fop/levelthree/trainarc/socialcapital/communitycapitalstodevelopassets-emeryfeyflora2006.pdf>
- Engstrom, C., & Tinto, V. (2008, January/February). Access without support is not opportunity. *Change*, pp. 46-50.

- Ergood, B. (1976). Toward a definition of Appalachia. In B. Ergood, & B. E. Kuhre (Eds.), *Appalachia: Social context past and present* (pp. 31-41). Dubuque, IA: Kendall/Hunt.
- Ewell, P., & Jenkins, D. (2008). Using state student unit record data to increase community college student success. *New Directions for Community Colleges*, 143, 71-81.
doi:10.1002/cc337
- Ewell, P., & Wellman, J. (2007). *Enhancing student success in education: Summary report of the NPEC initiative and National Symposium on Postsecondary Student Success*. Washington, DC: National Postsecondary Education Cooperative.
- Ferris, K., & Stein, J. (2008). *The real world: An introduction to sociology*. New York: W. W. Norton & Company.
- Flora, C. B. (2011). Mobilizing community capitals to support biodiversity. In J. Lopez Pujol (Ed.), *The importance of biological interactions in the study of biodiversity* (pp. 355-364). New York: InTech.
- Flora, C. B., & Bregendahl, C. (2012). Collaboration community-supported agriculture: Balancing community capitals for producers and consumers. *International Journal of Sociology of Agriculture and Food*, 329-346.
- Flora, C. B., & Flora, J. L. (2004). *Rural communities: Legacy and change* (2nd ed.). Boulder, CO: Westview.
- Flora, C. B., & Flora, J. L. (2008). *Rural communities: Legacy and change* (3rd ed.). Boulder, CO: Westview Press.
- Flora, C. B., & Flora, J. L. (2013). *Rural communities: Legacy and Change* (4th ed.). Boulder: Westview Press.

- Flora, C. B., Bregendahl, C., & Fey, S. (2007). Mobilizing internal and external resources for rural community development. In R. D. Knutson, S. D. Knutson, & D. P. Ernstes (Eds.), *Perspectives on 21st century agriculture: A tribute to Walter J. Armbruster* (pp. 210-220). Chicago: The Farm Foundation.
- Flora, C. B., Emery, M., Fey, S., & Bregendahl, C. (n.d.). *Community capitals: A tool for evaluating strategic interventions and projects*. Retrieved Jan. 9, 2015, from University of Wisconsin, Madison: Agriculture and applied economics: wp.aae.wisc.edu/ced/wp.../sites/.../204.2-Handout-Community-Capitals.pdf
- Flora, C. B., Livingston, M., Honyestewa, I., & Koiyaquaptewa, H. (2009). Understanding access and use of traditional food by Hopi women. *Journal of Hunger and Environmental Nutrition*, 4, 158-171.
- Glesne, C., & Peshkin, A. (1992). *Becoming qualitative researchers: An introduction*. White Plains: Longman.
- Goldrick-Rab, S. (2010). Challenges and opportunities for improving community college student success. *Review of Educational Research*, 80(3), 437-469.
- Gomm, R., Hammersley, M., & Foster, P. (Eds.). (2000). *Case study methods*. Thousand Oaks: Sage.
- Hagan, C. F. (2006). *Research methods in criminal justice and criminology* (7th ed.). Boston: Allyn and Bacon.
- Hampton, C., & Heaven, C. (2013). *Understanding and describing community*. Retrieved from The University of Kansas, Community Toolbox: <http://ctb.ku.edu/en/table-of-contents/assessment/assessing-community-needs-and-resources/describe-the-community/main>

- Handel, S. J. (2013). The transfer moment: The pivotal partnership between community colleges and four-year institutions in securing the nation's college completion agenda. *New Directions for Higher Education*, 5-15. doi:10.1002/he20052
- Henslin, J. M. (2006). *Essentials of sociology* (7th ed.). Boston: Pearson.
- Higher Learning Commission. (2015, July 2). *Currently or previously affiliated institutions - 07/02/2015*. Retrieved from Higher Learning Commission - Statement of affiliation status:
<https://www.ncahlc.org/component/directory/?Action=ShowBasic&Itemid=&instid=1554&lang=en>
- Hughes, K. (2012). *The college completion agenda 2012 progress report*. College Board Advocacy and Policy Center.
- International Institute for Sustainable Development. (2013). *Natural capital*. Retrieved July 26, 2015, from International Institute for Sustainable Development:
<http://www.iisd.org/natres/agriculture/capital.asp>
- Isaacs, J. B. (2008). *International comparisons of economic mobility*. Washington, DC: Pew Charitable Trusts.
- Ishitani, T., & Snider, K. (2006). Longitudinal effects of college preparation programs on college retention. *IR Applications: Using Advanced Tools, Techniques and Methodologies*, 9, 1-10.
- Jacobs, C. (2011). *Measuring success in communities: The communities capitals framework*. Brookings, SD: South Dakota State University.
- Jones, L. (2002). Some observations. In P. J. Obermiller, & M. E. Maloney (Eds.), *Appalachia: Social context past and present* (4th ed., pp. 155-160). Dubuque, IA: Kendall/Hunt.

- Jones-White, D. R., Radcliffe, P. M., Huesman, Jr., R. L., & Kellogg, J. P. (2010). Redefining student success: Applying different multinomial regression techniques for the study of student graduation across institutions of higher education. *Research in Higher Education*, 51, 154-174. doi:10.1007/s11162-009-9149-4
- Kresge Foundation. (2014, July 14). *About us*. Retrieved from Kresge Foundation:
<http://kresge.org/about-us>
- Kuh, G. D. (2009, May 7). *What matters to student success*. Retrieved July 28, 2015, from What matters to student success:
<https://circle.ubc.ca/bitstream/handle/2429/8906/Kuh%20UBC%20plenary%202009.pdf>
- Kuh, G. D., Cruce, T. M., Shoup, R., & Kinzie, J. (2008). Unmasking the effects of student engagement on first-year college grades and persistence. *Journal of Higher Education*, 79(5), 540-563.
- Lee, Jr., J. M., & Rawls, A. (2010). *The college completion agenda 2010 progress report*. College Board Advocacy and Policy Center.
- Leona M. and Harry B. Helmsley Charitable Trust. (2014, July 14). *About us*. Retrieved from Leona M. and Harry B. Helmsley Charitable Trust: <http://helmsleytrust.org/about-us>
- Lightfoot, S. L. (1983). *The good high school: Portraits of character and culture*. New York: Perseus .
- Lucas, C. J. (1994). *American higher education: A history*. New York: St. Martin's Griffin.
- Lumina Foundation. (2014, July 14). *About us*. Retrieved from Lumina Foundation:
http://www.luminafoundation.org/about_us/
- Macionis, J. J. (2005). *Sociology* (10th ed.). Upper Saddle River, NJ: Pearson.

- Merriam, S. (2009). *Qualitative research: A guide to design and implementation*. San Francisco: Jossey-Bass.
- Merriam, S. B. (1998). Qualitative research and case study applications in education: Revised and expanded from case study research in education. [Kindle version]. Retrieved from www.amazon.com
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: A sourcebook of new methods* (2nd ed.). Newbury Park, CA: Sage.
- Miles, M. B., Huberman, A. M., & Saldana, J. (2014). *Qualitative data analysis: A methods sourcebook* (3rd ed.). Thousand Oaks: Sage.
- Myran, G. (2009). A new open-door model for community colleges. In G. Myran (Ed.), *Reinventing the open door: Transformational strategies for community colleges* (pp. 1-10). Washington, DC: Community College Press.
- National Center for Academic Transformation. (2015, July 10). *The emporium model*. Retrieved from National Center for Academic Transformation: http://www.thencat.org/PlanRes/R2R_Model_Emp.htm
- National Center for Education Statistics . (2015, July 10). *Integrated postsecondary education data system: College navigator*. Washington, DC: United States Department of Education, Institute of Educational Services.
- Obama, B. H. (2011). The White House summit on community colleges: Summit report. (pp. 10-14). Washington, DC: The White House.
- O'Banion, T. (2010). The completion agenda: To what end? Emerging philosophy shifts focus from student access to success. *Community College Journal*, 81(2), 44-47.

- O'Gara, L., Mechur Karp, M., & Hughes, K. L. (2009). Student success courses in the community college: An exploratory study of student perspectives. *Community College Review*, 36(3), 195-218.
- Ohio Association of Community Colleges. (2014a, July 15). *OACC*. Retrieved from OACC: <http://www.ohiocommunitycolleges.org/>
- Ohio Association of Community Colleges. (2014b, July 15). *About the center*. Retrieved from OACC: <http://www.ohiocommunitycolleges.org/public-page.php?s=student-success-center>
- Ohio Association of Community Colleges. (2014c, July 15). *Driving success initiative*. Retrieved from OACC: <http://www.ohiocommunitycolleges.org/public-page.php?s=driving-success-initiative-1>
- Ohio Association of Community Colleges. (2014d, July 11). *Community college facts*. Retrieved from OACC: <http://www.ohiocommunitycolleges.org/public-page.php?s=community-college-facts>
- Ohio Association of Community Colleges. (2014e, July 15). *AmeriCorps college completion coaches*. Retrieved from OACC: <http://www.ohiocommunitycolleges.org/public-page.php?s=americorps-college-completion-coaches>
- Ohio Board of Regents. (1998a). *Operating manual for two-year campus programs*. Columbus, OH: Ohio Board of Regents.
- Ohio Board of Regents. (1998b). The two-year campus mission. In *Operating manual for two-year campus programs* (p. 100.01). Columbus, OH: Ohio Board of Regents.
- Ohio Board of Regents. (2012a). *Complete college Ohio: Task force report and recommendations*. Columbus: Ohio Board of Regents.

Ohio Board of Regents. (2012b). *Three-year degree plan fact sheet*. Columbus: Ohio Board of Regents.

Ohio Board of Regents. (2013). *PLA with a purpose: Prior learning assessment and Ohio's college completion agenda*. Columbus: Ohio Board of Regents.

Ohio Board of Regents. (2014a, July 15). *Initiatives*. Retrieved from Ohio higher ed: University system of Ohio: <https://www.ohiohighered.org/initiatives>

Ohio Board of Regents. (2014b). *One-year option*. Columbus, OH: Ohio Board of Regents. Retrieved from <https://www.ohiohighered.org/one-year-option>

Ohio Board of Regents. (2014c, July 15). *PLA with a purpose*. Retrieved from Ohio higher ed: University system of Ohio: <https://www.ohiohighered.org/PLA>

Ohio Board of Regents. (2014d, July 15). *College credit plus*. Retrieved from Ohio higher ed: University system of Ohio: https://www.ohiohighered.org/college_credit_plus

Ohio Board of Regents. (2014e). *College credit plus: Chancellor John Carey's recommendations for Ohio's dual credit program*. Columbus: Ohio Board of Regents.

Ohio Board of Regents. (2014f, July 15). *Complete college Ohio*. Retrieved from Ohio higher ed: University system of Ohio: <https://www.ohiohighered.org/completion>

Ohio Board of Regents. (2014g, July 15). *Credit when it's due*. Retrieved from Ohio higher ed: University system of Ohio: https://www.ohiohighered.org/credit_when_due

Ohio Board of Regents. (2014h, July 15). *Three year degree plan*. Retrieved from Ohio higher ed: University system of Ohio: <https://www.ohiohighered.org/3-year-degrees>

Ohio Department of Education. (2015, July 10). *Adult basic and literacy education (ABLE)*. Retrieved from Ohio higher ed: <https://www.ohiohighered.org/ABLE>

Ohio Education Association. (2015, July 3). *OEA - affiliated higher education institutions, 2013*.

Retrieved from Ohio Education Association: <http://www.ohea.org/oea-higher-ed-affiliates>

Ohio General Assembly. (1961). University branch districts. §3355.

Ohio General Assembly. (1965). Community colleges. §3354.

Ohio General Assembly. (1972). Technical colleges. §3357.

Ohio General Assembly. (1977). State community colleges. §3358.

Ohio General Assembly. (2007). Baccalaureate-oriented associate degree programs. §3357.13.

Ohio General Assembly. (2011). Statements for three-year baccalaureate degrees. §3333.43a.

Ohio General Assembly. (2013). Appointment of administrative department heads. §121.03(v).

Ohio General Assembly. (2014). State share of instruction formulas. § 363.190.

Outcalt, C. L., & Rabin, J. (1998). Responding to accountability mandates. *ERIC Digest*.

Parcel, T. L., & Dufur, M. J. (2001, March). Capital at home and at school: Effects on student achievement. *Social Forces*, 79(3), 881-911.

Pascarella, E. T., & Terenzini, P. T. (2005). *How college affects students: A third decade of research*. New York, NY: Wiley.

Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed.). Thousand Oaks: Sage.

Perkhounkova, Y., Noble, J., & McLaughlin, G. (2006). Factors related to persistence of freshmen, freshmen transfers, and nonfreshmen transfer students. *AIR Professional File*, 99, 1-9.

Poole, D. L., & More, S. (2001). *Participation of rural youth in higher education: Factors, strategies, and innovations*. Texas Rural Communities.

- Ragin, C. C. (1987). *The comparative method: Moving beyond qualitative and quantitative strategies*. Berkeley: University of California Press.
- Rasmussen, C., Armstrong, J., & Chazdon, S. (2011). Bridging Brown County: Captivating social capital as a means to community change. *Journal of Leadership Education*, 10(1), n.p. Retrieved Sept. 8, 2014, from http://bigcat.fhsu.edu/jole/issues/JOLE_10_1/Rasmussen%20Armstrong%20&%20Chazdon%202011.pdf
- Robertson, I. (1989). *Society: A brief introduction*. New York: Worth .
- Saldana, J. (2003). *Longitudinal qualitative research: Analyzing change through time*. Walnut Creek, CA: AltaMira Press.
- Scholz, R. W., & Tietje, O. (2002). *Embedded case study methods: Integrating quantitative and qualitative knowledge*. Thousand Oaks: Sage.
- Self, B. (2015, February 5). Laughter in the mountains: A conversation with Appalachian studies scholar Loyal Jones. *Mt. Spirit Online*.
- Sonin, K., Acemoglu, D., Sumner, S., Thoma, M., Varian, H., Heise, M., & Saint-Paul, G. (2011, January). *The question is: How does inequality matter?* Retrieved from The economist: http://www.economist.com/economics/by-invitation/questions/how_does_inequality_matter
- Stake, R. E. (1995). *The art of case study research*. Thousand Oaks: Sage.
- Strauss, A., Schatzman, L., Bucher, R., & Sabshin, M. (1981). *Psychiatric ideologies and institutions* (2nd ed.). New Brunswick, NJ: Transaction.
- Taylor, S. J., & Bogdan, R. (1984). *Qualitative research methods* (2nd ed.). New York: Wiley.

The University of California Museum of Paleontology, Berkeley, and the Regents of the

University of California. (2013). *The scientific community: Diversity makes the difference*. Retrieved July 27, 2015, from Understanding science.

Thelin, J. R. (2004). *A history of American higher education*. Baltimore: The Johns Hopkins University Press.

Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. *Review of Educational Research*, 45(1), 89-125.

United States Department of Education. (2015a, July 10). *History of the federal TRiO programs*.

Retrieved from United States Department of Education:

<http://www2.ed.gov/about/offices/list/ope/trio/triohistory.html>

United States Department of Education. (2015b, July 10). *Federal TRiO programs: Home page*.

Retrieved from United States Department of Education:

<http://www2.ed.gov/about/offices/list/ope/trio/index.html>

United States Department of Education. (2015c, July 10). *Student support services program*.

Retrieved from United States Department of Education:

<http://www2.ed.gov/programs/triostudsupp/index.html>

United States Department of Education. (2015d, July 10). *Upward bound program*. Retrieved

from United States Department of Education:

<http://www2.ed.gov/programs/trioupbound/index.html>

United States Department of Education. (2015e, July 10). *Talent search*. Retrieved from United

States Department of Education: <http://www2.ed.gov/programs/triotalent/index.html>

USA Funds. (2014, July 14). *About*. Retrieved from USA Funds:

<http://www.usafunds.org/Pages/About.aspx>

- Vashistha, A., Cutrell, E., & Thies, W. (2015). Increasing the reach of snowball sampling: The impact of fixed versus lottery incentives. *CSCW '15*. Vancouver, BC: ACM.
doi:10.1145/2675133.2675148
- Wells, R. (2008). The effects of social and cultural capital on student persistence: Are community colleges more meritocratic? *Community College Review*, 38(25), 25-46.
doi:10.1177/0091552108319604
- Yin, R. K. (2003). *Case study research* (3rd ed.). Thousand Oaks: Sage.
- Yin, R. K. (2014). *Case study research: Design and methods* (5th ed.). Thousand Oaks: Sage.
- Yourke, M., & Longden, B. (2004). *Retention and student success in higher education*. Maidenhead, UK: Open University Press.
- Zarkesh, M., & Beas, A. M. (2004). UCLA community college review: Performance indicators and performance-based funding in community colleges. *Community College Review*, 31(62-76), 62-. doi:10.1177/009155210403100404

Appendix A

Glossary of Terms

Adult Basic and Literacy Education (ABLE)

According to the Ohio Department of Education (2015), Ohio ABLE programs provide FREE services for individuals who need assistance acquiring the skills to be successful in post-secondary education and training, and employment. Local programs offer classes at flexible locations, and on different days and times to meet diverse needs. All students are required to attend orientation, where an assessment is given to help determine the individual's educational needs and goals. Services available at programs throughout all 88 Ohio counties include basic math, reading and writing skills, Adult Secondary Education/GED Preparation, English for Speakers of Other Languages (ESOL), transition services – including employment and post-secondary, life skills, employability skills and computer literacy, Family Literacy – enriching the parental role of adult learners, Workplace Literacy – education services offered in collaboration with business, industry, government or labor to increase the productivity of the workforce through improved literacy skills, Corrections Education – a partnership with a jail, detention center, community-based rehabilitation center or other similar institution, and Distance Education

Appalachian Regional Commission

Appalachian Region. According to the Appalachian Regional Commission (2015c),

The Appalachian Region, as defined in ARC's authorizing legislation, is a 205,000-square-mile region that follows the spine of the Appalachian Mountains

from southern New York to northern Mississippi. It includes all of West Virginia and parts of 12 other states: Alabama, Georgia, Kentucky, Maryland, Mississippi, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, and Virginia. Forty-two percent of the Region's population is rural, compared with 20 percent of the national population.

The Appalachian Region's economy, once highly dependent on mining, forestry, agriculture, chemical industries, and heavy industry, has become more diversified in recent times, and now includes manufacturing and professional service industries. Appalachia has come a long way in the past five decades: its poverty rate, 31 percent in 1960, was 17 percent over the 2009–2013 period. The number of high-poverty counties in the Region (those with poverty rates more than 1.5 times the U.S. average) declined from 295 in 1960 to 90 over the 2009–2013 period.

These gains have transformed the Region from one of widespread poverty to one of economic contrasts: some communities have successfully diversified their economies, while others still require basic infrastructure such as roads and water and sewer systems. The contrasts are not surprising in light of the Region's size and diversity. The Region includes 420 counties in 13 states. It extends more than 1,000 miles, from southern New York to northeastern Mississippi, and is home to more than 25 million people.

Appalachian Ohio. The Appalachian Regional Commission (2015b) has designated 32

Ohio counties as Appalachian Ohio. These counties include: Adams, Ashtabula, Athens, Belmont, Brown, Carroll, Clermont, Columbiana, Coshocton, Gallia, Guernsey, Harrison, Highland, Hocking, Holmes, Jackson, Jefferson, Lawrence, Mahoning, Meigs, Morgan, Muskingum, Noble, Perry, Pike, Ross, Scioto, Trumbull, Tuscarawas, Vinton, and Washington.

County Economic Levels. Economic levels are determined by a methodological approach developed and implemented by the Appalachian Regional Commission. They (2015a) define the approach and the levels as follows.

The Appalachian Regional Commission (ARC) uses an index-based county economic classification system to identify and monitor the economic status of Appalachian counties. The system involves the creation of a national index of county economic status through a comparison of each county's averages for three economic indicators—three-year average unemployment rate, per capita market income, and poverty rate—with national averages. The resulting values are summed and averaged to create a composite index value for each county. Each county in the nation is then ranked, based on its composite index value, with higher values indicating higher levels of distress. Each Appalachian county is classified into one of five economic status designations, based on its position in the national ranking.

Distressed. Distressed counties are the most economically depressed counties. They rank in the worst 10 percent of the nation's counties.

At-Risk. At-Risk counties are those at risk of becoming economically distressed. They rank between the worst 10 percent and 25 percent of the nation's counties.

Transitional. Transitional counties are those transitioning between strong and weak economies. They make up the largest economic status designation.

Transitional counties rank between the worst 25 percent and the best 25 percent of the nation's counties.

Competitive. Competitive counties are those that are able to compete in the national economy but are not in the highest 10 percent of the nation's counties.

Counties ranking between the best 10 percent and 25 percent of the nation's counties are classified competitive.

Attainment. Attainment counties are the economically strongest counties.

Counties ranking in the best 10 percent of the nation's counties are classified attainment.

Emporium Model

According to the National Center for Academic Transformation (2015),

The Emporium Model eliminates all lectures and replaces them with a learning resource center model featuring interactive software and on-demand personalized assistance, depends heavily on instructional software, including interactive tutorials, practice exercises, solutions to frequently asked questions, and online quizzes and tests, allows students to choose what types of learning materials to use depending on their needs, and how quickly to work through the materials, uses a staffing model that combines faculty, GTAs, peer tutors and others who respond directly to students' specific needs and direct them to resources from which they can learn, may require a significant commitment of space and equipment, more than one course can be taught in an emporium, thus leveraging the initial investment.

Ohio Community Colleges

Twenty-three comprehensive community colleges serve the 88 counties of Ohio (Ohio Association of Community Colleges, 2014d) and are legislatively created by the Ohio General Assembly under Ohio Revised Code §3354 (1965), §3358 (1977), and §3357 (1972). Providing statewide oversight and regulation of the community colleges is the Ohio Board of Regents led by the Chancellor who is appointed by the Governor (Ohio General Assembly, 2013, §121.03v). According to the Ohio Association of Community Colleges (2014e), Ohio's community colleges serve, "more than 300,000 students today (and) ... play a key role in educating and training the workforce our state [Ohio] needs to revitalize the economy and attract new businesses" (n.p.).

The Ohio Board of Regents (1998b) defines the two-year college mission as having six key components: pre-baccalaureate/transfer education, career/technical education, adult continuing education, workforce skills enhancement, and developmental education. The Ohio Board of Regents (1998a) regulates five organizational forms of two-year colleges: community colleges, state community colleges, technical colleges, university regional campuses, and university urban centers. The distinction between the five forms of two-year colleges is "characterized by differing administrative structures and patterns of governance" (Ohio Board of Regents, 1998a, p. 201.01).

Community colleges. Referencing Ohio Revised Code §3354 (Ohio General Assembly, 1965), the Ohio Board of Regents (1998a) defines,

A community college is a two-year college which may be established at the initiative of one or more county governments, or by a referendum vote, with the approval of the Board of Regents. A board of trustees governs the college and all members must reside in the district. Six board members are appointed locally and three are appointed by the

Governor. The college district is empowered and is strongly urged to secure a local property tax levy for operation much as a city, exempted village, or local board of education may do in operating elementary and secondary schools. Because the college can receive local tax support as well as state support, most community colleges are able to keep student fees lower than can other kind of two-year campuses. Community colleges offer pre-baccalaureate/transfer degree programs, career/technical education programs, developmental education, workforce training, adult continuing education, and community service activities. (p. 201.01)

State community colleges. Referencing Ohio Revised Code §3358 (Ohio General Assembly, 1977), the Ohio Board of Regents (1998) defines,

A state community college is a two-year college which may be established with the approval of the Board of Regents at the initiative of a technical college, a state university operating a regional campus in a district, or one or more county governments, or the electorate of a district. The college is governed by a local board of trustees, with all nine members being appointed by the Governor. Ohio's state community colleges have no legal power to propose a local tax levy and must, therefore, operate without the advantages of local financing. A state community college offers pre-baccalaureate/transfer degree programs, career/technical degrees, developmental education, workforce training, adult continuing education, and community service activities. (p. 201.01-201.02)

Technical colleges. Referencing Ohio Revised Code §3357 (Ohio General Assembly, 1972), the Ohio Board of Regents (1998a) defines,

A technical college is a two-year college which may be established with approval of the Board of Regents upon the initiative of a city school district or a county, or by two or more contiguous city, county, local, or exempted village school districts or counties.

Once established, however, the technical college district becomes an independent political subdivision governed by a board of trustees. The board shall have either five or six board members appointed locally and two or three appointed by the Governor.

Technical colleges receive support from the state and student fees. Current law provides that technical colleges may propose property tax levies to local electorates. Technical colleges specialize in offering career/technical education programs, adult continuing education programs, community service activities, workforce skills enhancement, and developmental education. Technical degree programs are frequently transferable into baccalaureate degree programs. Additionally, many of them may be articulated with four-year institutions for the completion of baccalaureate degrees. Further, technical colleges participate in the state approved transfer module. (p. 201.02)

However, the 127th Ohio General Assembly (2007, §3357.13) revised the scope of technical colleges to include the option of delivering baccalaureate-oriented associate degree programs; a shift from simply delivering courses, not programs, toward a baccalaureate degree. This change paved the way for technical colleges to join Ohio's community colleges and state community colleges as comprehensive community colleges. In response, Chancellor Eric Fingerhut (2008) requested, on behalf of Ohio's eight technical colleges, a change of institutional status from the Higher Learning Commission, North Central Association of Colleges and Schools. The change would permit Ohio's technical colleges to award the Associate of Arts and Associate of Science degrees. The Higher Learning Commission responded by collaborating

with each technical college to facilitate the change of institutional status resulting in all of Ohio's technical colleges becoming comprehensive community colleges (D. Diab, personal communication, July 11, 2014).

University regional campuses. Referencing Ohio Revised Code §3355 (Ohio General Assembly, 1961), the Ohio Board of Regents (1998a) defines,

A university regional campus consists of a permanent full-time separate facility established with the approval of the Board of Regents, governed by the university board of trustees, and offering two-year pre-baccalaureate/transfer programs (including all courses offered to serve lower division students), adult continuing education, community service, workforce skills enhancement, developmental education, and in some instances, technical education. The Board of Regents recommends the award of the appropriate associate degree for satisfactory completion of a two-year degree program, either transfer or career/technical. Current law permits the establishment of a university regional campus district with a board of trustees of seven members who are residents of the district, with powers enumerated in Section 3355.06 of the Ohio Revised Code. (p. 201.03)

University urban centers. The Ohio Board of Regents (1998a) defines,

A university urban center is a two-year college set up by an urban-based university, either on its main campus or elsewhere in the home city, for the purpose of giving special attention to the first two years of education beyond the high school. The college is an integral part of the parent university, and is governed and financed as a regular part of the university. The college may offer pre-baccalaureate/transfer degree programs, career/technical degrees, adult continuing education, community service activities,

workforce skills enhancement, developmental education, and selected baccalaureate degree programs. (p. 201.03)

For the purpose of this study, the term *community college* includes Ohio's comprehensive community colleges, namely, the legislatively-created community colleges, state community colleges, and technical colleges. University regional campuses and university urban centers are not comprehensive community colleges and, therefore, not included in the definition of a community college in this study.

Student Success Activities

Action. An action is a student success activity that is unstructured and may be representative of a wide range of measures to support student success.

Initiative. An initiative is a structured student success activity and may include national, state, or locally developed initiatives with prescribed processes and systems. Initiatives promote general student success and do not necessarily focus on an at-risk group or a category of students who may experience barriers to success.

Intervention. An intervention is a student success activity designed to target a specific group or an at-risk population that may be facing a barrier to access or success. An intervention is typically structured and includes activities to assist students in overcoming the hurdles to higher education. These activities may include national, state, or locally developed initiatives with a special emphasis on at-risk populations or other categories of students.

Intervention/initiative. An intervention/initiative hybrid is a structured activity that may benefit the broad population but may also include special aspects that target at-risk students.

TRiO Programs

According to the United State Department of Education (2015a), which manages and awards TRiO grants,

The history of TRIO is progressive. It began with *Upward Bound*, which emerged out of the Economic Opportunity Act of 1964 in response to the administration's War on Poverty. In 1965, *Talent Search*, the second outreach program, was created as part of the Higher Education Act. In 1968, *Student Support Services*, which was originally known as Special Services for Disadvantaged Students, was authorized by the Higher Education Amendments and became the third in a series of educational opportunity programs. By the late 1960's, the term "TRIO" was coined to describe these federal programs.

Further to the United State Department of Education (2015b), describes the purpose of the TriO programs as,

The Federal TRIO Programs (TRIO) are Federal outreach and student services programs designed to identify and provide services for individuals from disadvantaged backgrounds. TRIO includes eight programs targeted to serve and assist low-income individuals, first-generation college students, and individuals with disabilities to progress through the academic pipeline from middle school to postbaccalaureate programs. TRIO also includes a training program for directors and staff of TRIO projects.

Today, the term TRiO is antiquated with relationship to its origins.

Appendix B

National Student Success Initiatives

Completion by Design

Completion by Design (CbD) was formed in 2011 through the support of a five-year initiative of the Bill and Melinda Gates Foundation (Completion by Design, 2014a). The CbD goal is to “significantly increase completion and graduation rates” by helping “community colleges boost completion for most students, by focusing on comprehensive institutional transformation at scale” (Completion by Design, 2014, n.p.). Working with select community colleges in Florida, North Carolina, and Ohio, Completion by Design (2014a) engages “a systematic process of inquiry and design, aimed at systemic changes in policies, programs, and practices that strengthen pathways to completion for most students on their campuses” (n.p.).

To achieve the goals established by Completion by Design, the initiative engages two frameworks: The Preventing Loss, Creating Momentum Framework and the Pathway Design Principles (Completion by Design, 2014a). These frameworks are supported by helping “colleges design connected solutions across students’ entire educational experiences” and creating “conditions that allow for the holistic approach by directly addressing a spectrum organizational, cultural, and administrative factors that can make or break a serious effort to reform” (Completion by Design, 2014, n.p.).

Achieving the Dream

In 2004, the Lumina Foundation in conjunction with seven founding partner organizations (American Association of Community Colleges; Community College Leadership Program at the University of Texas-Austin; Community College Research Center, Teachers College, Columbia University; Jobs for the Future; MDC; MDRC; and Public Agenda)

conceived Achieving the Dream (AtD) for the purpose of “closing achievement gaps and accelerating student success” (Achieving the Dream, 2014a, n.p.). To realize its mission, AtD engaged a four prong approach by “guiding evidence-based institutional change, influencing public policy, generating knowledge, and engaging the public” (Achieving the Dream, 2014a, n.p.). As a result, “Achieving the Dream, Inc. leads the most comprehensive non-governmental reform network for community college student success in higher education history” (Achieving the Dream, 2014a, n.p.).

Today, Achieving the Dream serves more than 200 community colleges in 35 states and supports 15 state policy teams (Achieving the Dream, 2014b). Through a national dialog led by Achieving the Dream, the conversation between community colleges has shifted from the student access agenda to an holistic community college agenda that values both access and success (Achieving the Dream, 2014b).

Not only has the message between community colleges changed as a result of the work of Achieving the Dream but so has it changed in the capitols and statehouses across the nation. The AtD state policy teams “identify and promote policies that support colleges’ efforts to improve student outcomes” and “15 states have participated in formal Achieving the Dream policy work” (Achieving the Dream, 2014c).

The focus of Achieving the Dream continues to be “(closing) achievement gaps and accelerate success among diverse student populations, particularly low-income students and students of color” (Achieving the Dream, 2014d, n.p.). To accomplish this goal, AtD focuses on 14 key areas: college readiness, community engagement, culture of evidence and inquiry, equity, faculty and staff engagement, financial literacy, institutional change, knowledge sharing, scaling

change, state policy reform, student-centered supports, technology in education, visionary leadership, and workforce preparation (Achieving the Dream, 2014d).

Complete College America

The mission of Complete College America is simple; “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, 2014a, n.p.). Established in 2009, Complete College America works with states to “put in place the five ‘Game Changers’ that will help all students succeed in college” (Complete College America, 2014a, n.p.). Specifically, CCA supports change through performance funding, corequisite remediation, establishing full-time student status at fifteen credit hours, structured schedules, and guided pathways to success (GPS) (Complete College America, 2014a).

Leading the charge of improving student success, Complete College America has enlisted 33 states and the District of Columbia to form an Alliance of States which, with the state’s governor in partnership with colleges and universities, “pledges to make college completion a top priority and commits to ... setting completion goals, collect and report common measures of progress and develop action plans and move key policy levers” (Complete College America, 2014b, n.p.).

Complete College America is a national nonprofit organization supported by the Kresge Foundation, Carnegie Corporation of New York, Bill and Melinda Gates Foundation, Lumina Foundation for Education, USA Funds, and Leona M. and Harry B. Helmsley Charitable Trust (M. Barrick, personal communication, July 14, 2014).

Appendix C

Ohio Association of Community Colleges Student Success Initiatives

Community College Student Success Center

With financial support of a three-year grant from the Kresge Foundation, the Ohio Association of Community Colleges created the Ohio Community College Student Success Center which “(serves) as a statewide hub to assist our 23 colleges to significantly improve student success outcomes” (Ohio Association of Community Colleges, 2014b, n.p.). With the goals of “(supporting) colleges as they reform developmental education, (building) institutional capacity for data-driven decision-making, and (leveraging) the evidence-based practices that emerged from the various initiatives currently and formerly in place in Ohio’s community colleges,” (Ohio Association of Community Colleges, 2014b, n.p.) the Ohio Community College Student Success Center serves as a vital link between all community colleges and a central warehouse for student success initiatives from Ohio and on the national stage.

Additionally, the Ohio Community College Student Success Center awards mini-grants to support institutional student success initiatives and sponsors regional and statewide professional development opportunities for community college administrators, staff, and faculty (Ohio Association of Community Colleges, 2014b).

Driving Success Initiative

The purpose of the Ohio Association of Community Colleges Driving Success Initiative (DSI) is to “develop a robust research and evaluation program to identify policies and practices which have the greatest impact on student success while continuing to build on the findings of Ohio’s existing initiatives” (Ohio Association of Community Colleges, 2014c, n.p.). Through the efforts of DSI, a statewide advocacy agenda is developed to explore priorities, guidelines, and

protocols in support of student success and to evaluate OACC initiatives targeting student success (Ohio Association of Community Colleges, 2014c). Ultimately, “the OACC advocacy agenda will be expanded as colleges are influenced to adopt policies and practices that will lead them to achieve greater student success and as recommendations are made for modifications to state policies to enhance student success” (Ohio Association of Community Colleges, 2014c, n.p.).

AmeriCorps College Completion Coaches

The AmeriCorps College Completion Coaches Initiative is led by the Ohio Association of Community Colleges and the Ohio College Access Network and supported by grants from ServeOhio (Ohio Association of Community Colleges, 2014e). The initiative focuses on placing “college graduates, preferably with community college experience, onto Ohio community college campuses to provide in-depth, hands-on guidance and assistance to students who need extra support on their college completion path” (Ohio Association of Community Colleges, 2014e, n.p.). Further, coaches may be embedded in developmental English and Math courses, first year experience, and college skills courses to support instruction and help facilitate student success and persistence (Ohio Association of Community Colleges, 2014e).

For the academic year 2013-2014, 25 coaches were distributed at nearly half of all community colleges across Ohio. Those colleges include Clark State Community College, Columbus State Community College, Cuyahoga Community College, Lakeland Community College, Lorain County Community College, North Central State College, Northwest State Community College, Southern State Community College, Stark State College, Terra Community College, and Zane State College (Ohio Association of Community Colleges, 2014e).

Additionally, in academic year 2012-2013, Owens Community College and Hocking College hosted coaches (Ohio Association of Community Colleges, 2014e).

Appendix D

Ohio Board of Regents Student Success Initiatives

Ohio Student Success Initiatives

Implementing a student success agenda has become a critical statewide imperative in Ohio. According to the Ohio Board of Regents (2012a), “Ohio currently ranks 38th among the states with only 26% of adults holding a bachelor’s degree, compared with a national average of 31%. That 5% gap represents billions of dollars in lost economic activity to Ohio—by some estimates, \$2.5 billion a year for each percentage point” (n.p.). Further, “more than half of all Ohioans who enroll in college fail to earn a degree and often leave with high levels of debt” (Ohio Board of Regents, 2012a, p. 7). As a result, “Ohio’s ability to compete and prosper in a global, knowledge economy hinges directly on its citizens’ ability to succeed in jobs that require increasingly higher levels of knowledge and skills” (Ohio Board of Regents, 2012a, p. 7).

Credit When It’s Due Initiative

The Ohio Board of Regents (2014g), in collaboration with the Ohio Association of Community Colleges and the Inter-University Council of Ohio, have jointly sponsored the Credit When It’s Due Initiative which “aims to award at least 1,300 associate degrees statewide via reverse transfer” (n.p.). According to OBR (2014g), “Increasing credential attainment in Ohio is one of the Board of Regents’ top priorities” and “all 23 Ohio community colleges and all 13 public universities which offer a broad range of degrees have agreed to participate in this initiative” (n.p.). Coordinated by the Ohio Board of Regents, the initiative provides the resources for two-year and four-year colleges to work together to award degrees for student coursework completed at a two-year institution but continues to earn a four-year degree (Ohio Board of Regents, 2014g).

PLA with a Purpose Initiative

Integrating prior learning assessment (PLA) into the student's academic plan has proven to be greatly enhance overall student success, especially in relationship to graduation rates and persistence (Council for Adult and Experiential Learning, 2010). In fact, according to the Council for Adult and Experiential Learning (CAEL) (2010), "More than half (56%) of PLA students earned a postsecondary degree within seven years, while only 21 percent of non-PLA students did so" (p. 3). The council (2010) further supports integration of PLA by noting that "43 percent of PLA students earned a bachelor's degree, compared to only 15 percent of non-PLA students" and "13 percent of PLA students earned an associate's degree, compared 6 percent of non-PLA students" (p. 3).

But what is PLA? According to CAEL (2014), Prior Learning Assessment is a term used to describe learning gained outside a traditional academic environment. Put another way, it's learning and knowledge your students acquire while living their lives: working, participating in employer training programs, serving in the military, studying independently, volunteering or doing community service, and studying open source courseware. In short, PLA is the evaluation and assessment of an individual's life learning for college credit, certification, or advanced standing toward further education or training. (n.p.)

As a result of CAEL's research and in response to Ohio's College Completion Agenda (2014c), the Ohio Board of Regents launched the statewide PLA with a Purpose Initiative in July 2013 (Ohio Board of Regents, 2013). The objective of the initiative is to help students "earn postsecondary certificates and degrees, and to make the state more competitive in a global economy" (Ohio Board of Regents, 2013, p. 5). As a result, "Ohio's universities,

colleges, and adult career-technical centers will advance and promote the awarding of credit ... based on transparent, consistent, rigorous statewide standards” (Ohio Board of Regents, 2013, p. 5). In the end, the students benefit from transcripted credit based on statewide standards, graduate more quickly, and reduce overall educational debt (Ohio Board of Regents, 2013).

Three-year Degrees Initiative

Foundational to improving student success is reducing barriers facing students. A key barrier to success is student debt and the time required to complete a degree (Poole & More, 2001). In response to these hurdles, the 129th Ohio General Assembly (2011) instructed through statute that,

The chancellor of the Ohio Board of Regents shall require all state institutions of higher education that offer baccalaureate degrees, as a condition of reauthorization for certification of each baccalaureate program offered by the institution, to submit a statement describing how each major for which the school offers a baccalaureate degree may be completed within three academic years. (§3333.43a)

In response, the Ohio Board of Regents developed the Three-year Degree Plan Initiative (Ohio Board of Regents, 2014h).

In addition to the requirement placed upon four-year colleges and universities detailed in ORC §3333.43a, the initiative establishes practices to accelerate earning college credit while in high school through advance placement courses, the Post-Secondary Enrollment Options Program (PSEOP), Career-Technical Credit Transfer (CT)², and early college high schools (Ohio Board of Regents, 2014h). The role of community colleges is vital to the success of the initiative. After all, it is the community colleges which are the primary partners with high schools to deliver PSEOP, (CT)², and early college options. To facilitate degree completion in three years,

it is imperative that early learning opportunities are abundant and that high school students have completed significant college coursework at the time of high school graduation. Beyond the benefits of reducing student debt and time to degree completion, the Three-Year Degree Plan Initiative affords students the additional opportunities of declaring a dual major, participation in an internship, and studying abroad (Ohio Board of Regents, 2012b).

College Credit Plus

Closely related to the Three-year Degree Plan Initiative, the Ohio Board of Regents responded to the Ohio General Assembly Amended House Bill 59 §363.590 and developed the College Credit Plus (CCP) initiative (Ohio Board of Regents, 2014d). Joining the Ohio General Assembly and recognizing problems in the early college programs, the Ohio of Regents (2014e) declared, “Ohio’s current dual credit program is underutilized and is administered across the state with varying degrees of efficacy and quality” (p. 5). As a result, College Credit Plus is the reformation of the Ohio dual enrollment system which has, as its purpose, to “(create) seamless and equitable pathways for qualified high school students across all demographic populations” and “(create) a collaborative culture between K-12 and higher education that promotes and embraces College Credit Plus and works to maximize its full educational potential” (Ohio Board of Regents, 2014e, p. 3).

The goals (Ohio Board of Regents, 2014e) serving as overarching principles in the development of College Credit Plus include,

- Clearly define the College Credit Plus program.
- Expand participation in dual credit opportunities among all student demographic populations.

- Create a transparent dual credit funding system in which both school districts and colleges equitably share in the costs of educating dual credit students.
- Each College Credit Plus course is purposeful and meaningful for the student.
- To ensure that parents and students receive comprehensive and consistent communication regarding College Credit Plus opportunities and requirements.
- Systemwide, all secondary and postsecondary institutions consistently collect, report and track College Credit Plus data to identify the students enrolled, the courses offered and taken, credits earned, the instructor qualifications, student performances and agreement innovations. (pp. 9-18)

To realize these goals, Chancellor John Carey proposed 47 recommendations for implementation (Ohio Board of Regents, 2014e). Particularly significant are requirements that all public school districts and all institutions of higher education must participate, students and their families must incur no expense, and colleges and high schools must collaborate to establish pathways toward earning a credential (certificate or degree) by providing 15 credit hours to high school juniors and an additional 15 credit hours to high school seniors (Ohio Board of Regents, 2014e). College Credit Plus will be fully implemented in academic year 2014-2015.

One-year Option

The One-year Option is an initiative championed by the Ohio Board of Regents and required by the Ohio General Assembly (Ohio Board of Regents, 2014b). The initiative will afford matriculating students to community colleges from Ohio technical centers 30 technical credit hours if having completed a “900-hour program of study and obtained an industry-recognized credential approved by the Chancellor” (Ohio Board of Regents, 2014b, n.p.). Further

the initiative, provides for awarding proportional credit for programs of study between 600 and 899 hours and obtaining an industry approved credential (Ohio Board of Regents, 2014b).

Similar to PLA, College Credit Plus, and Three-year Degrees, the One-year Option benefits students by awarding credit for prior learning, accelerates the time to completion, and reduces educational debt. The One-year Option is to be implemented statewide in academic year 2014-2015.

Complete College Ohio

Ohio's investment in the principles of Complete College America was formalized when Governor John Kasich joined by Ohio's colleges and universities and embraced the student success initiative (Complete College America, 2011). What resulted was a unique statewide approach to student success and aggressive higher education reform, much under the auspices of Ohio's adaptation of Complete College America; The Complete College Ohio Initiative (Ohio Board of Regents, 2014f).

Defining the initiative, the Ohio Board of Regents (2012a) declared,

The Complete College Ohio Initiative is a call to action that requires us to focus and best utilize our state's resources to get our students to the finish line – earning meaningful certificates and degrees with the goal of providing a workforce of skilled, critical thinkers that will attract and keep business here in Ohio. (p. 7)

In response, Chancellor James Petro called upon representatives from the Ohio Board of Regents, college and university presidents, provosts, executive officers, and members of the Ohio General Assembly to form a task force with a mission “to develop a set of strategic recommendations for significantly increasing both the number and percentage of Ohioans who earn a postsecondary education or degree” (Ohio Board of Regents, 2012a, p. 8). The task force

further disaggregated into three working groups to conduct research, review student success literature, and develop recommendations (Ohio Board of Regents, 2012a).

The final report of the task force produced 20 recommendations under seven general categories: campus completion plans, foundations for access and success, connecting with college and preparing for success, ensuring and supporting first-year success, staying on track and accelerating progress, rewarding success and incentivizing completion, and strategic communications (Ohio Board of Regents, 2012a). Because of the unique culture, mission, and goals of the each institution, implementation was left to the discretion of the colleges and the task force acknowledged that some recommendations may be incongruent with certain colleges or universities (Ohio Board of Regents, 2012a). The exception to this task force agreement rested in the first recommendation which “required each college, university, and adult career technical center in Ohio to develop its own Campus Completion Plan” and that this plan and requirement would become “the centerpiece of the report” (Ohio Board of Regents, 2012a, p. 12).

Further, the Complete College Ohio Initiative not only placed responsibilities upon colleges and universities to strategically develop plans to improve student success and completion, but, additionally it placed a burden upon the Ohio Board of Regents to establish “uniform, statewide approaches in a number of different areas, including credit-hour learning experiences for degrees, prior learning assessments, internships and co-op learning experiences, postsecondary placement and funding approaches for dual enrollment” (Ohio Board of Regents, 2012a, p. 13).

From the recommendations of the report, widespread higher education reform has begun in Ohio. Numerous statewide student success initiatives have been implemented by the Ohio Board of Regents (2014a) and the Ohio Association of Community Colleges (2014a). Further,

the Ohio General Assembly, with the support of Governor John Kasich and Chancellor John Carey, has been responsive by legislatively embedding student success into the Ohio Revised Code (Ohio General Assembly, 2014). In particular, and of special significance to this study, Recommendation 19 led to acceleration of performance-based funding for Ohio's colleges and universities resulting in the state share of instruction subsidy based entirely on student success and completion (Ohio General Assembly, 2014).

Appendix E*Total percent change from academic year 2012 to academic year 2014*

College	Completion 2012	Success Points 2012	Degree and Certificates 2012	Transfers 2012	Total 2012	% Change between Total 2012 and Total 2014
A	2261.589	2205	270.5	364	5101.089	-35%
B	4761.748	4056	455.5	808	10081.248	-4%
C	12702.708	11959	1479	2691	28831.708	-20%
D	4888.202	4012	550.5	795	10245.702	-12%
E	27995.740	25159	2211.5	7530	62896.240	-13%
F	25702.233	24655	2339.5	6884	59580.733	-3%
G	3199.717	2900	392	805	7296.717	-17%
H	6042.961	6195	576.5	926	13740.461	-28%
Buckeye CC	2403.367	2052	192	375	5022.367	20%
I	9700.767	8425	1141	2328	21594.767	-6%
J	7587.800	6822	900.5	2569	17879.300	-6%
K	4351.422	3781	596	680	9408.422	-26%
L	3584.618	3518	483.5	681	8267.118	-17%
M	2740.125	2621	294	470	6125.125	-10%
N	3189.127	2795	450.5	779	7213.627	-22%
O	4056.690	3778	344	460	8638.690	-18%
P	13182.051	12212	1178	2993	29565.051	-14%
Cardinal CC	1916.233	1832	210	396	4354.233	7%
Q	18934.959	17469	1945.5	4184	42533.459	-10%
R	3640.440	3366	455.5	866	8327.940	-26%
S	12111.767	10585	1086.5	2256	26039.267	-6%
T	2754.233	2658	266	560	6238.233	-22%
U	2259.489	1966	385	339	4949.489	-29%
AVERAGE						-14%

College	Completion 2014	Success Points 2014	Degrees & Certificates 2014	Transfers 2014	Total 2014
A	1450.300	1257	289	310	3306.300
B	4383.447	3817	547.5	883.3	9631.247
C	10404.983	8764	1318.5	2586	23073.483
D	3976.700	3525	630	856	8987.700
E	22754.883	21506	3276.5	7366	54903.383
F	24099.333	23564	3179	7221	58063.333
G	2436.300	2394	525.5	719	6074.800
H	4192.730	3948	750.5	953	9844.230
Buckeye CC	2693.767	2578	369	380	6020.767
I	8689.767	7944	1382	2349	20364.767
J	6577.533	6732	1002.5	2460	16772.033
K	3235.300	2587	587	573	6982.300
L	2957.333	2694	516	718	6885.333
M	2264.333	2253	400	582	5499.333
N	2449.517	2042	378	729	5598.517
O	3194.200	2999	407	441	7041.200
P	10716.235	10639	1388.5	2647	25390.735
Cardinal CC	1967.967	2029	218	463	4677.967
Q	16425.247	15797	1873.5	4245	38340.747
R	2547.567	2335	402	881	6165.567
S	10897.217	9620	1435	2395	24347.217
T	2186.667	1962	300.5	431	4880.167
U	1448.091	1414	314.5	361	3537.591

Completion is the sum of “Subject Level FTE Completion” (Higher Education Information System, 2014) by institution.

Success points are the data totals from “Success Points” (Higher Education Information System, 2014).

Degrees and Certificates are the sum of FY degrees from “Completions” (Higher Education Information System, 2014)

Transfers are the data total from “Completions” (Higher Education Information System, 2014).

Appendix F*Percent change by category from academic year 2012 to academic year 2014*

College	% Change Completion	% Change Success Points	% Change Degrees and Certificates	% Change Transfers
A	-36%	-43%	7%	-15%
B	-8%	-6%	20%	9%
C	-18%	-27%	-11%	-4%
D	-19%	-12%	14%	8%
E	-19%	-15%	48%	-2%
F	-6%	-4%	36%	5%
G	-24%	-17%	34%	-11%
H	-31%	-36%	30%	3%
Buckeye CC	12%	26%	92%	1%
I	-10%	-6%	21%	1%
J	-13%	-1%	11%	-4%
K	-26%	-32%	-2%	-16%
L	-17%	-23%	7%	5%
M	-17%	-14%	36%	24%
N	-23%	-27%	-16%	-6%
O	-21%	-21%	18%	-4%
P	-19%	-13%	18%	-12%
Cardinal CC	3%	11%	4%	17%
Q	-13%	-10%	-4%	1%
R	-30%	-31%	-12%	2%
S	-10%	-9%	32%	6%
T	-21%	-26%	13%	-23%
U	-36%	-28%	-18%	6%
AVERAGE	-17%	-16%	17%	0%

Completion is the sum of “Subject Level FTE Completion” (Higher Education Information System, 2014) by institution.

Success points are the data totals from “Success Points” (Higher Education Information System, 2014).

Degrees and Certificates are the sum of FY degrees from “Completions” (Higher Education Information System, 2014)

Transfers are the data total from “Completions” (Higher Education Information System, 2014).

Appendix G

Dear Participant,

This letter is a request for you to take part in a research project to assess how community colleges are effectively improving student success. This project is being conducted by Gregory T. Busch, MS, a doctoral candidate in the College of Education and Human Services with supervision of Dr. Lynne Schrum, professor in the College of Education and Human Services, for a the purpose of a doctoral dissertation in fulfillment of the Doctoral Degree in Educational Leadership and Administration. Your participation in this project is greatly appreciated and will take approximately 60-90 minutes to complete the interview.

Your involvement in this project will be kept as confidential as legally possible. All data will be reported in the aggregate. You must be 18 years of age or older to participate. I will not ask any information that should lead back to your identity as a participant. Your participation is completely voluntary. You may skip any question that you do not wish to answer and you may discontinue at any time. If you are a student, your class standing will not be affected if you decide either not to participate or to withdraw. West Virginia University's Institutional Review Board acknowledgement of this project is on file.

I hope that you will participate in this research project, as it could be beneficial in understanding how community colleges are helping students become successful in reaching their goals. Thank you very much for your time. Should you have any questions about this letter or the research project, please feel free to contact Gregg Busch at (304) 991-4323 or by e-mail at gbusch1@mail.wvu.edu.

Thank you for your time and help with this project.

Sincerely,

Gregory T. Busch, MS
Doctoral Candidate
West Virginia University
College of Education and Human Services

Phone: 304-293-7073
Fax: 304-293-3098
<http://oric.research.wvu.edu>

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Appendix H

Interview Protocol

Lynne Schrum, PhD (Principle Investigator)
Gregory T. Busch, MS (Co-Investigator)

1. “Student success” may mean a lot of different things to different people and in different settings. For the purpose of this study, “student success” at (name of the community college) means helping students achieve their goals whether that is to earn a degree or certificate, pick up a credential, receive workforce and job skills training, transfer to a four-year college or university, take a class based on personal interest, or build upon skills that may need improvement in English, math, reading or English as a second language. With this broad definition of student success in mind, in what ways do you see (name of the community college) contributing to the success of the students?
2. (Name of the community college) is an important institution in the (city) area. For the college to be successful in achieving its mission, it relies on a number of relationships and strengths. I am going to ask you about some of those relationships and strengths. I would like you to describe how you see, or don’t see, how these come into play at (name of the community college).

Describe:

- a. The campus in general. The buildings and grounds. The organization of the campus. The units of the campus. The services available on the campus for students, faculty, and staff.
 - b. The physical location of the college within the area served by the college. The diversity of the area served by the college. The demographics and geography of the area served.
 - c. The reputation and relationship the college has with the community, the government leaders, and other colleges.
 - d. The skills and talents of the people who work here. Their experience. Their education. Their professional development.
 - e. The financial resources of the college. The budget. The financial investments in the college and its various resources.
 - f. The values of the college. The things that the people working here believe. The collective purpose or philosophy.
 - g. Teamwork, collaboration, partnerships, and units of the college and how people do, or do not, work together. The organizational structure and hierarchy of the college.
3. As you think back to the previous question about the various relationships and strengths at (name of the community college) and the first question with the broad definition of “student success,” in your opinion how have those relationships and strengths supported the college’s mission of helping students become successful in achieving their goals?

Given the qualitative nature of this study, the respondents’ answers may lead to follow up questions that cannot be anticipated.

Appendix I

Human Research Protocol
Only Minimal Risk Consent Form
Without HIPAA

**Only Minimal Risk
Consent Information Form (without HIPAA)**

Principal Investigator	Lynne Schrum, PhD
Department	College of Education and Human Services
Protocol Number	1503609154
Study Title	Improving community college student success through investment of a community capitals framework: A case study
Co-Investigator(s)	Gregory T. Busch, MS
Sponsor (if any)	None

Contact Persons

In the event you experience any problems related to this research, you should contact Dr. Lynne Schrum at (301) 332-4203. If you have any questions, concerns, or complaints about this research, you can contact Dr. Lynne Schrum at (301) 332-4203.

For information regarding your rights as a research subject, to discuss problems, concerns, or suggestions related to the research, to obtain information or offer input about the research, contact the Office of Research Integrity & Compliance at (304) 293-7073.

In addition if you would like to discuss problems, concerns, have suggestions related to research, or would like to offer input about the research, contact the Office of Research Integrity and Compliance at (304) 293-7073.

Introduction

You, _____, have been asked to participate in this research study, which has been explained to you by Gregory T. Busch, MS. This study is being conducted by Gregory T. Busch, MS, in the Department of Curriculum and Instruction/Literacy Studies in the College of Education and Human Services at West Virginia University.

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	Morgantown, WV 26506-6845

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Subject's

Initials _____
Date _____

Purpose(s) of the Study

The purpose of this study is to discover in what ways community colleges are effectively improving student success. Further, this study will serve as the basis for a doctoral dissertation in fulfillment of the doctoral degree in educational leadership and administration.

Description of Procedures

This study involves participating in a one-on-one interview with open-ended questions and will take approximately 60-90 minutes for you to complete. You will be asked questions about the community college and your understanding of activities and initiatives of the college. You will also be asked questions about your understanding, perception, and role in student success at this community college. You do not have to answer all the questions.

Discomforts

There are no known or expected risks from participating in this study.

Alternatives

You do not have to participate in this study.

Benefits

You may not receive any direct benefit from this study. The knowledge gained from this study may eventually benefit others.

Financial Considerations

There are no special fees for participating in this study. You will not receive compensation, financial or otherwise, by participating in this study.

Confidentiality

Any information about you that is obtained as a result of your participation in this research will be kept as confidential as legally possible.

In addition, there are certain instances where the researcher is legally required to give information to the appropriate authorities. These would include mandatory reporting of infectious diseases, mandatory reporting of information about behavior that is imminently dangerous to your child or to others, such as suicide, child abuse, etc.

Audiotapes or videotapes will be kept locked up and will be destroyed as soon as possible after the research is finished. In any publications that result from this research, neither your name nor any information from which you might be identified will be published without your consent.

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Subject's

Initials _____
Date _____

Voluntary Participation

Participation in this study is voluntary. You are free to withdraw your consent to participate in this study at any time.

Refusal to participate or withdrawal will not affect your employment, if an employee, or class standing, if you are a student, and will involve no penalty to you.

In the event new information becomes available that may affect your willingness to participate in this study, this information will be given to you so that you can make an informed decision about whether or not to continue your participation.

You have been given the opportunity to ask questions about the research, and you have received answers concerning areas you did not understand.

Upon signing this form, you will receive a copy.

I willingly consent to participate in this research.

Signatures

Signature of Subject

Printed Name Date Time

The participant has had the opportunity to have questions addressed. The participant willingly agrees to be in the study.

Signature of Investigator or Co-Investigator

Printed Name Date Time

Appendix J*Code descriptions* (Miles, Huberman, & Saldana, 2014)

Code	Description	Benefit	Method	Citation
Descriptive	“Assigns a label to data to summarize a word or short phrase – most often a noun – the basic topic of a passage”	“provides inventory topics for indexing and categorizing” and “appropriate for social environments”	Elemental	“Descriptive Coding”
In Vivo	“Uses words or short phrases from the participant’s own language in the data record as codes”	“includes folk or indigenous terms of a particular culture, subculture, or microculture to suggest the existence of the group’s cultural categories” “appropriate for virtually all qualitative studies but particularly ... honor the participant’s voice”	Elemental	“In Vivo Coding”
Process	“Uses gerunds exclusively to connote observable and conceptual action in the data”	“Implies actions intertwined with the dynamics of time, such as things that emerge, change, occur in particular sequences, or become strategically implemented” and “appropriate for virtually all qualitative studies, but particularly for grounded theory research that	Elemental	“Process Coding”

		extracts participant action/interaction and consequences”		
Emotion	“Labels the emotions recalled or experienced by the participant or inferred by the researcher about the participant”	“Provides insight into the participant’s perspectives, worldviews, and life conditions” and “appropriate for studies that explore intrapersonal and interpersonal participant experiences and actions”	Affective	“Emotion Coding”
Values	“Application of three different types of related codes onto qualitative data that reflect a participant’s values, attitudes, and beliefs, representing his or her perspectives or worldview”	Provides insight into “the importance we attribute to ourselves, another person, thing or idea” and “the way we think and feel about oneself, another person thing, or idea” and “is part of a system that values and attitudes, plus knowledge experiences, opinions, prejudices, morals, and other interpretive perceptions of the social world.” It is “appropriate for studies that explore cultural values, identity, intrapersonal and interpersonal experiences and	Affective	“Values Coding”

		actions in case studies”		
Evaluation	“Applies nonquantitative codes onto qualitative data that assign judgments about the merit, worth , or significance of programs or policy”	“Appropriate for policy, critical, action, particularly across multiple cases and extended periods of time”	Affective	“Evaluation Coding”
Holistic	“Applies a single code to a large unit of data in the corpus, rather than line-by-line coding, to capture a sense of the overall contents and the possible categories that may develop”	“Is often a preparatory approach to a unit of data before a more detailed coding or categorization process through First or Second Cycle methods” and “is most applicable when the researcher has a general idea as to what to investigate in the data”	Exploratory	“Holistic Coding”
Provisional	“Begins with a ‘start list’ of researcher-generated codes, based on what preparatory investigation suggests might appear in the data before they are collected and analyzed”	“Is appropriate for qualitative studies that build on or corroborate previous research and investigations”	Exploratory	“Provisional Coding”
Hypothesis	“Application of a researcher-generated, predetermined list of codes onto qualitative data specifically to assess a researcher-generated hypothesis”	“Developed from a theory/prediction about what will be found in the data before they have been collected or analyzed” and “is appropriate for hypothesis testing, content analysis, and analytic	Exploratory	“Hypothesis Coding”

		induction of the qualitative data set, particularly the rules, causes, and explanations of the data”		
Protocol	“Coding of qualitative data according to a preestablished, recommended, standardized, or prescribed system”	“Appropriate for qualitative studies in disciplines with previously developed and field-tested coding systems”	Procedural	“Protocol Coding”
Causation	“Extracts attributes or causal beliefs from participant data about not just how but why particular outcomes came about”	“Searches for combinations of antecedent and mediating variables that lead toward certain pathways and attempts to map a three part process” and “is appropriate for discerning motives, belief systems, worldviews, processes, recent histories, interrelationships, and the complexity of influences and affects on human actions and phenomena”	Procedural	“Causation Coding”
Attribute	“The notion of basic descriptive information such as the field work setting, participant characteristics or demographics, data format, and other variables of interest for qualitative and some applications of quantitative analysis”	“Appropriate for virtually all qualitative studies, but particularly for those with multiple participants and sites, cross case studies, and studies with a wide variety of data forms”	Grammatical	“Attribute Coding”

Magnitude	“Consist of supplemental alphanumeric or symbolic codes or subcodes applied to existing coded data or a category to indicate their intensity, frequency, direction, presence, or evaluative content”	“Most appropriate for mixed methods and qualitative studies in education, social science, and health care disciplines that support quantitative measures of evidence of outcomes”	Grammatical	“Magnitude Coding”
Subcoding	“Second-order tag assigned after a primary code to detail or enrich the entry”	“Appropriate for virtually all qualitative studies, but particularly for ethnographies and content analyses, studies with multiple participants and sites, and studies with a wide variety of data forms”	Grammatical	“Subcoding”
Simultaneous	“Application of two or more different codes to a single qualitative datum, or the overlapped occurrence of two or more codes applied to sequential unites of qualitative data”	“Appropriate when the data’s content suggests multiple meanings that necessitate and justify more than one code”	Grammatical	“Simultaneous Coding”

Appendix K

Analyses Tables for the Community Capitals at Buckeye Community College and Cardinal Community College

Each of the tables identify the student success activities revealed at the college to improve student success. Further, the table serves to demonstrate the link between the student success activity and community capital by relating the activity to the functional definition of the capital. Finally, the table provides the rationale for inclusion of the activity in the analysis through classification as an intervention, initiative, action, or intervention/initiative hybrid.

Table 5.1

Natural Capital and the student success activities at Cardinal Community College

Student Success Activity	Relationship to the Natural Capital	Activity Classification
Distance education	Demographics and geography of service area	Intervention/Initiative Hybrid
Off-site centers	Physical location in the service area	Intervention/Initiative Hybrid
Community use of college facilities	Physical location of the campus	Action
Well-maintained campus	Campus setting	Action
Small campus	Campus setting	Action

Table 5.2

Natural Capital and the student success activities at Buckeye Community College

Student Success Activity	Relationship to the Natural Capital	Activity Classification
Well-maintained campus	Campus setting and maintenance	Action
Community use of college facilities	Physical location of the campus	Action

Off-site centers	Physical location in the service area	Intervention/Initiative Hybrid
Near eateries, public transportation, shopping	Physical location of the campus	Action
Small campus	Campus setting	Action
Distance education	Demographics and geography of service area	Intervention/Initiative Hybrid

*Table 5.3**Cultural Capital and the student success activities at Cardinal Community College*

Student Success Activity	Relationship to the Cultural Capital	Activity Classification
Collective conscience	Belief	Action
Devotion to the community	Value	Action
Concern for fellow employees	Behavior	Action
Hire our own	Behavior	Action
Off-site personal support	Behavior	Intervention
Caring faculty	Behavior	Action
Climate of inclusion	Value	Action
Supportive and approachable	Behavior	Action
Welcoming, encouraging climate	Behavior	Action
Family-like campus climate	Behavior	Action
Faculty-Student engagement	Behavior	Action
Common goal of student success	Behavior	Action
Passionate about serving students	Value	Action

*Table 5.4**Cultural Capital and the student success activities at Buckeye Community College*

Student Success Activity	Relationship to the Cultural Capital	Activity Classification
Ruby Payne cultural education	Behavior	Initiative
Collective conscience	Belief	Action
Devotion to the community	Value	Action
Concern for fellow employees	Behavior	Action
Faculty-Student engagement	Behavior	Action

Off-site personal support	Behavior	Intervention
Caring faculty	Behavior	Action
Climate of inclusion	Value	Action
Mandatory new faculty orientation	Behavior	Initiative
Common goal of student success	Behavior	Action
Passionate about serving students	Value	Action
Supportive and approachable	Behavior	Action
Welcoming, encouraging climate	Behavior	Action
Family-like campus climate	Value	Action

Table 5.5

Human Capital and the student success activities at Cardinal Community College

Student Success Activity	Relationship to the Human Capital	Activity Classification
Off-site centers	Application of Promising Practices	Intervention/Initiative Hybrid
Distance learning	Application of Promising Practices	Intervention/Initiative Hybrid
Visitation and Experience Days	Application of Promising Practices	Intervention/Initiative Hybrid
Veteran Support	Application of Promising Practices	Intervention
Free Tutoring	Skills and Talents of the People Application of Promising Practices	Intervention
Empowering students to have a university experience	Education and Knowledge-base of Employees Application of Promising Practices	Action
Professional development	Professional Development	Initiative
Faculty-Student engagement	Application of Promising Practice	Action
Mandatory degree audit	Application of Promising Practice	Initiative
Automatic awarding of degrees	Application of Promising Practice	Initiative
Mandatory student orientation	Application of Promising Practice	Initiative

Mandatory advising	Application of Promising Practice	Initiative
Mandatory first-year-experience	Application of Promising Practice	Initiative
Retention specialist on staff	Application of Promising Practice	Intervention
Gas cards through financial aid	Application of Promising Practice	Intervention
Childcare on campus	Application of Promising Practice	Intervention
College Credit Plus	Application of Promising Practice	Initiative
Early alert system	Application of Promising Practice	Intervention
Student Success Center	Application of Promising Practice	Intervention
Noninstitutional grants	Application of Promising Practice	Initiative
Institutional grants	Application of Promising Practice	Intervention
Required faculty in-service	Application of Promising Practice	Initiative
Reduction of credit hours	Application of Promising Practice	Initiative

Table 5.6

Human Capital and the student success activities at Buckeye Community College

Student Success Activity	Relationship to the Human Capital	Activity Classification
Ruby Payne cultural education	Professional Development	Initiative
Distance learning	Application of Promising Practices	Intervention/Initiative Hybrid
Added emphasis on disability services	Application of Promising Practice	Intervention
Gas cards through financial aid	Application of Promising Practice	Intervention
Childcare on campus	Application of Promising Practice	Intervention
Veteran Support	Application of Promising Practices	Intervention
Free Tutoring	Skills and Talents of the People	Intervention

	Application of Promising Practices	
Flexible schedule	Application of Promising Practice	Initiative
Noninstitutional grants	Application of Promising Practice	Initiative
Institutional grants	Application of Promising Practice	Intervention
Faculty-student engagement	Application of Promising Practice	Action
ABLE on campus	Application of Promising Practice	Intervention
College Credit Plus	Application of Promising Practice	Initiative
Off-site centers	Application of Promising Practice	Intervention/Initiative Hybrid
Early alert system	Application of Promising Practice	Intervention
Transfer Advisor on staff	Application of Promising Practice	Intervention
Instructional Specialist on staff	Application of Promising Practice	Action
Student Success Center	Application of Promising Practice	Intervention
Upward Bound – High School Partnerships	Application of Promising Practice	Intervention
Educational Psychologist on staff	Knowledge-base of employees Application of Promising Practice	Intervention
TRiO services	Application of Promising Practice	Intervention
Developmental Education Initiative Grant	Application of Promising Practice	Intervention
Professional Development	Professional Development	Initiative
Required faculty in-service	Application of Promising Practice	Initiative
Mandatory new faculty orientation	Application of Promising Practice	Initiative
Reduction of credit hours	Application of Promising Practice	Initiative
Academic coaches	Application of Promising Practice	Intervention
Mandatory Advising	Application of Promising Practice	Initiative
Mandatory first-year experience	Application of Promising Practice	Initiative

Promote wellness for success	Application of Promising Practice	Action
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*Table 5.7**Social Capital and the student success activities at Cardinal Community College*

Student Success Activity	Relationship to the Social Capital	Activity Classification
Collective conscience	Teamwork, internal collaboration, partnerships, interpersonal relationships	Action
Concern for fellow employees	Interpersonal relationships	Action
Hire our own	College structure	Action
Off-site personal support	Interpersonal relationships	Intervention
Off-site centers	College structure, teamwork, internal collaboration, partnerships, shared governance	Intervention/Initiative Hybrid
Visitation and Experience Days	Teamwork, internal collaboration, partnerships, interpersonal relationships	Intervention/Initiative Hybrid
Veterans support	Teamwork, internal collaboration, partnerships, interpersonal relationships	Intervention
Free tutoring	Teamwork, internal collaboration, partnerships, interpersonal relationships	Intervention
Student ambassadors	Teamwork, internal collaboration, partnerships, interpersonal relationships	Initiative
Provost Academic Success Initiative	Teamwork, internal collaboration, partnerships, interpersonal relationships	Initiative
Faculty union	College structure, hierarchy, teamwork, internal collaboration, shared governance	Initiative
Student groups and organizations	College structure, internal collaborations, interpersonal relationships, shared governance	Initiative
Partnership with Cardinal University	College structure, hierarchy, teamwork, internal	Initiative

	collaboration, partnerships, interpersonal relationship, shared governance	
One Stop	College structure, teamwork, internal collaboration, partnerships, interpersonal relationship	Initiative
Student input into decision-making	Hierarchy, teamwork, internal collaboration, partnerships, interpersonal relationships, shared governance	Initiative
Approachable, supportive, willing to help each other	Teamwork, internal collaborations, partnerships, interpersonal relationships	Action
Mandatory orientation	Teamwork, internal collaborations, partnerships	Initiative
Mandatory advising	Teamwork, internal collaborations, partnerships, interpersonal relationships	Initiative
Mandatory first-year experience	Teamwork, internal collaborations, partnerships, interpersonal relationships	Initiative
Faculty-student engagement	Hierarchy, teamwork, internal collaborations, partnerships, interpersonal relationships	Action
Gas cards through financial aid	Teamwork, internal collaboration, partnerships	Intervention
On-site childcare center	College structure, teamwork, internal collaborations, partnerships, interpersonal relationships	Intervention
Early Alert System	Teamwork, internal collaboration, partnerships, interpersonal relationships	Intervention
Student success center	College structure, hierarchy, teamwork, internal collaboration, partnerships, interpersonal relationships	Intervention

Table 5.8

Social Capital and the student success activities at Buckeye Community College

Student Success Activity	Relationship to the Social Capital	Activity Classification
Ruby Payne cultural education	Teamwork, internal collaborations, partnerships, interpersonal relationships	Initiative
Added emphasis on disability services	College structure, teamwork, internal collaborations, partnerships, interpersonal relationships	Intervention
Collective conscience	Teamwork, internal collaboration, partnerships, interpersonal relationships	Action
Concern for fellow employees	Interpersonal relationships	Action
Off-site personal support	Interpersonal relationships	Intervention
Gas cards through financial aid	Teamwork, internal collaboration, partnerships	Intervention
On-site childcare center	College structure, teamwork, internal collaborations, partnerships, interpersonal relationships	Intervention
Veterans support	Teamwork, internal collaboration, partnerships, interpersonal relationships	Intervention
Free tutoring	Teamwork, internal collaboration, partnerships, interpersonal relationships	Intervention
Flexible scheduling	Teamwork, internal collaborations, partnerships	Initiative
Faculty union	College structure, hierarchy, teamwork, internal collaboration, shared governance	Initiative
Student groups and organizations	College structure, internal collaborations, interpersonal relationships, shared governance	Initiative
Mandatory first-year experience	Teamwork, internal collaborations, partnerships, interpersonal relationships	Initiative

Faculty-student engagement	Hierarchy, teamwork, internal collaborations, partnerships, interpersonal relationships	Action
Off-site centers	College structure, teamwork, internal collaboration, partnerships, shared governance	Intervention/Initiative Hybrid
Early Alert System	Teamwork, internal collaboration, partnerships, interpersonal relationships	Intervention
Transfer advisor on staff	College structure, hierarchy, teamwork, internal collaboration, partnerships, interpersonal relationships	Intervention
Instructional specialist	College structure, hierarchy, teamwork, internal collaboration, partnerships, interpersonal relationships	Action
Student success center	College structure, hierarchy, teamwork, internal collaboration, partnerships, interpersonal relationships	Intervention
TRiO Services	College structure, hierarchy, teamwork, internal collaborations, partnerships, interpersonal relationships	Intervention
Developmental Education Initiative	Teamwork, internal collaborations, partnerships, interpersonal relationships	Intervention
Academic coaches	College structure, hierarchy, internal collaborations, partnerships, interpersonal relationships	Intervention
Mandatory advising	Teamwork, internal collaborations, partnerships, interpersonal relationships	Initiative
Approachable, supportive, willing to help each other	Teamwork, internal collaborations, partnerships, interpersonal relationships	Action

Table 5.9

Political Capital and the student success activities at Cardinal Community College

Student Success Activity	Relationship to the Political Capital	Activity Classification
Devotion to the community	External relationships	Action
Off-site centers	External relationships	Intervention/Initiative Hybrid
Student ambassadors	External relationships	Action
Strong Ohio Jobs and Family Services relationship	External relationships	Action
Strong relationships with regional employers	Reputation, External relationships	Action
Strong government leader relationships	External relationships	Action
Festival participation	External relationships	Action
State committee memberships	External relationships	Action
Tax levy	Reputation, External relationships	Action
Relationship with faith-based organizations	Reputation, External relationships	Action
On-site food service	External relationship	Action
Athletic-community engagement	Reputation, External relationships	Action
Businesses' support for students	External relationships	Action
Gas cards through financial aid	External relationships	Intervention
Community use of college facilities	External relationships	Action
Noninstitutional grants	External relationships	Initiative
College Credit Plus	External relationships	Initiative
On-site childcare	External relationships	Intervention

Table 5.10

Political Capital and the student success activities at Buckeye Community College

Student Success Activity	Relationship to the Political Capital	Activity Classification
Ruby Payne cultural training	External relationships	Initiative
Gas cards through financial aid	External relationships	Intervention
On-site childcare	External relationships	Intervention

Devotion to the community	External relationships	Action
Strong Ohio Jobs and Family Services relationship	External relationships	Action
Strong relationships with regional employers	Reputation, External relationships	Action
Noninstitutional grants	External relationships	Initiative
Strong government leader relationships	External relationships	Action
Private-sector education partnership	External relationships	Initiative
On-site ABLE	External relationships	Intervention
Community use of college facilities	External relationships	Action
College Credit Plus	External relationships	Initiative
State committee memberships	External relationships	Action
Off-site centers	External relationships	Intervention/Initiative Hybrid
TRiO Services	External relationships	Intervention
Tax levy	Reputation, External relationships	Action
Relationship with faith-based organizations	Reputation, External relationships	Action
Developmental Education Initiative Grant	External relationships	Intervention
On-site food service	External relationship	Action
Achieving the Dream	External relationship	Initiative
National Leader College	External relationship	Initiative

Table 5.11

Financial Capital and the student success activities at Cardinal Community College

Student Success Activity	Relationship to the Financial Capital	Activity Classification
Off-site centers	Financial and capital resources, financial investments	Intervention/Initiative Hybrid
Provost Academic Excellence Initiative	Financial resources	Initiative
Cardinal University partnership	Financial and capital resources, Financial investments	Initiative
Retention Specialist	Financial investment	Intervention
Tax levy	Financial resource	Action
Student success grants	Financial resources	Intervention/Initiative Hybrid

Professional development	Financial investment	Initiative
Student success center	Capital resource, financial investment	Intervention
Institutional scholarships	Financial investment	Initiatives
Early Alert System	Financial investment	Intervention
On-site childcare center	Capital resource	Intervention
On-site food service	Capital resource	Action
Health and fitness center	Financial and capital resource, Financial investment	Action

Table 5.12

Financial Capital and the student success activities at Buckeye Community College

Student Success Activity	Relationship to the Financial Capital	Activity Classification
Main campus	Capital resource	Action
Ruby Payne cultural education	Financial investment	Initiative
On-site childcare center	Capital resource	Intervention
Tax levy	Financial resource	Action
Institutional scholarships	Financial investment	Initiatives
Private-sector education partnership	Financial and capital resources, Financial investment	Initiative
Off-site centers	Financial and capital resources, financial investments	Initiative
Early Alert System	Financial investment	Intervention
Transfer advisor	Financial investment	Intervention
Instructional specialist	Financial investment	Action
Instructional technology	Financial investment	Action
Student success center	Capital resource, financial investment	Intervention
Student success grants	Financial resources	Intervention/Initiative Hybrid
Professional development	Financial investment	Initiative
Mandatory new faculty orientations	Financial investment	Initiative
Academic coaches	Financial investment	Initiative
On-site food service	Capital resource	Action
Health and fitness center	Financial and capital resource, Financial investment	Action

*Table 5.13**Built Capital and the student success activities at Cardinal Community College*

Student Success Activity	Relationship to the Built Capital	Activity Classification
Off-site centers	Physical infrastructure, Social infrastructure	Intervention/Initiative Hybrid
Distance learning	Physical infrastructure, Social infrastructure	Intervention/Initiative Hybrid
Veterans support services	Physical infrastructure, Social infrastructure	Intervention
Tutoring	Physical infrastructure, Social infrastructure	Intervention
Student Ambassadors	Social infrastructure	Initiative
Provost Academic Excellence Initiative	Social infrastructure	Initiative
Student groups and organizations	Physical infrastructure, Social infrastructure	Action
One Stop	Physical infrastructure, Social infrastructure	Initiative
Cardinal University partnership	Physical infrastructure, Social infrastructure	Initiative
Study tables for athletes	Social infrastructure	Action
Honors program	Social infrastructure	Initiative
Early Alert System	Physical infrastructure, Social infrastructure	Intervention
Small, easily navigated campus	Physical infrastructure	Action
Food pantry and clothing closet	Physical infrastructure, Social infrastructure	Intervention
College Credit Plus Summer Experience	Social infrastructure	Intervention
Expanded computer labs	Physical infrastructure	Action
Community use of college facilities	Physical infrastructure, Social infrastructure	Action
College Credit Plus	Physical infrastructure, Social infrastructure	Initiative
Student success center	Physical infrastructure, Social infrastructure	Intervention
Mandatory advising	Physical infrastructure, Social infrastructure	Initiative
Well-maintained campus	Physical infrastructure	Action
On-site childcare center	Physical infrastructure, Social infrastructure	Intervention

Refined curriculum and programs	Social infrastructure	Action
On-site food service	Physical infrastructure, Social infrastructure	Action
Health and fitness center	Physical infrastructure, Social infrastructure	Action

*Table 5.14**Built Capital and the student success activities at Buckeye Community College*

Student Success Activity	Relationship to the Built Capital	Activity Classification
Well-maintained campus	Physical infrastructure	Action
Ruby Payne cultural education	Social infrastructure	Initiative
Enhanced emphasis on disability services	Physical infrastructure, Social infrastructure	Intervention
On-site childcare center	Physical infrastructure, Social infrastructure	Intervention
Tutoring	Physical infrastructure, Social infrastructure	Intervention
Flexible scheduling	Social infrastructure	Action
Student groups and organizations	Physical infrastructure, Social infrastructure	Action
Private-sector education partnership	Physical infrastructure, Social infrastructure	Initiative
On-site ABLE	Physical infrastructure, Social infrastructure	Intervention
Community use of college facilities	Physical infrastructure, Social infrastructure	Action
Expanded computer labs	Physical infrastructure	Intervention
College Credit Plus	Physical infrastructure, Social infrastructure	Initiative
Off-site centers	Physical infrastructure, Social infrastructure	Intervention/Initiative Hybrid
Distance learning	Physical infrastructure, Social infrastructure	Intervention/Initiative Hybrid
Veterans support services	Physical infrastructure, Social infrastructure	Intervention
Early Alert System	Social infrastructure	Intervention
Transfer advisor	Physical infrastructure, Social infrastructure	Initiative
Instructional specialist	Physical infrastructure, Social infrastructure	Action

Instructional technology	Physical infrastructure	Action
Student success center	Physical infrastructure, Social infrastructure	Intervention
Educational psychologist	Physical infrastructure, Social infrastructure	Intervention
TRiO programs	Physical infrastructure, Social infrastructure	Intervention
Developmental Education Initiative Grant	Physical infrastructure, Social infrastructure	Intervention
Refined curriculum and programs	Social infrastructure	Action
Academic coaches	Physical infrastructure, Social infrastructure	Intervention
Mandatory advising	Physical infrastructure, Social infrastructure	Initiative
Outreach center	Physical infrastructure, Social infrastructure	Action
On-site food service	Physical infrastructure, Social infrastructure	Action
Health and fitness center	Physical infrastructure, Social infrastructure	Action
Small, easily navigated campus	Physical infrastructure	Action

Dedication

I dedicate my dissertation to my students and all community college students, especially those in Appalachia, striving to overcome barriers to success but clinging to a dream of a better life.

Acknowledgments

Lynne Schrum, Ph.D., Dean of the Abraham S. Fischler College of Education, NOVA Southeastern University, who, without her support, guidance, tenacity, and brilliance, this dissertation would not have become a reality. When others stepped aside, you continued believed in me and, for this, I am forever grateful.

Dale Niederhauser, Ph.D., *Audra Slocum, Ph.D.*, *Samuel Stack, Ph.D.*, *Dixie Vaughan, Ph.D.*, my committee, and *Cornelia Butler-Flora, Ph.D.*, deep appreciation to each of you for your support, guidance, and service.

Mary Beth Busch, Ed.D. (abd), my loving partner in life, chief advisor, and staunch advocate. Your unending support, love, and patience has encouraged me throughout this journey and your practical approach to reality continues to ground me and keep me focused. You are forever a doctor in my mind.

Nicholas Busch, MA and *Emily Grace Busch, MPA, CHES*, my incredible children and their loving spouses, *Mary Lott Busch* and *Alex J. Faulkner*. You have paid the greatest price for this dissertation in the hours that it stood in the way of my life and your high school, college, and personal life events. I am deeply appreciative of your love, understanding, and support. I am beyond words for how proud I am of each of you and love you dearly.

Gregory (Max) Busch and *Harper Busch*, my grandchildren. Fortunately, you and other grandchildren who may follow will never remember Pap's journey to his doctorate, but Pap remembered you often when he was struggling to finish and wanted nothing more than to play.

Special thanks to my family, especially my mother, *Wilma Richard Busch*, and my father-in-law and mother-in-law, *The Reverend Robert Stanley* and *Alice Morgan Stanley*, my brother, brothers-in-law, sisters-in-law, nephews, and nieces for their love, support, and encouragement. Special acknowledgement to my late maternal grandmother, *Esther Wolverton Richard*, who taught me that peace, tolerance, kindness, caring and supportive to all is the true measure of love and our purpose.

Much appreciation to the community colleges, the representatives, and the students who participated in the study, shared their stories, and brought the study to life.

Finally, appreciation to my friends and colleagues, named and unnamed, who, for a decade, encouraged, supported, and commiserated with me, especially *Tanya Kittle Easton, Ed.D.*, who joined me on the buddy plan throughout the program and was a source of strength and stick-to-itiveness. *Mary Little Hiltibran* and *Gina Rossi Kamwithi*, each courageously battling cancer with perseverance, hope, and a smile, inspired and reminded me that life could be much worse than sacrificing an evening out to write a dissertation and when times become tough to keep fighting the fight.