MULTI-ACTOR POLICY IMPLEMENTATION IN POSTSECONDARY

EDUCATION: A DESCRIPTIVE CASE STUDY OF THE CAREER AND

TECHNICAL CREDIT TRANSFER POLICY IMPLEMENTATION PROCESS

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ABSTRACT

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Educational institutions, including workforce development centers, community

colleges, and public universities faced a variety of challenges at the beginning of the 21st

century, yet few of these tasks captured the public's attention as much as meeting the

workforce development needs of an ailing nation. As the country watched its housing

market collapse and economy recede, elected officials began calling on community colleges

and public universities to lead the way in restoring America's economic competiveness

Across the nation, state leaders, including Ohio lawmakers, have passed legislation to

address these concerns and aspirations, but the success of these initiatives depends, in large

part, on the efforts of implementing agents and local actors (e.g., administrators, educators)

responsible for putting these policies into practice. It is one thing to pass legislation to

address education and workforce development needs, but it is quite another for

implementing agents to meet policymakers' expectations.

The purpose of this study is to determine how implementing agents (i.e., workforce

development centers, community colleges, public universities) and policymakers shaped the

implementation of the career and technical credit transfer policy and identify what strategies

policymakers and implementing agents employed to put the policy in place. A qualitative

approach was employed. Ten administrators, educators, and others affiliated with Ohio

Board of Regents, the Ohio Department of Education, Ohio's community and technical

colleges, Ohio's workforce development centers, and Ohio's public universities agreed to

participate in the study. Data was gleaned from interviews and document analysis.

Five recommendations emerged from the data. To facilitate the implementation of

strategies such as the career and technical credit transfer policy that span multiple

institutions, systems, or both, practitioners should consider the following recommendations: 1) Apply political pressure (e.g., legislation) to increase the likelihood that implementing agents act on lawmakers' recommendations and implement policies that fulfil their objectives; 2) Align institutions (e.g., adult workforce centers, community colleges, and public universities) and modify reporting lines to promote cooperation and increase accountability; 3) Recruit individuals who possess a student-centered attitude and encourage implementing agents and local actors to put students' interests ahead of self-interests; 4) Involve faculty in meaningful ways and empower them to draw on their experience as educators to figure out the best way to realize legislators' intentions; and 5) Build on past successes. Pursue smaller, safer victories to increase group cohesion, efficacy, and potency before attempting larger, riskier challenges.

DEDICATION

      This capstone project is dedicated to my classmates, colleagues, faculty, family, and friends who supported me throughout my graduate studies.

ACKNOWLEDGEMENTS

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CHAPTER 1

Introduction

Educational institutions, including workforce development centers, community colleges[1], and public universities faced a variety of challenges at the beginning of the 21st century, yet few of these tasks captured the public's attention as much as meeting the workforce development needs of an ailing nation. As the country watched its housing market collapse and economy recede, elected officials began calling on community colleges and public universities to lead the way in restoring America's economic competiveness (Holzer, 2015; Hurley, 2009). They recognized that the country's economic recovery depended on its ability to prepare workers for employment in the emerging, knowledge-based economy. Carnevale (2009) wrote, "The decline of the blue-collar job market…meant trouble for those workers" (p. 38) who lacked at least some postsecondary education. According to Holzer (2015), "American employers have little reason to think that high school graduates bring them many skills...that they value and for which they should pay" (p. 5).

Many employers are seeking individuals who can perform higher-level tasks such as using the latest technological equipment to their complete job functions. These employers tend to prefer prospective employees who hold a postsecondary credential (e.g., certificate[2],

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[1] In this study, community college refers to public, two-year community colleges. It does not include private, not-for-profit or for-profit two-year postsecondary institutions.
[2] Certificates are low-cost, career-oriented postsecondary credentials that take less than two years to complete, and most take less than a year to finish. Certificates help students move quickly from the classroom to the workplace (Carnevale, Rose, & Hanson, 2012).

associate degree, bachelor's degree) that demonstrates that they possess the knowledge, skills, and abilities to succeed in the workplace (Carnevale, 2009; Carnevale & Ross, 2011). Greer (2013) found that "nearly every state in the nation has…adopted goals on college completion tied to workforce development needs and global competiveness" (p. 6) and concluded that the major purpose of today's public, postsecondary institutions is preparing individuals for the workforce. Although stakeholders agree that adult workforce centers, community colleges, and public universities must play a significant role in workforce readiness, they share concerns about barriers to degree completion, particularly for students enrolled in career and technical programs and community colleges (Clark, 2012; Dougherty & Townsend, 2006; Hughes & Karp, 2006; Jenkins, 2011; Pusser & Levin, 2009).

Across the nation, state leaders, including Ohio lawmakers, have passed legislation to address these concerns and aspirations, but the success of these initiatives depends, in large part, on the efforts of implementing agents and local actors (e.g., administrators, educators) responsible for putting these policies into practice (Jenkins, 2006; Lipsky, 2010). "Despite all the rhetoric about satisfying student and community needs, the procedures maintained in community colleges tend toward protecting the staff's rights, satisfaction, and welfare" (Cohen, Brawer, & Kisker, 2013, p. 111). It is one thing to pass legislation to address education and workforce development needs, but it is quite another for implementing agents to meet policymakers' expectations.

The traditional separation between workforce development and postsecondary education makes it difficult for students to transfer coursework between workforce development centers, community colleges, and public universities (Hughes & Karp, 2006). Many states do not provide strong incentives to encourage postsecondary institutions to create clear pathways for students to transfer from one institution to another (Jenkins, 2011).

Fortunately, efforts such as the career and technical credit transfer policy in the state of Ohio are connecting these facets of the educational system, and these "vanguard" initiatives are yielding lessons for others seeking to implement similar programs (Jenkins, 2006). This study, therefore, seeks to describe the implementation of the career and technical credit transfer policy in the state of Ohio, and it strives to identify strategies for implementing similar policies that span multiple institutions, systems, or both.

In 2005, the Ohio House of Representatives passed H.B. 66 (ORC 3333.162) (see Appendix A). The bill directed the Ohio Board of Regents to work collaboratively with the Ohio Department of Education's Office of Career-Technical and Adult Education, public adult and secondary career-technical education institutions (i.e., community colleges), and state-supported institutions of higher education (i.e., community colleges, public universities) to establish criteria, policies, and procedures to transfer agreed-upon technical courses from one system to another (Ohio Board of Regents, 2006). The legislature recognized that too few Ohioans possessed the technical and professional skills to succeed in the increasingly knowledge-based economy, and it sought to enhance educational opportunities for Ohioans, particularly adult learners, and bolster the state's sagging economy. It gave the Ohio Department of Education and the Ohio Board of Regents an aggressive timeline for realizing the bill's objectives. Once known for its highly trained workforce, Ohio ranked 32nd out of 50 states, 30th out of 50 states, and 29th out of 50 states in associate degrees, bachelor's degrees, and graduate degrees respectively—reflecting the widening gap between its workers' abilities and its employers' needs (Ohio Board of Regents, 2008).

The Ohio Department of Education and the Ohio Board of Regents pulled together stakeholders, particularly adult workforce center, community college, and public university faculty to act on the legislation. The consequent career and technical credit transfer policy

(see Appendix B) reduces the cost of obtaining a postsecondary credential and the time required to earn it, and it helps more students meet the requirements of current and prospective employers. It also encourages workforce development centers to offer courses and programs that meet industry standards, achieve agreed upon learning outcomes for success in postsecondary education, and apply to the completion of an associate or bachelor's degree at a community college or public university in Ohio (Jenkins, 2006; Ohio Board of Regents, 2006, 2008, n.d.). Adult workforce centers do not award college credit. Receiving institutions (e.g., community colleges, public universities) award credit for career and technical courses completed at adult workforce centers that are equivalent to their courses. For example, students who complete the heating, ventilating, and air conditioning (HVAC) program at Ashland County-West Holmes Career Center receive 22 semester hours of college credit toward the HVAC associate degree when they enter Columbus State Community College. The career and technical credit transfer policy is not about credit transfer; it is about access to credit.

By making it possible for more students to earn credit for approved technical courses and programs, H.B. 66 makes postsecondary credentials more attainable for Ohioans and meets the needs of workers and employers in a more efficient manner. The state's career and technical credit transfer policy recognizes over 500 selected courses in over 20 technical areas, including automotive technology, engineering technology, information technology, medical assisting, and nursing (Ohio Board of Regents, 2006; Ohio Department of Higher Education, 2015). Once awarded, credit may be applied toward the completion of a postsecondary credential at an Ohio community college, public university, or both. These credentials include certificates, associate degrees, and bachelor's degrees in career and technical areas that lead to better-paying, in-demand jobs (see Appendix C). Other states

may attempt to implement similar policies that require the cooperation of multiple institutions, systems, or both, yet legislators, educators, and other stakeholders may enter into such relationships without understanding the challenges that lie ahead.

Although community colleges have been praised for meeting the training needs of business and industry more quickly than public universities (Vaughn, 2006), education as a whole has been characterized as slow to respond to labor market demands (Bastedo, 2005). "[Postsecondary] institutions are slowly recognizing that, if they continue to do business as usual, their ability to educate students…will be seriously compromised. But translating this slow awareness into changes at the institutional core…will be a long-term, incremental process" (McGuinness, 2005, pp. 198-199). According to the research in higher education, reform measures may be hindered by a variety of factors, including, but not limited to differences between participating institutions (e.g., workforce development centers, community colleges, public universities), barriers between educational institutions, or both (Orr & Bragg, 2001).

Many community colleges and public universities have entered into articulation agreements with individual institutions that allow students to transfer from one school to another, but most states have not implemented policies that allow students to transfer credits, particularly vocational and technical courses, from one educational system (i.e., secondary educations) to another (i.e., postsecondary education). An examination of adult education, suggests that most of these systems do not share common curriculum goals. Harbour and Wolgemuth (2015) suggested that community colleges are divided over the commitment to low cost, high enrollment transfer-oriented programs and high cost, low enrollment vocational programs. Cohen and Brawer (2008) countered that debates over curriculum—workforce development versus baccalaureate education— are passé, but on the

other hand, they claimed that, "the most pervasive and long-standing issue in community colleges is the extent to which their courses are accepted by the universities" (p. 347). Four-year institutions continue to dominate the collegiate function, determining which community colleges courses may be applied toward the baccalaureate degree and which ones may not. "Universities may be reluctant to issue credit for courses not taken on their campuses….Thus, aligning applied associate degrees with bachelor's degrees has been challenging" (Hughes & Karp, 2006, p. 3). Because of the reluctance of some public universities to recognize community colleges as full partners in adult education, statewide coordination (e.g., career and technical credit transfer policy) has been shown to enhance collaboration between community colleges and public universities (Cohen et al., 2013, p. 124) and may facilitate policy implementation across systems.

Although few studies examine community colleges and four-year institutions as competitive threats or welcomed partners (Glover, 2008), policy analysts and scholars continue to encourage secondary and postsecondary educators to implement strategies that make it easier for students to progress from one system to another (Bragg, Dresser, & Smith, 2012; Freeman, Conley, & Brooks, 2006). Haphazard schemes are unlikely to overcome the challenges confronting educational systems. Earlier findings suggest that educational institutions and systems should work together to meet the nation's workforce development needs, but existing models of collaboration may not overcome the cultural, historical, organizational, philosophical, and social differences between workforce development centers, community colleges, and public universities. Meeting the nation's workforce development needs may require "organizational arrangements that we are only beginning to envision and create….Many of our most urgent problems call for flexible arrangements, constant adaptation, and the savvy blending of expertise and credibility that requires crossing

the boundaries of organizations and sectors" (Snyder & Briggs, 2004, p. 172). Successful leaders and organizations are crossing boundaries and drawing on the expertise of multiple individuals and entities to solve common problems. In collaboration with others, they are finding innovative solutions to pressing problems that allow their organizations to adapt and succeed in a rapidly changing environment (Snyder & Briggs, 2004; Wenger, McDermott, & Snyder, 2002).

Since the establishment of the colonial colleges, the United States has called on postsecondary institutions to address the nation's social ills, and recent media gleanings suggest that business leaders, lawmakers, tax payers, and others will continue to place such demands at the feet of workforce development centers, community colleges, and public universities. Policymakers, as in the state of Ohio, are asking local actors to put policies into practice that span multiple systems, requests that many educators may be unable to fulfill. A number of stakeholders have called on investigators to study efforts such as the implementation of the career and technical credit transfer policy that may inform policymakers and implementing agents (Phillips, 2011), but higher education literature has overlooked policy implementation as an area of study (Jenkins, 2011). This study, therefore, seeks to describe how workforce development centers, community colleges, and public universities shaped the implementation of the career and technical credit transfer policy in the state of Ohio, and it tries to identify strategies for implementing polices across institutions and educational systems.

Background

At the turn of century, the industrial revolution gave rise to the "manufacturing belt" which included parts of Illinois, Indiana, Michigan, New Jersey, New York, Ohio, Pennsylvania, and West Virginia (Florida, 1996; Kahn, 1999). As businesses in these regions

prospered, so did their employees, many of whom possessed no more than a high school diploma or its equivalent. Throughout much of twentieth century, generations of American laborers benefited from well-paying factory jobs at industrial giants such as Chrysler, Ford, and General Motors (Florida, 1996; Jacobson, LaLonde, Sullivan, 1993). As early as the 1970s, however, the robust "manufacturing belt" began to deteriorate into the "rust belt" as companies outsourced high-wage, manufacturing jobs to low-wage countries such as China, India, and Mexico (Florida, 1996; Kahn, 1999; Kirsch, Braun, Yamamoto, & Sum, 2007). Leading up to the passage of H.B.66, manufacturing employment fell 32.9% in the "rust belt" between 1969 and 1996 (Kahn, 1999), one in five American manufacturing positions disappeared between 1988 and 2004 (Biswas, Mills, & Prince, 2005), and the unemployment rate rose to double digits in parts of Ohio and other former industrial strongholds (Bureau of Labor Statistics, 2009).

Although science and technology-oriented professions started to replace lost manufacturing jobs, employers said that too few Americans possessed the cognitive skills and training required to fill these roles, particularly in aerospace, computers, electronics, engineering, and health care—the fastest growing segments of the new, knowledge-based economy (Biswas et al., 2005; Carnevale & Rose, 2011; Jenkins, 2006; McCabe, 1997). According to Pusser et al. (2007), "The nation's labor force includes 54 million adults who lack a college degree; of those, nearly 34 million have no college experience at all" (p. 1). As the nation continued to shed traditional manufacturing jobs in favor of knowledge-driven careers, the country's status as an economic super power was threatened by its lack of eligible workers with postsecondary certificates and degrees (Alssid et al., 2005; Brooks, 2008; Clinton, 1995; Jenkins, 2006; Kirsch et al., 2007; McCabe, 1997; Obama, 2009).

Kirsch et al. (2007) argued that the United States should overhaul its education system, including its workforce development initiatives, or the next generation of Americans will not achieve the economic success enjoyed by their parents. Congressman McKeon, in his opening statement to the Subcommittee on 21st Century Competiveness of the Committee on Education and the Workforce, said, "the nation's job training system…was fragmented, contained overlapping programs, and did not serve either job seekers or employers well" (Implementation of the Workforce Investment Act, 2002). Plagued by inefficiency and corruption, federal workforce development programs did not prepare American workers for employment in science and technology fields (McCabe, 1997). As a result, too many individuals lacked basic literacy and numeracy skills, and they were being left behind as employers sought workers with at least some postsecondary education, if not an associate degree or a bachelor's degree (Gayle, Tewarie, & White, 2003; Jacobs & Dougherty, 2006; Pusser et al., 2007). To regain the nation's competitive advantage in the global marketplace, state governments, community colleges, and public universities might embrace the new vocationalism and career pathways movements and implement policies that facilitate degree completion (Bragg, 2001). These movements include innovations such as Ohio's statewide career and technical credit transfer policy, which awards college credit for coursework in specific technical areas (Jenkins, 2006; Ohio Board of Regents, 2006). These courses, which adhere to industry standards and reflect agreed upon knowledge and skills, may also be applied to the completion of an associate or bachelor's degree at a public, two-year or four-year institution in Ohio (Jenkins, 2006; Ohio Board of Regents, 2006).

These programs, known as career pathways, prepare students for employment and help them advance their careers throughout their professional lives. According to the proponents of this model, states cannot afford for students to complete workforce

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development programs without also earning credits toward a college or university degree (Jenkins, 2006; Pusser & Levin, 2009). Career pathways are considered an effective tool for building a modern workforce and increasing credential and degree completion rates (Ashburn, 2009). The implementation of the career and technical credit transfer policy as mandated by the Ohio House of Representatives further established pathways to degree completion for students (Ohio Board of Regents, 2006, p. 2). This policy and related efforts by the State of Ohio are helping students acquire the knowledge and skills to compete in the workplace while also helping them achieve their educational aspirations without unnecessary duplication or cost.

Biswas et al. (2005) and Jenkins (2006) reported that employment opportunities in the new knowledge-driven economy typically pay more than traditional manufacturing jobs, yet Ashburn (2006) found that many former manufacturing employees "have little interest in going to college" (para. 14).

> These folks…are really struggling to find their place in the new
> economy….It's our job to tell them that they're not going to get a good job
> unless they go to school. There aren't any jobs available for them that don't
> require a significant amount of training (postsecondary leader[3], personal
> communication, November 10, 2009).

Their reluctance to enroll in a postsecondary program appears to be driven by fear rather than disinterest in further education. "Ohio's unemployed and underemployed workers are starting to get it; they understand that they need additional training but many of them lack

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[3] These comments are drawn from confidential interviews completed between November 10, 2009, and November 16, 2009, with postsecondary leaders employed by the Ohio Board of Regents and the Ohio Department of Education.

the confidence to pursue it" (postsecondary leader, personal communication, November 10, 2009; postsecondary leader, personal communication, November 16, 2009).

When these individuals do enroll, they are usually "seeking the shortest path to a steady job" (postsecondary leader, personal communication, November 10, 2009). Therefore, they tend to enroll in shorter certificate programs rather than longer degree programs. Since the implementation of the career and technical credit transfer policy, participants may earn college credit for approved career and technical courses. Originally, many of these courses were based upon industry standards such as Microsoft certifications, but more and more community colleges are developing contextualized courses that meet certification requirements and are also linked to associate degree programs (Jacobs & Dougherty, 2006). Ohio's career and technical credit transfer policy encourages the workforce development centers and the community colleges to collaborate on new curricula, thereby creating stackable credentials and career pathways for adult students seeking employment or advancement opportunities (postsecondary leader, personal communication, November 10, 2009).

So far, Ohio has developed 17 career pathways to meet the specific needs of its 13 economic development regions (postsecondary leader, personal communication, November 16, 2009). The most popular career pathways are those associated with healthcare opportunities such as nursing and medical transcription (postsecondary leader, personal communication, November 10, 2009; postsecondary leader, personal communication, November 16, 2009). As the popularity of these programs grows, so does the demand for support services such as academic advisors and financial aid counselors (postsecondary leader, personal communication, November 16, 2009). Many adult learners are at risk of failing to complete their programs, particularly those who attend part-time while working

and those who are returning to school after a long absence from the classroom. These students need academic advising, career counseling, mentoring, and tutoring (Pusser et al., 2007).

To prepare American workers for high-skill, high-wage, and high-demand positions, educators and policymakers should consider implementing career pathways that allow career and technical students to transfer coursework to two-year and four-year programs (Bragg, Dresser, & Smith, 2012; Hughes & Karp, 2006). These movements combine academic and vocational training, creating stackable credentials and pathways to the completion of associate and bachelor's degrees (Jacobs & Dougherty, 2006). Postsecondary training is essential to the nation's success as higher-level, technology-driven occupations replace traditional-manufacturing jobs in the United States (Alssid et al., 2005; Biswas et al., 2005; Brooks, 2008; Clinton, 1995; Jacobs & Dougherty, 2006; Jenkins, 2006; Kirsch et al., 2007; McCabe, 1997; Obama, 2009). The career and technical credit transfer policy is a good example of the growing career pathways movement and the challenges and opportunities associated with it. Nevertheless, its success continues to depend on implementing agents.

Research Questions

Despite the national attention placed on workforce development, degree attainment, and global competiveness, few states have implemented policies similar to the Ohio career and technical credit transfer policy. Given the number of public entities responsible for postsecondary education and workforce development in the state of Ohio, this research attempted to determine how implementing agents and local actors (e.g., workforce development centers, community colleges, and public universities) affected the implementation of the career and technical credit transfer policy. To that end, it answered the following research questions:

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1. In what ways did implementing agents (e.g., workforce development centers, community colleges, and public universities) positively shape the implementation of the policy?

2. In what ways did implementing agents (e.g., workforce development centers, community colleges, and public universities) negatively shape the implementation of the policy?

3. What strategies did policymakers, implementing agents, or both employ to implement the policy?

Theoretical Framework

In this section, I will introduce the theoretical point of view that shaped this single, descriptive case study. Although qualitative studies are sometimes inductive, the examination of topics and themes and the inferences drawn from them are grounded in the data, developing a theoretical framework prior to data collection is an essential step in the case study design process. It imposes structure on the descriptive account and identifies topics for further investigation (Merriam, 1998; Thornton, 1993; Wolcott, 1994). "The typical a theoretic statement 'let's collect information about everything' does not work...the investigator without a descriptive theory will soon encounter enormous problems in limiting the scope of the study" (Yin, 1993, p. 21). This study draws on four bodies of literature—policy implementation, postsecondary education, sensemaking, and boundary-spanning strategies—to describe the implementation of the career and technical credit transfer policy.

This study purposefully relies upon a single state for data collection and analysis. Although Matland (1995) argued that policy implementation is shaped by the setting in which it occurs, Pfeffer (2006) found that "few studies spend much time trying to situate their analysis in some specific setting or pay much attention to the organizational or

particular features of the site where the data was collected" (p. 459). As stated earlier, the Ohio House of Representatives directed the Ohio Board of Regents to work collaboratively with the Ohio Department of Education's Office of Career-Technical and Adult Education, public adult and secondary career-technical education institutions, and state-supported institutions of higher education to establish criteria, policies, and procedures to transfer agreed-upon technical courses from one system to another (Ohio Board of Regents, 2006). Other states may require educators to implement similar policies that require the cooperation of multiple institutions, systems, or both, but earlier findings suggest that legislators, educators, and other stakeholders may pursue such relationships without realizing the challenges that lie ahead (Collins, 2008)

Workforce development centers, community colleges, and public universities have different roles and responsibilities (Hill, 2003), and these functions have created a hierarchical system in which public universities tend to overshadow two-year institutions (Cohen & Brawer, 2008, p. 430). An array of factors, including, but not limited to, economic, political, and social forces have shaped the structure and life of postsecondary institutions (Thelin, 2004), and educators have noted discernible differences between community colleges and public universities over time (American Association of Community Colleges & American Association of State Colleges and Universities, 2004). Stakeholders, however, might not consider how the differences between institutions, systems, or both, may shape policy implementation (Kezar, 2005b). Public universities, for example, are more likely to share decision-making authority among administrators, faculty, and governing boards, and faculty may expect to play a role in shaping "those aspects of educational life which relate to the educational process" (AAUP, 2006, p. 130); whereas "shared governance is more of an ideal than a practice in community colleges" (Levin, Kater, & Wagoner, 2006, p. 50). On one

hand, these differences between workforce development centers, community colleges, and public universities may foster learning and innovation, but on the other hand, they may be troubling for policymakers, educators, and other stakeholders (Wenger et al., 2002).

Prior research also underestimated the influence of boundary-spanning strategies, particularly communities of practice and coordinators, on sensemaking and implementation (Smylie & Evans, 2006). Most researchers studied the "cognitive scripts...of the individual sensemaker" (Spillane, Reiser, & Gomez, 2006, p. 48), even though sensemaking occurs in communities of practice. Implementing agents and local actors are bound together by shared norms and expectations arising from collegial interactions within and among professional communities (Coburn & Stein, 2006; Spillane et al., 2006). Implementing agents are shaped by their participation in communities of practice, membership in professional associations, and interactions with consultants, publishers, stakeholders, and others (Spillane et al., 2006). These affiliations frame the sensemaking process and determine, in large part, the success of the reform effort.

The communities of practice perspective "pushes studies of teacher professional community up and out of schools...learning within communities of practice in schools is linked with and shaped by connections with other communities that stretch beyond the school walls" (Coburn & Stein, 2006, p. 46). The emphasis is shifted from individual endeavors to the collective efforts of implementing agents and local actors (Coburn & Stein, 2006; Spillane et al., 2006; Smylie & Evans, 2006). Although much of the literature on communities of practice is grounded in K-12 education, communities of practice may play an important role in the improvement of postsecondary education (Jenkins, 2011).

Taken together, policy implementation, postsecondary education, sensemaking, and communities of practice literature provide an effective theoretical framework for making

sense of policy implementation in postsecondary education, particularly those

implementation processes that span multiple institutions, systems, or both, as in the case of

the career and technical credit transfer policy. The theoretical framework increases the

likelihood of collecting and analyzing the data necessary to answer the previously described

research questions.

CHAPTER 2

Literature Review

Because literature on policy implementation in higher education is limited (Jenkins, 2011), this literature review also includes relevant studies from primary and secondary education. In this section, I discuss four bodies of literature—policy implementation, postsecondary education, sensemaking, and boundary-spanning strategies—that may influence the success or failure of the career and technical credit transfer policy. The first part of this section reviews policy implementation literature and the differences between top-down and bottom-up implementation strategies. The second part of this section describes postsecondary education. The third part examines sensemaking as it relates to policy implementation in postsecondary environments, and the fourth, and final, part of this section reviews the strategies for spanning institutional boundaries, system boundaries, or both. For each section, I utilized the *Dissertation and Theses, Education Full Text, PsycInfo, Web of Knowledge,* and *Wilson Web* databases to identify sources for inclusion in the literature review.

Policy Implementation

The study of policy implementation has reached a mature stage, but there are still concerns that need to be addressed (Brynard, 2009). As lawmakers press for complex reforms in local behavior, scholars and practitioners have expressed renewed interest in implementation studies (Barrett, 2004; Coburn & Stein, 2006; Saetren, 2005). Although experts agree that proper implementation is essential to putting policy into practice

(Edwards, 1980), they have not reached a theoretical consensus on policy implementation. Past studies have uncovered contradictory findings and made conflicting recommendations for investigation and practice (O'Toole, 2004). Saetren (2005) argued that we need better research to address these shortcomings. Even though most scholars have turned their attention toward more in-depth studies of policy implementation (O'Toole, 2004), "few studies spend much time trying to situate their analyses in some specific setting or pay much attention to organizational history or particular features of the site where the data was collected" (Pfeffer, 2006, p. 459). Policymakers who ignore the importance of these attributes and the contributions of local actors to the implementation process do so at their own risk (Deleon & Deleon, 2002; Pollitt, 2008). Therefore, recent studies have explored the influence of implementing agents, their attributes, and their social networks on policy implementation (Coburn & Stein, 2006; Smylie & Evans, 2006; Spillane et al., 2006).

Although policymakers may employ a variety of methods to put policies into practice, those seeking to affect change in postsecondary education may want to consider the unique characteristics of American higher education before choosing an implementation strategy (Deleon & Deleon, 2002; Eckel & Kezar, 2003). Policy implementation is shaped by the setting in which it occurs, and few settings are as unique as postsecondary education (Matland, 1995). Public colleges and universities tend to be more independent (Kezar, 2001) than other governmental agencies. "Indeed, for much of their history in the United States, public academic institutions were treated with unusual deference by their state sponsors, who were often content to 'leave the money on the stump' with few questions asked" (Zumeta, 2001, p. 155). Contrary to more traditional corporate arrangements, postsecondary institutions are loosely coupled systems made up of differentiated components and

specialized workers who are prone to resist sudden, large-scale reform measures (Cohen & Brawer, 2008, p. 110; Kezar, 2001; Weick, 1991).

Workforce development centers, community colleges, and public universities may not fancy being managed like old fashioned, management-driven factories. Faculty do not think of themselves as labor (Fish, 2007). Compared to tightly coupled systems, professional organizations such as colleges and universities turn the traditional top-down management philosophy upside down and challenge conventional decision-making patterns (Kezar, 2003; Lapworth, 2004). Expectations may vary from one institution to another, but most academic employees, including some community college faculty and staff, expect decision-making authority to be shared equally among administrators, faculty, and governing boards (Miller, 2003; Morphew, 1999). As professionals, these educators expect to have a say in their workplaces (Levin et al., 2006, p. 49). This form of institutional management is known as shared governance. It defines the cooperative relationship between governing boards, administrative officers, and faculty, and it recognizes the need for both "administrative and scholarly expertise" (Morphew, 1999, p. 72). On the other hand, some "faculty believe that since they do all the teaching and research, they *are* [emphasis in original] the university, and administrators are just support personnel. Sometimes the administration thinks *it* [emphasis in original] is the university; at other times the governor, legislature, or the alumni think the same" (Vedder, 2012).

The majority of higher education literature, however, examines shared governance at public, research-oriented universities, ignoring its role in the management of community colleges (Levin et al., 2006, p. 48; Miller, 2003; Shinn, 2004). "There have not been in-depth studies of the level of engagement of community college faculty in efforts to improve student outcomes, but observational efforts suggests that it is often limited to a relatively

small number of especially dedicated individuals" (Jenkins, 2011, p. 15). The large number of part-time instructors makes it difficult for community colleges to engage faculty in reform efforts such as the implementation of the career and technical credit transfer policy. Unlike university faculty who are responsible for teaching, research, and "those aspects of educational life which relate to the educational process" (AAUP, 2006, p. 139), community college faculty are paid to teach, not to assist with program improvement (Jenkins, 2011). Community colleges have been described as bureaucratic institutions employing authoritarian decision-making processes and providing limited opportunities for meaningful participation (Cohen & Brawer, 1996, p. 122; Kater & Levin, 2004; Miller & Miles, 2008). "Shared Governance in the community college may not be advancement in joint decision making but instead an increase in faculty work and responsibility for the management of the institution" (Levin et al., 2006, p. 50). Nevertheless, reformers may find willing partners in community college faculty. Despite the lack of incentives to participate in reform efforts, a large number of community college faculty have a positive opinion of shared governance and seek opportunities to participate in the management of the institution alongside administrators and trustees (Benton, 1997; Cohen et al., 2013, p. 102; Jenkins, 2011).

Regardless of who has the authority to make decisions about the operation of public institutions, lawmakers are becoming formidable forces in postsecondary education as their constituents are demanding more value from workforce development centers, community colleges, and public universities (Dougherty & Townsend, 2006). Proponents of shared governance argue that its emphasis on consensus building leads to more informed and more thoughtful decisions by trustees, administrators, and faculty (Gayle et al., 2003). On the other hand, critics of shared governance contend that it impedes progress and perpetuates sameness to the detriment of postsecondary education (Benjamin & Carroll, 1998; Fish,

2007; Gayle et al., 2003). John Lombardi, former president of the University of Florida, said, "universities for the most part do not have management; they have governance," which he defines as "the political process that balances the various competing interests of an institution through a complicated and lengthy process" (Fish, 2007, p. 12). Some members of the academy, and a growing number of important stakeholders, including alumni, business leaders, community members, governors, state legislators, students, and others, share President Lombardi's concerns. They argue that the cumbersome nature of shared governance prevents institutions from responding to a "rapidly changing external environment" (Lapworth, 2004, p. 300). At a time when many colleges and universities struggle to meet the curricular and co-curricular needs of their students, opponents of shared governance argue that postsecondary institutions cannot afford to practice such "lethargic, contentious, and ineffective" (Shinn, 2004, p. 26) forms of institutional governance. Over the last few decades, calls for reform have continued to mount as the demands placed on higher education have continued to grow. In some instances, lawmakers have coerced institutions, particularly community colleges, into abandoning their traditional, local-oriented activities in favor of state and national priorities (Levin, 2001).

To ensure that public institutions prepare students to succeed in the global, knowledge-based economy, lawmakers are passing legislation such as H.B. 66 (see Appendix A) to make it easier for students to earn postsecondary certificates and degrees (McClendon, Hearn, & Deaton, 2006; National Governors Association, 2011). Although many of these efforts have been well received by stakeholders, policymakers should not ignore the cultural, historical, political, and social forces that shape postsecondary institutions and influence policy implementation in postsecondary education. Few organizations are as steeped in tradition as American colleges and universities.

Professional literature identifies three strategies for putting policies into practice: the older and more established top-down method, the bottom-up approach, and the newer blended strategy. Polices do not execute themselves (Edwards, 1980). Regardless of the strategy used, most practitioners and scholars agree that policy implementation is an arduous and time-consuming process that rarely occurs in a linear, straightforward fashion and may end in failure despite participants' best intentions (Deleon & Deleon, 2002; Edwards, 1980; Mulgan, 2009; Pressman & Wildavsky, 1973; Pollitt, 2008). Failure (i.e., policy slippage) occurs when implementing agents deviate from the original policy message and fail to achieve its objectives (Kenney, 2009). Proponents of top-down implementation characterize any deviation from the original policy as failure, whereas supporters of bottom-up implementation argue that local discretion allows local actors to adapt reform measures to meet the needs of their local constituents (Hopkins, Monaghan, Hansman, 2009).

Top-down implementation employs a "command and control" (Deleon & Deleon, 2002, p. 470) orientation that constrains local adaptation and increases the likelihood that reforms will be put into practice as policymakers intended (Harris, 2007). In this scenario, implementing agents are expected to follow orders, whereas those using a bottom-up implementation strategy encourage local actors to modify proposed reforms as needed. Cohen, Timmons, and Fesko (2005) found that some federal policymakers wrote ambiguous policy messages on purpose so that implementing agents could exercise some discretion in planning their local workforce development activities. Ambiguity may refer to poorly defined means for achieving lawmakers' objectives, as in the example above, or it may refer to fuzzy objectives (Matland, 1995). Top-down implementation requires that policymakers must communicate their intentions clearly and consistently (Fernandez & Rainey, 2006; Kenney, 2009; Mazmanian & Sabatier, 1989) to ensure that policies are implemented correctly. On

the other hand, bottom-up implementation accepts that local actors are essential to policy implementation, and that they are more likely to embrace reform measures when they are also included in the policymaking process (Berry, 2009; Deleon & Deleon, 2002; Edwards, 1980; Maynard-Moody, Musheno, & Palumbo, 1990).

According to Edwards (1980), local actors need the freedom to adapt polices to local situations because implementers "can be hampered by overly specific instruction" (p. 26). Intentional ambiguity, as in the case of federal workforce development activities, may enhance relations between policymakers and implementing agents, encourage local innovation, and foster implementation (Cohen et al., 2005; Sharkansky, 1997). Critics argue that bottom-up implementation turns the process upside down and leads to unexpected outcomes; they contend that public policies should be written by legislators, not implementing agents (Barrett, 2004; Deleon & Deleon, 2002; Wood, 2008).

> Those in state government are in a better position to observe the relationships among colleges and universities and typically have a more holistic sense of public sentiment. Consequently, they are likely to be more sensitive than institutions to the appropriateness of the entire pattern of institutions and their missions, the relationships among institutions, and priorities across the entire state system of higher education (Schmidtlein & Berdahl, 2005, p. 77).

Top-down implementation states that agents must know what to do and be committed to doing it, or else they will not abandon current operating practices in favor of new methods (Edwards, 1980; Harris, 2007).

Although the analysis presented here reflects the debate between top-down and bottom-up implementation, most implementation efforts require blending both methods

into a comprehensive strategy (Lubell & Fulton, 2007). Numerous theorists have suggested that the ideal model for implementation combines the best aspects of both approaches (Mazmanian & Sabatier, 1989), but few attempts have been made to mix the two perspectives (Matland, 1995). Policymakers and senior leaders play an important role in the implementation process (Fernandez & Rainey, 2006), and they may be more likely to possess a holistic understanding of the state's educational needs than local actors may. On the other hand, local actors may be more likely to understand local needs and may be less likely to oversimplify the challenges confronting their constituents. A one-size-fits-all solution may not address their constituents' needs; a solution that works in one community may not work in another. Coburn and Stein (2006) found that effective policymakers used brokers, boundary objects, and boundary spanning practices to align the actions, energies, and practices of implementing agents while also allowing for local appropriation and meaning making. Successful leaders realize that implementing agents, particularly highly educated, highly informed professionals, are more likely to execute polices correctly when they are included in the development process. Therefore, effective leaders cultivate relationships with stakeholders and encourage their participation throughout the process (Fernandez & Rainey, 2006).

Postsecondary Education

Collaborative efforts such as the implementation of the career and technical credit transfer policy are popular among educators seeking to meet stakeholder expectations in the 21st century; however, many leaders may enter into such partnerships without comprehending the nuances of such relationships (Collins, 2008; Dukakis & Portz, 2010; Klitgaard & Treverton, 2004; Never, 2007; Snyder & Briggs, 2004). Although postsecondary institutions share some similarities, workforce development centers, community colleges,

and public universities are distinct institutions with different roles and responsibilities, and these differences may affect policy implementation (Hill, 2003). A variety of forces have shaped the structures and purposes of postsecondary institutions in the United States over time (Thelin, 2004), and educators have noted discernible differences between the practices of community colleges and public universities (American Association of Community Colleges & American Association of State Colleges and Universities, 2004).

Many American colleges and universities are rooted in tradition, and they may oppose efforts that threaten their norms, self-interests, or both (Diamond, 2006; Prather & Carlson 1993). Leaders, including policymakers and implementing agents, are beginning to recognize that collaborative efforts such as implementing policies across multiple institutions are more successful when they are aligned with the cultures of the institutions responsible for them (Awbrey, 2005). The notion of culture is particularly important when attempting to manage change across institutions, systems, or both (Gayle, 2003). Exploring the differences between workforce development centers, community colleges, and public universities may clarify the policy implementation process and help policymakers and implementing agents put policies into practice more effectively, particularly efforts such as the career and technical credit transfer policy that span multiple institutions and systems (Tierney, 1988; Wenger et al., 2002).

Since the establishment of the colonial colleges, higher education has flourished in the United States giving rise to numerous public and private institutions, including comprehensive universities, denominational colleges, junior colleges (i.e., community colleges), land-grant institutions, normal schools (i.e., teachers' colleges), public colleges and universities, research universities, and women's colleges (Rudolph, 1990). William Rainey Harper, president of the University of Chicago, and J. Stanley Brown, superintendent of

Joliet Township High School, founded Joliet Junior College, the nation's first community college in 1901 (Joliet Community College, 2012). In the late 19th century, university administrators such as Henry P. Tappan, president of the University of Michigan, recommended that universities transfer the responsibility for teaching first-year and second-year (i.e., lower-division) courses to high schools. Similarly, William Rainey Harper, president of the University of Chicago, proposed that the undergraduate program be divided into a junior (i.e., lower-division) college and a senior (i.e., upper-division) college. Harper suggested that junior colleges should be affiliated with senior colleges but that junior colleges should manage their own faculty, curriculum, living groups, and student government (Ross, 1963). He posited that universities should concentrate their efforts on advanced undergraduate students, graduate students, and research, but universities did not hand over their responsibility for teaching lower-division courses to community colleges (Cohen & Brawer, 2008, p. 8).

Community colleges have been aligned with secondary education or higher education (Keith, 1996), but in most instances, the modern community college is "independent of both the high school and the four-year university" (Ross, 1963, p. 144). Community colleges award certificates, diplomas, and associate degrees, and they prepare students to enter the workforce, transfer to four-year institutions, or both. They also teach non-credit bearing courses personal enrichment courses and workforce development courses among others. For a growing number of Americans, particularly students of color and nontraditional students, the community college is the primary gateway to American higher education. According to Cohen and Brawer (2008, pp. 4-5), some have affectionately referred to the community college as the people's college and democracy's college, but some critics have insisted that the community college is not a real college. It has also been labeled the

contradictory college (Dougherty, 2001) and the anti-university (Jencks & Riesman, 1968).

These negative phrases cast community colleges as alternative institutions (Cohen & Brawer, 2008, p. 8) and favor universities over community colleges and workforce development centers, the other agents in the implementation of the career and technical credit transfer policy. Community colleges, in particular, and workforce development centers provide open, affordable access to postsecondary education.

Community colleges are engines of economic growth and centers of cultural, intellectual, and social development for low-income students and adult learners (Boggs, 2004). Whereas most public universities are committed to teaching, research, and service, two-year institutions are devoted to "teaching and learning" (Vaughn, 2006, p. 7). Since the early 20th century, community colleges have prepared students to transfer to public universities, and since the Great Depression, they have equipped American workers to compete in the workplace. Community colleges, as they did in the Depression era, continue to play an essential role in helping American workers succeed in the modern, global economy (Vaughn, 2006). Unlike many public universities, community colleges implemented open-access admission policies, providing postsecondary training for large numbers of at-risk students and allowing many public universities to maintain selective admission requirements (Cohen et al., 2013, p. 26). Articulation agreements made it possible for academically oriented students to transfer from community colleges to public universities, but prior to the implementation of the career and technical credit transfer policy, few pathways existed for vocational students to transfer credits earned from one public institution to another in the state of Ohio.

Although Ayers (2002) suggested that articulation agreements between community colleges and public universities have enhanced the reputation of two-year institutions, most

community colleges still lack the political capital of public universities (Kahlenberg, 2011). Differences in composition also exist between community colleges and public universities. Community college faculty are less likely to hold terminal degrees, whereas public university faculty are more likely to possess the highest degrees awarded in their fields of study. Some community college faculty engage in academic research, but most do not. Community college faculty keep abreast of developments in their fields by reading professional literature, attending professional conferences, or both. Some may also complete internships (Cohen et al., 2013, pp. 106-107; Vaughn, 2006). A community college professor, for example, may intern at an accounting firm to keep up to date with federal regulations (e.g., Sarbanes-Oxley Act) and their implications for businesses. Public university faculty, particularly tenure-track members, are expected to conduct original research and publish their findings in peer-reviewed journals and presents their findings at academic conferences. Because of the research expectations placed on tenure-track faculty, most of them teach two courses each semester. Full-time community college faculty, however, teach as many as five courses each term (Cohen et al., 2013, p. 82). Community colleges tend to hire more female faculty and part-time faculty than their public university counterparts. Part-time instructors are more cost effective than full-time faculty, earning less in wages and benefits, and they give community colleges more flexibility in meeting the changing curriculum needs of their students (Cohen & Brawer, 2008, p. 94; Banachowski, 1996; Melendez, 2004). On the other hand, others argue that the use of part-time instructors weakens two-year institutions and demotes community colleges and their faculty to the bottom of the academic hierarchy (Altbach, 2005; Clark, 1988).

The more institutions and their faculty adhere to the norms of the great American universities, the more respect they gain. In academia, "prestige is defined by how close an

institution, or an individual professor's working life, comes to the norm of publication and research, a cosmopolitan orientation to the discipline and the national profession, rather than to local teaching and institutionally focused norms" (Altbach, 2005, p. 296). Community colleges are committed to providing easy access to a comprehensive education that meets the needs of their local communities, particularly workforce development. Occupational training has been an important part of the community college curriculum, and most predict that it will continue to be an essential component of the community college program as community colleges help retool the nation's workforce (Vaughn, 2006).

American higher education is enmeshed in a series of complex hierarchies....framed by discipline, institution, rank, and specialty" (Altbach, 2005, p. 296). Most public universities receive more attention and command more respect than their community college counterparts command even though two-year institutions enroll more than 43% of the nation's undergraduate students (Altbach, 2005; Higher Education Research and Development Institute, 2012). These hierarchies influence the relationships between public universities, community colleges, and workforce development centers, and should be considered before educational institutions, educational systems, or both, enter into partnerships with other educational entities.

Sensemaking

Spillane, Reiser, and Reiner (2002) declared, "We must explore the mechanisms by which implementing agents understand policy and attempt to connect understanding with practice" (p. 391). Earlier studies assumed that policymakers and policy implementers, commonly referred to as local actors or implementing agents, agreed upon the meaning and intent of policies before putting them into practice (Gonzalez, 2008). On the other hand, later studies found that assumption to be inaccurate, if not false. Policymakers and legislators

rarely provide explicit instructions for policy implementation. Lawmakers tend to leave the finer points of policy to the discretion of local actors (Hill, 2003). Although this practice may allow local actors to shape the policy, it may distort the intentions of lawmakers and make it difficult for local actors to decipher the policy message (Hill, 2003; Spillane et al., 2002). As stated earlier, policies do not implement themselves. Local actors must make sense of reforms and their ramifications in the context of their own environment before they can implement legislative mandates such as the career and technical credit transfer policy (Spillane, et al., 2006).

Spillane et al. (2006) argue that "if implementation involves interpretation, because implementers must figure out what a policy means and how it applies in order to determine how it is used, then a cognitive framework that unpacks the ideas that implementers construct from reform proposals" (p. 49) is necessary. Sensemaking is a cognitive process rooted in organizational theory and it has been used in postsecondary education and a variety of other settings (Dervin, 2004). It has been described simplistically as making sense of unexpected events, although it is much more than that. According to Weick (1995), "Sensemaking is about authoring as well as interpretation, creation as well as discovery" (p. 8). It encourages local actors to draw upon their knowledge, beliefs, and attitudes to make sense out of unexpected events and make decisions in ambiguous, complex, and uncertain situations (Eddy, 2003; Honig & Hatch, 2004; Spillane et al., 2002; Weick, 1995).

> Most aspects of life contain various degrees of ambiguity (conflicting or
> excessive information) and uncertainty (lack of information) that must be
> continuously processed. As individuals, we process ambiguity and uncertainty
> through both cognitive and social mechanisms. Sensemaking is a theoretical
> construct that contains the cognitive and social mechanisms for dealing with

ambiguity and uncertainty. Sometimes sensemaking is explicit in that it

occurs when we are deliberate and mindful of our surroundings. Sometimes

sensemaking is tacit in that we do not realize that we are doing it, but it

nevertheless helps us confront the equivocality of life. Sensemaking helps

both individuals and organizations think, learn, act, react, and design

solutions more effectively. The theoretical base of sensemaking cuts across

and is applicable to the disciplines of psychology, sociology, organizational

behavior, management, information science, education, and design (Ross

School of Business, 2008, para. 1).

Top-down implementation considers any deviation from the policy as a corruption of the

implementation process, but bottom-up implementation contends that the discretion of local

actors is essential to successful implementation (Cohen et al., 2005; Hopkins et al., 2009;

Mills, 1998; Spillane et al., 2002; Spillane, Halverson, Diamond, 2004). Policy

implementation is likely to fail if local actors are not allowed to adapt the policy to local

conditions (Matland, 1995). Policy adaptation has been described as policy reinvention, but it

should not be mistaken as policy failure or as a deliberate attempt by local actors to ignore

the intent of lawmakers (Mills, 1998; Rogers, 2003; Spillane et al., 2002). Policy

implementation is a political process, and lawmakers must make concessions to maintain

coalitions necessary for successful implementation (Matland, 1995).

Some argue that policymakers should maintain tight control over the implementation

process to reduce policy slippage, but others suggest that they should encourage local actors

to use their knowledge of local conditions to shape the implementation of public policies

and their ensuing workforce development activities (Cohen, Timmons, and Fesko, 2005;

Mills, 1998). Although allowing local actors to exercise their discretion may lead to variations

of the same policy, it may foster creativity and enhance implementation. In some instances, flexibility allowed implementing agents to realize the objectives of lawmakers while also addressing the unique needs of their constituents and the realities of their work environments (Marshall, 1988; Matland, 1995).

Most conventional theorists fail to account for the importance of sensemaking in the policy implementation process (Spillane et al., 2002). Implementing agents use sensemaking to make sense of unexpected events and ambiguous policies passed down by state and federal officials. Drawing upon their subject-matter expertise and knowledge of local stakeholders, implementing agents interpret, reinvent, and implement policies consistent with the expectations of policymakers and the needs of local constituents. Sensemaking establishes and reinforces shared meaning within communities of practice. Shared meaning acts as a bonding agent by holding organizations together and facilitating policy implementation and the adaptations needed to achieve policy objectives. Sensemaking, and the shared meaning that emanates from it, occurs individually and collectively over time; it does not take place in distinct stages. Despite the common ideologies that hold communities of practice together, faculty struggle to collaborate across departmental lines. Calhoun and Starbuck (2003) suggested that barriers to collaboration are rooted in departmental subcultures formed over decades, if not centuries, of practice. Just as these differences may prevent faculty from working together, similar impediments may inhibit policymakers and local actors (e.g. trustees, administrators, and faculty) from developing and implementing public policy. Implementing agents, particularly highly educated faculty, value different decision-making models and epistemological structures than policymakers do. Although sensemaking can lead to policy slippage, it can also bridge the gap between policymakers and implementing agents—building and maintaining the support necessary for successful policy

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implementation. Therefore, policy implementation studies should explore the significance of sensemaking in the implementation process.

Strategies

The implementation of the career and technical credit transfer policy suggests that workforce development centers, community colleges, and public universities are crossing boundaries and drawing on the expertise of educators, employers, and community leaders to assist students in completing postsecondary certificates and degrees needed for employment and career advancement. Crossing boundaries may be unsettling for some postsecondary institutions, but it also forces them to acknowledge their differences and question their assumptions—fostering learning, innovation, and collaboration, all of which may aid policy implementation (Wenger et al., 2002). As stated earlier, policy implementation frequently ends in failure, despite the best intentions of policymakers and implementing agents. Few individuals possess the skills required to connect institutions and local actors across organizational boundaries (Miller, 2003). Recent studies found that effective policymakers are using coordinators and communities of practice to facilitate the policy implementation process, particularly when it requires the cooperation of large organizations such as the Ohio Department of Education and the Ohio Board of Regents or disparate institutions such as workforce development centers, community colleges, and public universities (Kamensky, Burlin, & Abramson, 2004).

On behalf of policymakers, coordinators pool the power of implementing agents and other stakeholders to facilitate policy implementation. Brokering relationships across organizational boundaries, linking local actors and implementing agents, forming communities of practice, and connecting pockets of expertise are among their most important tasks (Wenger et al., 2002). Coordinators facilitate conversations among

implementing agents, and they may meet with them independently to solicit input and lay the groundwork for future negotiation and sensemaking, but they do not provide answers (Coburn & Stein, 2006). Coordinators are encouraged to use local actors and communities of practice to solve complex problems and master difficult tasks. Still, past studies underestimated the influence of communities of practice on sensemaking and implementation (Smylie & Evans, 2006). Most researchers studied the "cognitive scripts...of the individual sensemaker" (Spillane et al., 2006, p. 48), even though sensemaking is not an individual activity. Recent studies found that sensemaking occurs in communities of practice, made up of people, "who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis" (Wenger et al., 2002, p. 4). All of these characteristics are present in postsecondary education, including the institutions and systems responsible for implementing the career and technical credit transfer policy.

Examining the role of coordinators, communities of practice, and other boundary-spanning strategies may enhance implementation literature and assist policymakers and implementing agents responsible for putting policies into practice (Spillane et al., 2006). Coordinators and communities of practice connect implementing agents, and they engage them in sensemaking through formal, organized events and casual, everyday activities (Coburn, 2001; Kezar & Eckel, 2002; Spillane et al., 2002; Wenger et al., 2002). These experiences shape how they make sense of policy messages and act on reform measures to address changing conditions in their environments (Coburn & Stein, 2006; Smylie & Evans, 2006; Spillane et al., 2006). Although much of the communities of practice literature is grounded in K-12 education, communities of practice may play an important role in the improvement of postsecondary education (Jenkins, 2011) and in the implementation of

policies that span multiple institutions, systems, or both (Spillane et al., 2006; Smylie & Evans, 2006). The influence of communities of practice on policy implementation "pushes studies of teacher professional community up and out of schools...[as] learning within communities of practice in schools is linked with and shaped by connections with other communities that stretch beyond the school walls" (Coburn & Stein, 2006, p. 46). Communities of practice provide an opportunity for local actors to share ideas, identify best practices, and devise strategies for implementing reform measures. Drawing on their combined experience, communities of practice such as those made up of administrators and faculty from Ohio's workforce development centers, community colleges, and public universities are well suited to address areas of concern associated with the career and technical credit transfer policy and other educational reform measures.

Although communities of practice may have a positive effect on sensemaking and implementation, they may also promote different interpretations of the same policy message and hinder reform efforts (Spillane et al., 2006). Most implementing agents and local actors seek out like-minded professionals within and among communities of practice, and they rely upon those relationships to make sense of policy messages "in the context of their bounded community" (Coburn & Stein, 2006, p. 37). Successful implementation depends upon the ability of implementing agents to comprehend the intentions of policymakers, but many local actors cling to familiar practices and resist more substantive reforms. Major restructuring efforts might be complicated by implementing agents' participation in professional communities, their inability to differentiate between current and proposed practices, and their tendency to supplement rather than supplant prior knowledge. Such initiatives might also be thwarted by local actors attempts to meet the growing, and sometimes conflicting, needs of their stakeholders (e.g., employers, students, elected

officials), choosing one outcome at the expense of another (Dougherty, Reid, & Nienhusser, 2006).

Philosophical differences, for example, over the direction of workforce development may undermine some efforts. Proponents for the new vocationalism movement argue that community colleges should prepare students for technology-driven occupations and other careers that require higher-level skills, including bachelor's degrees. Yet, others claim that community colleges should focus on traditional workforce development programs that emphasize job training and placement services to help low-income laborers and displaced workers find immediate employment in new, better-paying jobs in service-oriented industries (Jacobs & Dougherty, 2006). Although policy failure should not "be attributed to lack of effort, incomplete buy-in, or explicit rejection of the reform's ideas" (Spillane et al., 2006, p. 52), erroneousness interpretations are disconcerting for policymakers as they "press for...more complex changes in local behavior" (Spillane et al., 2006, p. 48). Discrepancies between policymakers and local actors may lead to policy slippage that occurs when implementing agents' results fall short of policymakers' expectations.

Communities of practice may be described as strong or weak and as open or closed. Strong communities of like-minded professionals are more likely to adopt new methods, but, when they do, they are also more likely to deviate from policymakers' intentions (Coburn & Russell, 2008; Coburn & Stein, 2006). Conversely, weak communities are less likely to alter their practices, but they are also less likely to depart from the objectives of policymakers. Closed communities are more likely to foster trust and shared norms, but they are also less likely to provide members access to new information and more likely to resist change, particularly if they are successful (Wenger et al., 2002). Alternatively, open communities lack shared norms, but they are more likely to provide members access to new information.

Previous findings indicate that the channels of communication present in open communities may enhance implementation by providing the necessary information to all group members. The communities of practice included in this study reflect some of the characteristics described above (i.e., strong or weak and open or closed).

Although some institutions have found that partnerships comprised of trustees, administrators, and faculty are better able to solve complex problems, devise innovative solutions, implement new policies, and launch ground-breaking initiatives, some colleges and universities find the barriers to collaboration to be frustrating, if not debilitating. Trustees, administrators, and faculty are not trained to work together. Most community college and public university trustees are "predominantly white male, college graduate, high-income, middle-aged people with professional or managerial occupations" (Cohen & Brawer, 2008, p. 138), not educators, and many of them do not recognize the differences between for-profit businesses and postsecondary institutions. These barriers may include different vocabularies, sets of experiences, management styles, and standards of performance, all of which can be difficult to overcome (Wenger et al., 2002). Faculty members, particularly those at larger, research-oriented institutions, complete graduate programs that emphasize individual, often isolated, work—not collaboration. Promotion and tenure are based largely on individual effort, therefore such training may prove beneficial to those seeking tenure, but it may be less helpful for those needing to work with trustees, administrators, and policymakers (Kater & Levin, 2005; Kezar, 2006). The lack of preparation is not limited to faculty. Surprisingly, few graduate programs prepare administrators to collaborate across departmental lines (Jackson & Ebbers, 1999).

These deficiencies are exasperated by the configuration of traditional colleges and universities, most of which are divided into schools, departments, and offices that act like

individual silos and reinforce hierarchy and bureaucracy (Jackson & Ebbers, 1999; Kezar, 2005a, 2005b). In these highly compartmentalized environments, potential stakeholders rarely engage in collaborative efforts and 50% or more of their attempts to sustain long-term change end in failure (Kezar, 2005b). Although Kezar's research examines partnerships between academic departments and administrative offices, her findings encourage policymakers and implementing agents to acknowledge the influence of organizational attributes on collaboration. Partnerships require a web of personal relationships and structures that enhance learning (Kanter, 1994, p. 97).

These obstacles may also extend to relationships between policymakers and implementing agents—those educators responsible for implementing legislative mandates such as the career and technical credit transfer policy. Marshall (1988) suggested that educators and policymakers should seek to understand each other's normative assumptions to overcome their clashing organizational cultures and advance mutually beneficial policies. Even though collaboration can be an effective tool for pooling the knowledge, skills, and abilities of stakeholders, higher education literature focuses almost exclusively on facilitating collaborative efforts between academic departments and administrative offices. Nevertheless, these strategies may assist trustees, administrators, faculty, and policymakers seeking to enhance public, two-year and four-year colleges and universities. Breaking down barriers to collaboration, many of which are rooted in age-old academic traditions, will require time and patience, but studies suggest that the rewards justify the effort (Philpott & Strange, 2003).

Sharing information, responsibility, and, particularly, authority can be extraordinarily difficult, but it can be an effective strategy for garnering stakeholder support. Although counterintuitive, sharing authority may increase one's sphere of influence—not diminish it.

Fish (2007) encourages leaders to "tell them [faculty] everything. Share every piece of information you have, the moment you have it..." (p. 13), and encourage educators to question policy objectives through well-articulated processes (Miller, McCormack, Maddox, & Seagren, 1996). Gayle (2003) argued that there is no substitute for community dialogue; it may reveal differences that need to be addressed. Participants may resolve these differences by communicating clearly, listening attentively, and delaying judgment. Effective communication is essential for successful policy implementation. It fosters trust between participants, and it assists leaders in establishing a common language and creating a shared vision between policymakers and policy implementers (Gayle, 2003; Kezar, 2003, 2005b, 2006).

The more involved these stakeholders are in policy development, the more likely they, those most affected by the decision, are to support the intent of the policy. By seeking input from policy implementers, policymakers may reduce the likelihood of policy slippage, the difference between policy intent and policy implementation (McGarrell et al., 1990; Ryan & Joong, 2005). Cutting-edge institutions, businesses, and other organizations are succeeding because of communities of practice. Similar to artisan guilds of the Middle Ages, communities of practice are fostering learning, innovation, and collaboration, all of which may aid policy implementation (Wenger et al., 2002).

CHAPTER 3

Research Methods

Creswell (2003) argued that a study's research problem and its research questions should determine its research design. Therefore, I employed a single, descriptive case study to describe the implementation of the career and technical credit transfer policy (Merriam, 1998). Qualitative methods are ideally suited for answering "how" and "what" questions as put forth in this study, whereas quantitative methods are preferred for answering "why" questions that suggest cause and effect (Creswell, 2007; McMillan & Wergen, 2006; Yin, 1994). Qualitative methods are not easy substitutes for statistical, mathematical, or computational techniques. Such strategies, including case studies, are rigorous methods of inquiry that should be utilized when quantitative measures and statistical analysis fail to capture the nuances and depth of the subject under investigation (Creswell, 2003). Researchers generally use qualitative methods to study "interactions among people, for example, [that] are difficult to capture with existing measures" (Creswell 2007, p. 40). Case studies are capable of exposing the intricacies of complex phenomena such as policy implementation and providing rich and thick descriptions of the interactions that occur within and among communities of practice (Edwards, 1980; Hopkins et al., 2009; Lincoln & Guba, 1985; Maykut & Morehouse, 1994; Pressman & Wildavsky, 1973).

Qualitative methods allow researchers to study subjects in their natural environments, not laboratories, enhancing their ability to describe the human experience

from the participants' perspective, not the researchers' (Merriam, 1998; Strauss & Corbin, 1998). Patton (1985) explained:

> [Qualitative research] is an effort to understand situations in their uniqueness as part of a particular context and the interactions there. Thus understanding is an end in itself, so that it is not attempting to predict what may happen in the future necessarily, but to understand the nature of that setting—what it means for participants to be in that setting, what their lives are like, what's going on for them, what their meanings are, what the world looks like in that particular setting—and in the analysis to be able to communicate that faithfully to others who are interested in that setting (p.1).

These methods enhance our understanding of important areas of inquiry, adding rich details to the research narrative and yielding results that cannot be gathered using more conventional research methods (Brown, Stevens, Troiano, & Schneider, 2002; Strauss & Corbin, 1998).

Researchers generally favor the case study method when examining policy implementation (Edwards, 1980). In fact, it is "the method of choice" (Yin, 1993, p. 3) when the researcher seeks to describe a phenomenon in its real-life context, especially when the boundaries between the phenomenon and its context are not evident. "Most case studies focus on one particular instance...and attempt to gain theoretical and professional insights from full documentation of that instance" (Freebody, 2003, p. 81). A single case study, as in this study, examines one issue (e.g., policy implementation) and one bounded system (e.g., the career and technical credit transfer policy). A bounded system refers to a case that is bound by parameters such as time and place (e.g., the implementation of the career and technical credit transfer policy in the state of Ohio) and is comprised of a collection of

interrelated parts (Creswell, 2007; Merriam, 1998; Stake, 1995). A descriptive case study is a "detailed examination of an event (or a series of related events) which the analyst believes exhibits (or exhibit) the operation of some identified general theoretical principles" (Mitchell, 1983, p. 192). The researcher collects and analyzes all relevant evidence, addresses rival explanations, presents the most significant aspect of his or her study, and makes use of his or her expert knowledge of the subject (Yin, 1994).

Site

The site for this study was the State of Ohio, the Ohio Board of Education, the Ohio Board of Regents, and the key institutions being studied. In 2006, the Ohio House of Representatives passed H.B. 66 (ORC 3333.162) to address Ohio's workforce development needs. The bill directed the Ohio Board of Regents to work collaboratively with the Ohio Department of Education's Office of Career-Technical and Adult Education, public adult and secondary career-technical education institutions (i.e., workforce development centers), and state-supported institutions of higher education (i.e., community colleges and public universities) to establish criteria, policies, and procedures to transfer agreed-upon technical courses from one system to another (Ohio Board of Regents, 2006). In response, the Ohio Board of Regents and the Ohio Department of Education formed an advisory committee and a steering committee—made up of representatives from Ohio's workforce development centers, community colleges, and public universities—to implement the career and technical credit transfer policy. Jenkins (2006) identifies the policy as one of the "vanguard initiatives [that] are starting to yield lessons for others seeking to build career pathways" (p. 19), therefore, it is a good example of the emerging "career pathways" movement and the challenges associated with it, particularly policy implementation which spans multiple

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communities of practice (e.g., workforce development centers, community colleges, and public universities).

Sampling

Probability sampling strategies are not appropriate for qualitative studies (Merriam, 1998). Merriam (1998), Miles and Huberman (1994), and Patton (1990) agreed that non-probability sampling strategies are the most appropriate for qualitative studies. Purposeful sampling, a type of non-probability sampling, is the most common method for selecting participants capable of providing information-rich data. I contacted members of the career and technical credit transfer policy advisory committee and steering committee to complete initial interviews (see Appendix D), and I asked each interviewee to recommend additional individuals for inclusion in this study. I interviewed ten administrators, educators, and others affiliated with Ohio Board of Regents, the Ohio Department of Education, Ohio's community and technical colleges, Ohio's workforce development centers, and Ohio's public universities. All interviewees participated in the development of the career and technical credit transfer policy, the implementation of the policy, or both, or they had intimate knowledge of the policy. This method of non-probability sampling is known as chain, network, or snowball sampling (Merriam, 1998). I conducted interviews until saturation occurred and data became redundant. At that point, variation was accounted for and understood, and there was no more information to be collected (Lincoln & Guba, 1985; Morse, 1994).

Data Sources

Although the case study method does not stipulate which data collection techniques must be employed, researches are encouraged to use multiple strategies to collect data (Lincoln & Guba, 1985; Yin, 1994).

The distinctive feature of a case study is not so much the source of its data

but rather its focus on attempting to document the story of a naturalistic-

experiment-in-action, the routine moves educators and learners make in a

clearly known and readily defined discursive, conceptual, professional space

(the case), and the consequences of those people's actions, foreseen and

otherwise, for learning and for the ongoing conduct of the research project

(Freebody, 2003, pp. 82-83).

I gleaned intelligence from documents, audio-visual materials, and other sources (Creswell,

2003; McMillan & Wergen, 2006; Yin, 1994). Examples include advisory committee reports,

consultant presentations, government documents, newspaper articles, and steering

committee reports. I also used semi-structured interviews to gather data about the

implementation of the career and technical credit transfer policy. Interviews helped me

collect personal accounts of the implementation process that could not be obtained from

observations and primary documents (Patton, 1987). Multiple sources of data were used for

triangulation (i.e., cross-checking) and corroboration of emerging patterns and themes to

enhance credibility and make data believable (Creswell, 2003, 2007; Denzin, 2006; Gay, Mills,

& Airasian, 2006; Lincoln & Guba, 1985; Yin, 1993).

Data Collection

Adhering to the steps outlined by Lincoln and Guba (1985), I completed semi-

structured, telephone interviews, lasting approximately 45 minutes each, with administrators,

educators, government officials, and others as appropriate (see Appendix E). Kahn and

Cannell (1957) contend that interviews are "a conversation with a purpose" (p. 194). I

attempted to use these interviews to describe the implementation of the career and technical

credit and transfer policy which I believe "exhibits the operation of some identified general

theoretical principles" (Mitchell, 1983, p. 192). I employed the theoretical framework to assist me in preparing interview questions in advance. Although qualitative studies are fundamentally inductive, adopting a theoretical framework is an essential step in the research design process. It informs the investigation, structures data collection, and increases the likelihood of gathering the right information (Freebody, 2003; Lincoln & Guba, 1985; Merriam, 1998; Thornton, 1993; Wolcott, 1994; Yin, 1994).

During the interview, I encouraged interviewees to respond in their own words, and I avoided leading questions and predetermined responses that might adversely affect the respondents' comments (Freebody, 2003; Kvale, 1996; Lincoln & Guba, 1985; Marshall & Rossman, 2006). The success of the interview rested, in large part, upon my ability to ask appropriate questions and to listen attentively to the interviewee (Yin, 1994). I asked probing questions, clarified important points, and explored emerging topics "to enhance credibility in the eyes of the information sources, for without such credibility the findings and conclusions as a whole cannot be found credible by the consumer of the inquiry report" (Lincoln & Guba, 1985, p. 213). Although I used an interview protocol (see Appendix F), I used a semi-structured process to capture the research participants' accounts of the implementation process as needed; the most relevant information to the case study was not always known prior to the interview (Freebody, 2003; Yin, 1994). Semi-structured interviews allowed me to address predetermined, theory-driven questions, and they allowed the interviewee to share other, relevant information that may not be known prior to data collection (Freebody, 2003). In keeping with the emergent nature of qualitative studies, I selected additional subjects to explore and elaborate on emerging ideas as I collected and analyzed data (Brown et al., 2002). The interview protocol and questions were reviewed by respected scholars in the field, approved by the IRB, and pilot-tested prior to collecting data to enhance dependability

and meet the trustworthiness criteria for naturalistic inquiry (Lincoln & Guba, 1985; Merriam, 1998; Yin, 1993, 1994).

In accordance with the IRB protocol, I provided an informed consent agreement to each participant and collected a signed copy of the agreement prior to the start of each interview (see Appendix G). Moreover, the agreement was reviewed with each participant prior to his or her interview. To protect the privacy of the research participants, "data identifying the subjects will not be reported" (Kvale, 1996, p. 114). Pseudonyms are used to identify the interviewees. Disclosing the identities of the research participants is not essential to the outcome of this study. The concepts generated by the participants as whole, not by the individual participants, are at the center of the study (Glaser, 1978). To ensure accuracy, all interviews were digitally recorded and returned for member checking once they were transcribed (Lincoln & Guba, 1985). If a participant did not consent to being recorded or if technical difficulties interfered with the recording, I summarized my field notes and shared them with the respondent for approval, correction, or extension. Every effort was made to preserve the dynamic nature of the original conversation (Brown et al., 2002; Gay et al., 2006; Riessman, 1993; Seidman, 1991).

Data Analysis

According to Marshall and Rossman (2006), analyzing reams of qualitative data "is messy, ambiguous, time-consuming, creative, and fascinating" (p. 154). I used NVivo, a data analysis application, to create a case study database and utilized a systematic process to organize data into a retrievable format, maintaining a chain of evidence (Hancock & Algozzine, 2006; Yin, 1993, 1994). Creating a case study database, maintaining an audit trail, describing data collection procedures, and explaining data analysis techniques ensures that other researchers may duplicate my efforts, enhancing confirmability and dependability

(Creswell, 2007; Gay et al., 2006; Lincoln & Guba, 1985; Yin, 1994). Based upon my theoretical framework, I developed a priori codes (see Appendix H) to facilitate initial data analysis and employed pattern matching to attach those codes to emerging themes found in audio-visual materials, documents, field notes, transcripts, and other records (Campbell, 1975; Campbell & Russo, 2001; Campbell & Stanley, 1966; Yin, 1994). Pattern matching is a theory-driven data analysis strategy where researchers attempt to link theoretical patterns and observed patterns (Trochim, 1989). This method is similar to typological analysis, which identifies predetermined categories prior to data analysis and then divides collected data into those preexisting groups.

Yin (1994) cautions researchers against claiming patterns based upon subtle matches; he argues that researchers should identify "gross matches or mismatches" (p. 110) that can easily be identified using the eyeballing technique. Pattern matching and typological analysis are very different from traditional, inductive approaches of analyzing qualitative data (Hatch, 2002). I used emerging categories and themes to make sense of my collected data "because it is inconceivable that enough could be known ahead of time…to devise the design adequately" (Lincoln & Guba, 1985, p. 41) and revised my codes accordingly (see Appendix I). Consistent with qualitative research methods, I reviewed the data throughout the data collection and data analysis processes, drawing tentative conclusions, and refining my research questions and study as needed (Hancock & Algozzine, 2006; Hatch 2002). The analysis of qualitative data involves organizing, examining, and reducing data to recognize patterns, identify themes, discover relationships, develop explanations, make interpretations, mount critiques, and generate theories to better understand the phenomenon being studied (Hatch, 2002; Gay et al., 2006; Merriam, 1998; Miles & Huberman, 1984; Sutter 2006). This approach is significantly different from that of quantitative researchers that do not begin

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data analysis until after all information has been collected. "Qualitative data analysis is less technical, less prescribed, and less linear but more iterative (back and forth) than quantitative analysis" (Sutter, 2006, p. 327). Throughout data analysis, I compared my findings to the original interview transcripts to ensure that I described the implementation of the career and technical credit transfer policy as it was described to me (see Appendix J). I did not conclude data analysis until all research questions had been answered and an in-depth understanding of the research problem had been achieved (Hatch, 2002).

Trustworthiness

Pfeffer (2006) and Pollitt (2008) suggested that some qualitative researchers fail to uncover the distinct characteristics of the research site. These criticisms may be addressed by proper data collection and analysis. Freebody (2003) states, "case studies focus on one particular instance...and attempt to gain theoretical and professional insights from full documentation of that instance" (p. 81). Researchers should collect and analyze all relevant evidence, address rival explanations, present the most significant aspect of their study, and make use of their expert knowledge of the subject (Yin, 1994). Collecting multiple sources of evidence, maintaining an audit trail, returning transcripts for member checks, and using a third party for cross-examination enhances credibility, confirmability, dependability, and the degree to which findings can be trusted (Lincoln & Guba, 1985; Marshall & Rossman, 2006; McMillan & Wergin, 2006; Yin, 1994).

Contrary to some critics, qualitative methods are no less objective than quantitative techniques (Creswell, 2007; Marshall & Rossman, 2006; Schuh & Upcraft, 2001). Nonetheless, qualitative researchers must acknowledge their own social identities, including their assumptions and biases so as not to obscure their findings (Gay et al., 2006; Yin, 1994). Qualitative methods may further marginalize the oppressed if used incorrectly, but

qualitative methods may empower individuals and groups and give voice to their experience when used properly. No research method, quantitative or qualitative, is free of bias as studies are authored by raced, gendered, classed, and politically-oriented individuals whose assumptions influence the collection, analysis, and presentation of their data and research findings (Creswell, 2007; Marshall & Rossman, 2006). Despite these biases and assumptions, qualitative researchers may achieve a higher degree of neutrality by questioning their assumptions and dismantling preconceived notions (Lincoln & Guba, 1985).

Limitations

This single, descriptive case study possesses several limitations, but its potential to enhance the growing body of policy implementation literature outweighs its shortcomings. As a qualitative researcher, I sought to describe the implementation of the career and technical credit transfer policy and to contribute to an emerging theory about policy implementation efforts that span multiple institutions, systems, or both. I did not seek to generalize my findings to other populations (Gay, et al., 2006) as my data collection consisted of document analysis and ten interviews. "As a general rule, qualitative researchers are reluctant to generalize [findings] from one case to another because the contexts of cases differ" (Creswell, 2007, p. 74). Single, descriptive case studies are used to confirm or challenge a theory (e.g., communities of practice theory), not to generalize findings to a specific population (Yin, 1994). My findings may be useful to others in similar situations, with comparable research questions, or similar questions of practice (Lincoln & Guba, 1985), and they may aid state policymakers, implementing agents, and others interested in reforming higher education (Marshall & Rossman, 2006). However, the burden of determining whether my findings are transferable to circumstances other than this case study rests with the readers of my findings, not me (Gomm, Hammersley, & Foster, 2000; Lincoln

& Guba, 1985). "Although transferability inferences cannot be made by an investigator who knows only the sending context" (Lincoln & Guba, 1985, p. 297), I am responsible for providing a thick description and conducting this study "in such a manner as to ensure that the subject was appropriately identified and described" (Marshall & Rossman, 2006, p. 201). Even though I used snowball sampling and achieved data saturation, I recognize that a different data set may have yielded different findings. I supplemented interview data with document analysis to corroborate emerging themes and accurately describe the implementation of the career and technical credit transfer policy as presented by research participants.

Researcher as Instrument Statement

A researcher as instrument statement is appropriate as this study involved collecting data through one-on-one interviews with the researcher as instrument (Marshall & Rossman, 2006). As a graduate student at the University of Virginia, I developed a keen interest in the organization and governance of two-year, public community colleges, particularly their workforce development programs, and I have written several papers on workforce development, including career pathways, the "new vocationalism" movement, and state and federal policies that shape workforce development initiatives at community colleges.

Prior to attending the University of Virginia, I earned a bachelor's degree in sociology at the University of North Carolina at Charlotte and a master's degree in higher education at the University of South Carolina. I began my career in higher education at the University of San Francisco, a Catholic, Jesuit institution, and I continued my career at the University of Florida and the University of Iowa. I currently work at Piedmont Virginia Community College.

Based on professional activities and accomplishments, I prefer to be involved in the implementation of polices that affect my areas of responsibility and enjoy collaborating with colleagues and other stakeholders to achieve desired objectives. I entered the one-on-one interviews aware of these preferences, yet I attempted to collect, analyze, and present data as interviewees shared it with me—telling their story, not mine. I also employed a reflexive journal, peer debriefing, and an overseeing board (i.e., committee) to increase the likelihood of achieving trustworthiness (Lincoln & Guba, 1985).

CHAPTER 4

Research Findings

As mentioned in the first chapter, the purpose of this study is to determine how implementing agents (i.e., workforce development centers, community colleges, public universities) and policymakers shaped the implementation of the career and technical credit transfer policy and identify what strategies policymakers and implementing agents employed to put the policy in place. In this chapter, I will answer the research questions put forth in the first chapter using data collected from ten semi-structured interviews lasting about 45 minutes each. The names of the interviewees have been changed to pseudonyms (e.g., Basswood, Butternut, Chestnut, Cottonwood, Hawthorn, Hemlock, Hornbeam, Pignut, Shadbush, Sycamore) to protect their identities. I also analyzed documents including articles, hearings, memoranda, presentations, publications, reports, and speeches. The research questions are:

1. In what ways did implementing agents (e.g., workforce development centers, community colleges, and public universities) positively shape the implementation of the policy?

2. In what ways did implementing agents (e.g., workforce development centers, community colleges, and public universities) negatively shape the implementation of the policy?

3. What strategies did policymakers, implementing agents, or both employ to implement the policy?

The following findings tell the story of the Ohio career and technical credit transfer policy implementation process through 2014. According to document analysis and interviews, Representative Shawn Webster encouraged the Ohio legislature to address the concerns of adult workforce students who went on to pursue postsecondary certificates and degrees at Ohio's community colleges and public universities. Lawmakers passed H.B. 66 (see Appendix A) and directed the Ohio Department of Education and the Ohio Board of Regents to establish criteria, policies, and procedures to transfer agreed-upon technical courses from one system to another (Ohio Board of Regents, 2006). The General Assembly also made changes to the Ohio Department of Education and the Ohio Board of Regents to encourage collaboration among adult workforce centers[4], community colleges, and public universities and hold them accountable for meeting the objectives expressed in H.B. 66.

State leaders recruited student-centered educators to adapt H.B. 66 to local conditions and achieve the legislature's intentions. As a result, educators implemented the career and technical credit transfer policy and evaluated courses in over 20 career and technical areas—making it possible for adult workforce center students to receive college-credit when they continue their studies at community colleges, public universities, or both. Throughout chapter five, I will answer each of the research questions stated earlier by providing a rich and thick description of the career and technical credit transfer policy implementation process as presented in documents and interviews.

Research Question #1

In what ways did implementing agents (e.g., workforce development centers, community colleges, and public universities) positively shape the implementation of the policy?

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[4] In this study, adult workforce centers refer to public institutions that provide customizable, labor market-driven workforce education and training services. In Ohio, these facilities are also referred to as career centers, technical and career centers, and technical centers.

Past Successes. Interviewees emphasized the role of past successes when describing

the implementation of the career and technical credit transfer policy. When asked how

implementing agents managed to put the career and technical credit transfer policy in place,

Ms. B. Cottonwood (personal communication, July 23, 2013), a member of the advisory

committee, said, "past success leads to success." Mr. T. Basswood (personal communication,

April 24, 2014), a community college vice president, described how past successes

contributed to the implementation of the career and technical credit transfer policy:

> It's a long story….In the 1990s, the state legislature wanted the public
>
> universities to award credit for community college courses—not just in
>
> general studies, but in all areas. That was the beginning of the state's transfer
>
> initiatives, and it served as a catalyst for the career and technical credit
>
> transfer policy.

On the subject of past successes, Ms. B. Cottonwood (personal communication, July 23,

2013), a member of the advisory committee, continued, "Ohio has been working on course

articulation since 1990. It started with general education courses, and then it moved on to

other courses that might be completed in the first two years of an undergraduate program."

Ms. C. Hawthorn (personal communication, March 18, 2014), a member of the steering

committee, summarized the importance of the past successes: "Ohio's past successes laid the

groundwork for the career and technical credit transfer policy."

When speaking before the Committee on Education and the Workforce, Dr.

Nancy Zimpher (cited in College Credit Mobility, 2005) stated that the articulation

and transfer policy implemented 25 years ago "was a major achievement…at that

time" (p. 17), and it has undergone numerous changes over the years. However,

those modifications were small compared to the implementation of the career and

technical credit transfer policy that led to significant "curricular and administrative changes" (Ohio Board of Regents, 2010, p. 1) across the state's educational system.

Ohio's "articulation and transfer process did not evolve overnight" (Zimpher cited in College Credit Mobility, 2005). According to Tsuchinda and Casto (2010) at the Ohio Association of College Admissions Counselors annual meeting, the General Assembly directed the Ohio Department of Education and the Ohio Board of Regents to "build upon the already established Transfer Assurance Guide (TAG) system created by legislation in 2003" (p. 4). The success of the state's past efforts facilitated the implementation of the far-reaching career and technical credit transfer policy. Building on its achievements, Ohio continues to expand options for its students—sometimes moving into new and uncharted territory. Mr. T. Basswood (personal communication, April 24, 2014), a community college vice president, described the development of Ohio's articulation and transfer process:

> Ohio kind of did it backwards. It created a way for students to transfer
> courses from two-year to four-year institutions first, and then it created a way
> for students to move from adult workforce centers to community colleges.
> In some instances, adult workforce center students may also receive credit
> from public universities who award technical baccalaureates.

Nevertheless, granting credit for career and technical courses that are equivalent to college-level courses taught at Ohio community colleges and public universities was a natural extension of the state's prior efforts. Ohio's approach is summed up in the words of Mr. S. Hornbeam (personal communication, June 9, 2014), an adult education director, who said, "Start with the easy stuff, the programs you're most familiar with, and work towards the more difficult programs."

Mr. S. Hornbeam (personal communication, June 9, 2014), an adult education director, cited an example of past successes that contributed to the implementation of the career and technical credit transfer policy:

> The success of bilateral agreements made in the past helped pave the way for the implementation of the career and technical credit transfer policy. Those agreements were put in place by institutions that chose to work together, and their successes laid the foundation for more significant efforts.

Others interviewees suggested that past successes strengthened relationships between implementing agents and contributed to the implementation of more significant, more complex efforts such as the career and technical credit transfer policy. Ms. B. Cottonwood (personal communication, July 23, 2013), a member of the advisory committee, added the following about the career and technical credit transfer policy implementation process:

> Like any relationship, it evolved over time. The more faculty worked together, the more effective they became….Most faculty care about students, that's why they teach, and that's certainly true of Ohio's faculty. Once they understood that it would help students further their educations, improve their quality of life, and…be more competitive in the workforce, and they realized that they played a key role in it, they learned to work together. They stopped representing their institutions and started representing their students. It wasn't perfect, nothing is, but it helped that we had the right people at the table—faculty members who cared about students, were willing to learn from each other, and work together. Most of them hadn't worked…with each other before, but they learned from each other and benefited from the experience.

When talking about strategies for implementing the career and technical credit transfer policy, Mr. T. Basswood (personal communication, April 24, 2014), a community college vice president, said, "At first Ohio focused on…the low hanging fruit so to speak…but it's finally happening." The data appear to substantiate the importance of past successes, and the strong relationships that stem from these accomplishments, in facilitating future successes.

Student-Centered Attitude. Findings suggest that the student-centered attitude of implementing agents helped them overcome the fragmentation that hindered past reform efforts. It appeared to go a long way in helping the Ohio Department of Education and the Ohio Board of Regents put the career and technical credit transfer policy in place. In a document prepared for the Ohio Board of Regents, Governor Strickland (as cited in Fingerhut, 2008b) said, "For too long, Ohio has been ill-served by competition between institutions for students and resources, rather than the collaboration that would benefit all Ohioans" (p. 3). Just as Ohio's articulation and transfer polices changed over time so did its attitude toward helping students move from one institution to another. In *Bringing Down the Silos*, a document prepared for the Ohio Board of Regents, Tafel (2010) suggested that the career and technical credit transfer policy reflects a significant departure from the institutionally focused practices of the past. He wrote that educators adopted a more student-centered attitude, pursuing priorities that also advanced student interests such as certificate and degree completion. Ms. A. Shadbush (personal communication, June 24, 2013), a member of the advisory committee, described the effect of H.B. 66 on adult workforce centers, community colleges, and public universities:

> I think the legislation helped break down some of the barriers. People don't
> realize that a lot of these barriers are put up for self-preservation. Yet, it's the
> students who have to pay in terms of time, in terms of repeat coursework,

[and] in terms of money. Schools put their interests ahead of their students'

needs, and that's why a lot of students get fed up with education. A lot of

students say, 'Give me the credit, give me the credential, and get me out of

here.' Students get caught up in a bureaucratic system that's more concerned

with perpetuating itself than helping students. So what's the goal? It's not to

be a perpetual student. So how do we help students reach their goals? I think

this was a valiant attempt to streamline that process.

According to Tafel (2010), there are a lot of professionals, especially at the grassroots, who

care about students. Their emphasis on student success continues to shape the

implementation of the career and technical credit transfer policy. Providing a pathway for

Ohioans to gain the knowledge, skills, and abilities to succeed in the 21st century economy,

and helping students move from one institution to another, are the cornerstones of the

state's efforts.

Enhancing the efficiency of Ohio's adult workforce and postsecondary systems was

secondary to helping more Ohioans, particularly adults, low-income individuals, and people

of color, earn postsecondary credentials (College Credit Mobility, 2005). Nevertheless, a

report published by the Governor's Commission on Higher Education & the Economy

(2004) revealed that "conflicting expectations" (p. 20) and "longstanding difficulties" (p. 21)

made creating opportunities for Ohioans to move between adult workforce centers,

community colleges, and public universities an arduous task. When asked about the

challenges confronted by implementing agents putting the career and technical credit

transfer policy in place, Ms. B. Cottonwood (personal communication, July 23, 2013), a

member of the advisory committee, said, "When we started, there weren't a whole lot of

states doing what we were doing. It's hard work, but it's worth it." In a document about

pathways to postsecondary certificates and degrees, the National Governors Association (2009) noted than most states' workforce development programs favor secondary students and advanced degree students over those who are working but lack a postsecondary credential. However, it recognized nine states, including Ohio, for helping working adults meet the changing needs of employers whose success depends upon attracting and retaining educated workers.

Interviewees suggested that implementing agents leveraged the state's network of adult workforce centers, community colleges, and public universities to benefit all Ohioans, and their commitment to student success was essential to the implementation of the career and technical credit transfer policy. This scenario reflects a willingness change a culture that has been institutionally focused, not student centered, for a long time. Mr. E. Hemlock (personal communication, July 14, 2014), a community college president, explained:

> The General Assembly, the Ohio Board of Regents, and the Ohio Department of Education started by building a culture committed to transfer, and it facilitated the implementation of earlier efforts and the career and technical credit transfer policy as well. We've put in a lot of work over a long period, and I think we've created a culture of acceptance based on the idea of equivalent learning experiences. These equivalences make sense, they stand up to scrutiny, and they're supported by institutions across the state. That's really been the basis of how we approached the whole project.

In *Bringing Down the Silos*, a document prepared for the Ohio Board of Regents, Church (as cited in Tafel, 2010) stated, "Change, especially system change, is hard work and requires ongoing vigilance and constant engagement. Campus leaders need to keep their eyes on the prize" (p. 30). Church's comments were confirmed by

interviewees. When asked why the career and technical credit transfer policy was put in place, Ms. B. Cottonwood (personal communication, July 23, 2013), a member of the advisory committee, said, "We did it to help students. If it didn't benefit students, we wouldn't have done it. It was faculty driven and student focused. That's the student focus. Our goal was to help students." Interviewees recognized that many adults who are working without postsecondary credentials are seeking the shortest path to a better job. They argued that the career and technical credit transfer policy should emphasize learning outcomes that "moved students from non-credit bearing institutions (i.e., adult workforce centers) to credit-bearing institutions (i.e., community colleges, public universities)" said Mr. T. Basswood, personal communication, April 24, 2014).

Interviewees suggested that implementing agents were committed to helping students. In describing their commitment to putting the right policy in place, Ms. P. Sycamore (personal communication, July 11, 2014), a public university faculty member, said, "It was hard. We were building the car as we were driving it. It was brand new. Nobody had ever done it before. We tried somethings, somethings that didn't work, and ripped them up and started over." In response to a question about the importance of a student-centered attitude, Ms. B. Cottonwood (personal communication, July 23, 2013), a member of the advisory committee, said the following:

> People have to share a common vision, that overarching goal. It's bigger than any one person; it's bigger than any one institution. It's all about helping our students, helping our state, and helping our nation move forward. You've got to look beyond yourself and ask yourself, 'If I want to be a part of this, how can I make something good happen? How can I make this a quality program

that will help students?' You can protect your discipline, you can be a good steward of your discipline, but that doesn't mean that it can't adapt to change.

Interviewees suggested that institutions are more willing to grant credit for equivalent learning experiences completed at adult workforce centers and community colleges than in the past.

Ms. W. Pignut (personal communication, July 11, 2014), a public university provost, addressed the attitudes of community colleges and public universities toward helping career and technical students earn a postsecondary credential: "More institutions are asking themselves, 'How can we help people in our communities start where they are and get to the finish line?'" Still there are many divergent opinions. Implementing agents recognize that "institutions, particularly universities, are not monoliths" (W. Pignut, personal communication, July 11, 2014).

When asked about implementing similar policies in other states, Mr. J. Butternut (personal communication, June 9, 2014), an adult education director, said, "If you want it to really work, you have to be clear that it's to help students earn credentials. It's about helping more student access advanced educational opportunities. Otherwise you'll get sacked by turf issues." In keeping with the student-centered attitude, Mr. E. Hemlock (personal communication, July 14, 2014), a community college president, said, "It's been a lot of hard work, but we've made a lot of progress. Sometimes it was difficult, but it was the right thing to do." The data appear to confirm that despite the challenges associated with the implementation of the career and technical credit transfer policy, the student-centered attitude helped make it a reality. Since the early stages of the implementation process, the scope of the policy has expanded from 5 to more than 20 technical areas.

Research Question #2

In what ways did implementing agents (e.g., workforce development centers, community colleges, and public universities) negatively shape the implementation of the policy?

Overall, document analysis and interviews suggested that the hierarchical nature of Ohio's adult education system and implementing agents' reluctance negatively shaped the implementation of the career and technical credit transfer policy. As stated earlier, the Ohio House of Representatives directed the Ohio Board of Regents to work collaboratively with the Ohio Department of Education's Office of Career-Technical and Adult Education, public adult and secondary career-technical education institutions (i.e., workforce development centers), and state-supported institutions of higher education (i.e., community colleges and public universities) to establish criteria, policies, and procedures to transfer agreed-upon technical courses from one system to another (Ohio Board of Regents, 2006). Even though lawmakers recognized that increasing the number of postsecondary certificate and degree holders in Ohio required adult workforce centers, community colleges, and public universities to work together, at least one prominent official "did not think it could happen" according to Webster (as cited in Tafel, 2010, p. 21) in *Bringing Down the Silos*, a document prepared for the Ohio Board of Regents.

Hierarchical System. Document analysis and interviews indicated that adult workforce centers, community colleges, and public universities have different roles and responsibilities, and these functions have created a hierarchical system in which "adult workforce centers are the lowest rung of the system" (J. Butternut, personal communication, June 9, 2014). Interviewees concurred when describing the challenges associated with awarding college credit to career and technical students. Ms. W. Pignut (personal communication, July 11, 2014), a public university provost, said, "These institutions are

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different, and their differences…made it harder for two-year and four-year institutions to be confident in the legitimacy of what learning experiences they'd be required to accept for college-level credit."

When asked about the presence of a hierarchical system, Mr. J. Butternut (personal communication, June 9, 2014), an adult education director, agreed, "There's a definite pecking order, especially if you sit in a room with all of them; and if you look at the data, you will say, 'Wow, the universities are really cocky for the stuff they put out.'" When asked about the perceived inferiority of adult workforce centers and community colleges, Ms. C. Hawthorn (personal communication, March 18, 2014), a member of the steering committee, said, "I'm a little guilty of it too. But, it's a perception that's not a reality." Nevertheless, when asked about factors that negatively shaped the implementation of the career and technical credit transfer policy, Ms. B. Cottonwood (personal communication, July 23, 2013), a member of the advisory committee, said the following:

> There was fear that we were dumbing down the system.…We always fear the unknown. Think about it. If four-year colleges say, 'We're the only ones who can do it right, or you poor community colleges.' The pecking order was one of the biggest challenges we dealt with. Some of the four-year universities thought they were better than the community colleges, and some of the community colleges thought they were better than the adult [workforce] centers.

Despite some institutions' misgivings about granting college credit for adult workforce center courses, Chancellor Fingerhut (2008b), in a document in prepared for the Ohio Board of Regents, indicated that these courses were similar to technical courses offered at two-year institutions:

There is a close relationship between programs offered at adult workforce centers and technical courses offered at community colleges, but these systems have often been more competitive than collaborative. In addition to the resources wasted, adults who take courses at adult workforce centers and then seek to obtain a college degree frequently have to start over from scratch (p. 57).

Before implementation of the career and technical credit transfer policy, adult workforce students did not receive college credit. Now, adult workforce students may receive college credit when they continue their education at a community college or public university that teaches an equivalent course (Mr. T. Basswood, personal communication, April 24, 2014).

Mr. T. Basswood (personal communication, April 24, 2014), a community college vice president, described the significance of the career and technical credit transfer policy: "There's really no such thing as transfer. It's really access to credit at community colleges or in some cases universities." He continued, "We want people like this to get college credit so that it'll decrease their time to degree if they chose to go to a community college." Still, Ms. B. Cottonwood (personal communication, July 23, 2013), a member of the advisory committee, said, "Some institutions said we're the only school that can do it right; we're better than the school down the street."

Documents and interviews addressed the challenges of getting institutions to work together. In an editorial, *The Columbus Dispatch* (as cited in Marcus, 2010) wrote, "They had to become team players" (p. 183), but getting them to work together was no easy task. Ms. F. Chestnut (personal communication, June 24, 2013), a member of the steering committee, described the environment: "At first, it was very hierarchical. Some of the community

colleges insulted the adult workforce centers, and the adult workforce centers walked away angry after the first meeting." Other interviewees continued to express similar feelings. Mr. J. Butternut (personal communication, June 9, 2014), an adult education director, said the following:

> Very few people ever go out and compare an adult workforce program to a community college program. Unless you visit the two programs and compare them, you can't say this is so much better or so much more rigorous than that one. Before the policy was implemented, I went over to a community college who wanted to recruit my [adult workforce center's] students….It had less equipment. Its labs were in poor condition. Its curriculum was poor, but if offered college credit toward an associate degree. The community college wanted my students because it knew how well educated they were, but it was unwilling to grant them college credit. Just because it's taught at a community college doesn't always mean it's better.

When asked about the hierarchy among adult workforce centers, community colleges, and public universities, Mr. S. Hornbeam (personal communication, June 9, 2014), an adult education director, said. "The community colleges believed that the public universities didn't respect them, yet the community colleges turned around and disrespected the adult workforce centers."

Mr. E. Hemlock (personal communication, July 14, 2014), a community college president, said, "The adult workforce centers felt left out. They wanted learning that takes place in their setting—learning that they believe is equivalent to learning taking place in a college credit setting—to be treated equivalently. That was their desire, and it should have

been." Mr. J. Butternut (personal communication, June 9, 2014), an adult education director, said the following:

> The adult workforce centers are not as influential as Ohio State University or
> even Columbus State Community College. Those larger institutions are more
> powerful. They have lobbyists….The adult workforce centers offer career
> and technical training that's important but not as politically powerful as the
> courses taught at Columbus State Community College or Ohio State
> University. The adult workforce centers were very interested in having their
> courses recognized by the state's higher-level institutions, but that's difficult
> to achieve when you're the lowest rung of the system.

Interviewees suggested that the spirit of the career and technical credit transfer policy implementation process dispelled some of the myths about adult workforce centers and community colleges alike. It did not eliminate all of the divisions between institutions, but it enhanced the relationships between Ohio's postsecondary institutions. When talking about relationships between institutions, Ms. A. Shadbush (personal communication, June 24, 2013), a member of the advisory committee, said the following:

> The adult workforce centers and community colleges continued to hash it
> out, and eventually they recognized that they were teaching a lot of the same
> content. Once they realized this, their animosity toward one another began to
> fade and their attitude toward one another began to improve. The career and
> technical credit transfer policy put a spotlight on many of the vocational and
> technical programs offered at adult workforce centers and community
> colleges. In the past, educators emphasized bachelor's degree programs; but
> many of the certificate and associate degree programs prepare students for

jobs in STEM fields too. And now educators are emphasizing them too, and

that's a good thing.

Ms. C. Hawthorn (personal communication, March 18, 2014), an adult education director,

concurred "The career and technical credit transfer policy provides an important foothold

for adult workforce centers. Regardless of how many career and technical courses are

recognized by community colleges and public universities, it's a big step forward."

When describing the attitudes of some community college and public university

faculty toward granting credit for career and technical courses, Mr. T. Basswood (personal

communication, April 24, 2014) said the following:

As community college vice president, I rubbed elbows with a lot of four-year

institutional leaders, and they had an elitist attitude. They thought the two-

year institutions couldn't possibly teach at their level. So the universities were

reluctant to grant credit for courses completed at community colleges, and

then the same thing held true for the faculty at the two-year colleges. They

had somewhat of an elitist attitude toward the adult workforce centers who

couldn't possibly teach at the community college level. Sometimes, I just

want to pull my hair out. They're not being asked to grant credit for an entire

program. In most instances, it's a few basic courses—nothing that's taught in

the second year.

In regards to one type of institution being better than another kind, Ms. C. Hawthorn

(personal communication, March 18, 2014), a member of the steering committee, said, "That

was their perception. It wasn't necessarily true, but it was difficult to overcome."

Interviewees indicated that progress has been made. When asked about the

relationships between adult workforce centers, community colleges, and public universities,

Mr. J. Butternut (personal communication, June 9, 2014), an adult education director, said the following:

> Relationships have improved. Ohio has moved the needle in a positive
> direction, but there's still work to be done. I'm sure that I'll be gone before
> we figure out why the turf battles are so great and why universities believe
> they've cornered the market on undergraduate education even when the data
> isn't in their corner.

Even though some interviewees suggested that the implementation of the career and technical credit transfer policy was complicated by public universities who believed they were better than adult workforce centers and community colleges, others agreed that some four-year institutions were more open to the policy. Mr. S. Hornbeam (personal communication, June 9, 2014), an adult education director, said the following:

> Some of the universities were more receptive than others are. The ones who
> already had bilateral agreements in place were a lot more receptive; they were
> more progressive. We had some of them who didn't want to recognize career
> and technical programs, and we had to go through the Ohio Board of
> Regents. I believe a lot of that had to do with universities not being aware of
> the content of the programs.

Ms. P. Sycamore (personal communication, July 11, 2014), a public university faculty member, summed up the attitude of receiving institutions toward granting credit for learning experiences completed at adult workforce centers.

> I'll say this about the rigor. I think they were okay with the fact that we were
> articulating credit for students who received a terminal certification. As long

as students were sitting for an accreditation…as long as they had a test that led to credit…they were okay with granting credit.

Since it started addressing the needs of transfer students 25 years ago, Ohio has made a lot of progress. The state's adult workforce centers, community colleges, and public universities moved slowly toward a seamless educational system for all Ohioans. It took years to overcome the differences between these institutions and eliminate the barriers that inhibited students' ability to earn postsecondary credentials. In *Bringing Down the Silos*, a document prepared for the Ohio Board of Regents, Tafel (2010) said the following:

Credit transfer and student mobility are among the most perplexing issues facing the higher education community today…. It is no secret that most institutions of higher education prefer that students begin and end their studies on *their* [emphasis in original] campuses. As a consequence, transfer students are not as highly valued as *homegrown* [emphasis in original] graduates. In fact, transfer students often are viewed as being academically inferior—not having received the same quality of instruction and not having benefited fully from the institutions educational approach and philosophy.

These attitudes perpetuated a system that put institutions' interests over students' needs and made the attainment of postsecondary certificates and degrees more difficult and more costly for many Ohioans.

Ms. B. Cottonwood (personal communication, July 23, 2013), a member of the advisory committee, said, "Making it better and moving it forward…means acknowledging that your colleague down the street can do just as good a job educating students as you can." Mr. S. Hornbeam (personal communication, June 9, 2014), an adult education director, indicated that the career and technical credit transfer policy implementation process brought

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adult workforce centers, community colleges, and public universities together; and it helped

them appreciate each other's attributes. Similarly, Ms. A. Shadbush (personal

communication, June 24, 2013), a member of the advisory committee, said, "I'm not sure

that we're past the cultural differences, but we're moving forward. If you've got a good

working relationship—one that's open, honest, and inclusive—you've got it made. If not,

you're not going to get very far." Mr. S. Hornbeam (personal communication, June 9, 2014),

an adult education director, concurred, "We've not overcome the pecking order yet, but

we've come a long way." Interviewees agreed that overcoming a hierarchical system

perpetuated over many years was one of the greatest challenges confronted by implementing

agents.

 Reluctance. Document analysis and interview data suggested that some

implementing agents were reluctant to recognize adult workforce center programs for

college credit, and that their reluctance negatively shaped the implementation of the career

and technical credit transfer policy. The Governor's Commission of Higher Education & the

Economy (2004) argued that postsecondary institutions are experts at fending off their

critics and rejecting suggestions to improve productivity (p. 55). While recalling the

implementation of the career and technical credit transfer policy, Ms. P. Sycamore (personal

communication, July 11, 2014), a public university faculty member, said, "A lot people didn't

see the sense in it. They asked, 'Why do we have to do this? We already have a bilateral

agreement?'" According to Mr. J. Butternut (personal communication, June 9, 2014), an

adult education director, "Institutions were cutting their own deals, and they still are cutting

their own deals….There's a lot of autonomy in Ohio….So there were a lot of these little

bilateral agreements that were doing the same thing that the state was trying to do

statewide."

In an article published in the *Chronicle of Higher Education*, Roderick Chu, former chancellor of the Ohio Board of Regents, concurred. Chu (as cited in Selingo, 1998) compared some administrators and faculty to alcoholics: "They will not recognize problems; they are in denial" (para. 10). On the other hand, others claimed that postsecondary institutions want to collaborate, and they want to be cost effective. Still, in an editorial, published in *The Columbus Dispatch*, Bruce Johnson (as cited in Marcus, 2010), president of the Inter-University Council of Ohio, said they do not want to be managed by lawmakers who do not know how to run colleges and universities. Selingo (1998) suggested that Roderick Chu, former chancellor of the Ohio Board of Regents, moved too quickly. He applied some of the business principles he honed as an Andersen consultant, but he alienated administrators and faculty who were accustomed to the slower, more collegial ways of academia.

Similar to Chu, Eric Fingerhut, former state senator and chancellor of the Ohio Board of Regents, encountered resistance from postsecondary institutions when he served as the ranking Democrat on the Ohio Senate Finance Committee. He said, "One university after another would come in and tell us how well they were doing. All of that was certainly plausible. And yet we were 38th in the nation in terms of educational attainment" (Fingerhut as cited in Marcus, 2010, p. 182). Others concurred that academic institutions, including many of Ohio's adult workforce centers, community colleges, and public universities were slow to address their shortcomings. As the state's tax revenue declined and its budget shrunk, Ohio lawmakers urged postsecondary leaders to implement business practices that would reduce operating costs, increase productivity, and contribute to economic growth. Still, many faculty members were skeptical of strategies that might bolster the bottom line at

the expense of academic life (Governor's Commission on Higher Education & the Economy, 2004).

Mr. J. Butternut (personal communication, June 9, 2014), an adult education director, suggested that no institutions wanted to give up any ground during the implementation of the career and technical credit transfer policy. He said the following:

> All institutions are hesitant to give up too much ground as if they're going to lose some business or something, but I've not seem anyone lose anything. None of the schools have gone out of business since the policy has been implemented. I've not heard of any institutions taking an enrollment hit. Some of the community colleges are taking a hit on their enrollments….Their enrollments were climbing for years and now they're declining, but that has more to do with changes in demographics and the economy than with this policy.

Other interviewees made similar comments. Mr. T. Basswood (personal communication, April 24, 2014), a community college vice president, observed that some faculty were reluctant to embrace the career and technical credit transfer policy. He said, "I think college faculty are protective of their disciplines, and many of them believe they're the only ones that can teach in those fields. They're protective of their curriculum; so I think some of them were reluctant." Mr. J. Butternut (personal communication, June 9, 2014), an adult education director, explained: "Institutions tend to protect their turf even when they give up some turf." According to Butternut, some schools might grant college credit for one course but not for another course. He said, "Some courses are still sacred. There's still some of that. That's one of the impediments to implementing the policy. I'm not sure if we'll ever get rid of that."

Findings suggested that helping the adult workforce centers, community colleges, and public universities understand what each teaches and encouraging them to appreciate the positive attributes of each institution was challenging. To overcome these challenges, "Ohio put the stakeholders in a room together and urged them to get to know each other" said Ms. F. Chestnut, personal communication, June 24, 2013), a member of the steering committee. When describing these meetings about the career and technical credit transfer policy, he continued:

> It was difficult in the beginning; some of them didn't like each other very much. Some of them were defensive and territorial, and some of them were afraid of how the policy might affect their institution. It was very time consuming and very expensive.

Ms. C. Hawthorn (personal communication, March 18, 2014), a member of the steering committee, suggested that adult workforce centers "care more about bilateral [agreements] than statewide agreements, and it kind of makes sense. If you're my neighbor, and I have a really good relationship with, you're going to give my more credit." He indicated that bilateral agreements between two schools (e.g., an adult workforce center and a community college) are relationship-based and therefore participating institutions tend to award more credit to each other's students.

Some institutions did not accept the career and technical transfer policy as a mandatory requirement, and their resistance hindered the implementation of the policy. Ms. P. Sycamore (personal communication, July 11, 2014), a public university faculty member, described these institutions' ambivalence through the eyes of a validation center coordinator:

> It was a traumatic five years for me. Nobody was happy when I walked through the door, but they were extremely happy when I left. I think it was

more of, 'Why do we have to do this? We already have a bilateral agreement.

Why are we doing this?' They didn't see the sense in doing it. And then after

it was done, they were fine. I don't think that they were upset. I listened to

everything they had to say, and then I showed them how the validation

process was going to be a lot easier than they anticipated. This went a long

way in easing their concerns. The validation center coordinators dispelled a

lot of misnomers about the validation process.

In a memorandum, Paula Compton (2010), associate vice chancellor of the Ohio Board of

Regents, wrote, "Some confusion exists as to whether public institutions are required to

participate in the career and technical credit transfer initiative." The Ohio Board of Regents

encourages institutions to enter into bilateral agreements that address local needs, but the

existence of locally grafted transfer agreements does not excuse adult workforce centers,

community colleges, or public universities from participating in the career and technical

credit transfer policy (Compton, 2010).

All institutions must submit for approval courses whose content falls into one of the

subject areas governed by the career and technical credit transfer policy. This makes it

possible for students to move from one state institution to another without unnecessary

duplication. Ms. A. Shadbush (personal communication, June 24, 2013), a member of the

advisory committee, described the reaction to H.B. 66: "Honestly, a lot of people thought it

was being forced upon them. When it's mandated, when you have to do it, there's always

some resistance. But I think we're past that now." Ms. F. Chestnut (personal

communication, June 24, 2013), a member of the steering committee, agreed, "I don't think

faculty at any level think it's ideal, but most of them agree that it's necessary." Even though

most educators accepted the career and technical credit transfer policy over time, some still

oppose the methods that were used to put it in place. Ms. A. Shadbush (personal communication, June 24, 2013), a member of the advisory committee, said, "I don't think I would make it mandatory."

The data suggested that adult workforce centers and community colleges were slow to act during the Great Recession. Mr. J. Butternut (personal communication, June 9, 2014), an adult education director, said the following:

> There's no workplace pressure in a recession. But when institutions find out that employers can't find skilled welders, they're more likely to award college credit so that welders can earn needed credentials. The legislation put a little pressure on institutions, but it didn't become meaningful until workforce pressures put some heat on it.

Ohio's adult workforce centers, community colleges, and public universities are expected to play a significant role in retooling the state's workforce. Business leaders need capable workers that will enable their Ohio-based businesses to thrive and grow. In a document prepared for the Ohio Board of Regents, Chancellor Fingerhut (2008b) said, "This is accomplished primarily by increasing the overall educational attainment level of Ohio's workforce, and demonstrating that those who graduate from our schools have the analytical, communication, and problem-solving skills that businesses need from all workers" (p. 91). According to an article in the *Cincinnati Business Courier*, Representative Shawn Webster (as cited in Business Lessons, 2006) informed his constituents that Honda Motor Company built a $500 million plant in Indiana instead of Ohio because of Indiana's commitment to workforce development. Ohio's loss cost Representative Webster's district over 4,000 manufacturing jobs.

In a document discussing Ohio's efforts to expand educational opportunities for working adults, the National Governors Association (2009), stated that the majority of states implement strategies to improve primary, secondary, and postsecondary education while ignoring workforce development, particularly for those already in the workforce but lacking a postsecondary certificate or degree. When discussing the need for the career and technical credit transfer policy, Mr. J. Butternut (personal communication, June 9, 2014), an adult education director, said the following:

> You have to look at the economic climate. It's easier to put policies in place
>
> when the employment picture is rosier. Manufacturing is coming back.
>
> Unemployment in the area is 4.8 percent. That's full employment. I have
>
> companies calling every day, 'I can't find workers; I can't find anyone with
>
> the right skills; I can't find anyone with the right credential.'

At a meeting of the Advisory Committee on the Transfer of Adult Career and Technical Programs, Representative Shawn Webster (as cited in Advisory Committee, 2008) expressed his expectations for career and technical education: "We must show employers that the system is nimble, flexible, and able to provide 'just in time' needs. We need to move quickly and keep our policies and procedures simple so that we do not lose employers. Every day that passes without an adaptable, responsive system is a day that Ohio suffers" (para. 3).

Ms. F. Chestnut (personal communication, June 24, 2013), a member of the steering committee, described adult workforce center, community college, and public university faculty's reluctance and the legislature's response:

> Most educators didn't like being told what to do. However, several groups
>
> tried to bring them together, but it was not working. Finally, lawmakers said,
>
> "Enough is enough; if they won't do it on their own, we'll legislate it. The

General Assembly is very involved in public education, and it has issued a

number of directives over the years."

In response to a question about the benefits of the career and technical credit transfer policy,

Ms. P. Sycamore (personal communication, July 11, 2014), a public university faculty

member, said the following:

Prior to the implementation of the career and technical credit transfer policy,

receiving institutions awarded credit haphazardly. Some institutions granted

too few credit hours, and others awarded too many credit hours. The career

and technical credit transfer policy ensured that all the stakeholders got

together and agreed on which courses would transfer from one institution to

another and how they'd count toward a certificate or degree. The career and

technical credit transfer policy is working! My son is completing courses at an

adult workforce center, and he knows exactly how the courses will apply to

an associate degree. He'll be closer to earning a degree because of the policy.

The career and technical credit transfer policy is better than a bilateral

agreement. Students are no longer limited to one institution. They can

choose from multiple public institutions.

Ms. B. Cottonwood (personal communication, July 23, 2013), a member of the advisory

committee, suggested that stakeholders' apprehension about the career and technical credit

transfer policy began to fade once they understood the policy and its benefits, yet others

confirmed that legislative pressure played an important role in overcoming stakeholders'

resistance to the policy. According to Mr. E. Hemlock (personal communication, July 14,

2014), a community college president, the General Assembly said the following to the Ohio

Department of Education and the Ohio Board of Regents:

Either develop a policy that enables students to transfer efficiently and

effectively from one institution to another or we'll do it for you,' and boy did

that motivate the education communities….That concept has stuck. At each

juncture, we've had legislative involvement. Their attitude has been, 'you can

solve this problem on your own; but if you don't, or don't want to do it, we'll

do it for you. But you probably want to do it yourselves.'

Findings suggest that adult workforce centers, community colleges, and public universities

alike appreciated the opportunity to shape the career and technical credit policy.

Research Question #3

What strategies did policymakers, implementing agents, or both employ to implement the policy?

Alignment. Data suggested that alignment facilitated the implementation of the

career and technical credit transfer policy and helped hold implementing agents accountable.

In a document prepared by the Governor's Commission on Higher Education & the

Economy (2004), the commission encouraged Ohio to leverage the strengths of its adult

workforce centers, community colleges, and public universities to increase educational

opportunities for Ohioans, particularly adult learners. It maintained that awarding more

postsecondary certificates and degrees was essential to reinvigorating the state's economy.

Despite the commission's recommendations, Ohio continued to fall behind other states in

the percentage of working-age adults with an associate degree or higher. According to a

document prepared for the Ohio Board of Regents, it ranked 38th nationally when Governor

Strickland took office in 2007 (Fingerhut, 2008). Mr. E. Hemlock (personal communication,

July 14, 2014), a community college president, said that educators wanted adult workforce

centers to be a part of the Ohio Department of Higher Education along with community

colleges and public universities:

Adult workforce centers fell under the Ohio Department of Education, but

we lobbied to bring all adult programs under one state agency so that we

could create better alignment with the rest of the adult system and help more

Ohioans complete certificates and degrees.

In an article published in *State Budgeting Matters*, Thomas (2012), a policy consultant, indicated

that Governor Strickland called for a demand-driven, regionally focused, and adult-friendly

workforce development system from the onset of his administration, and he found allies in

the General Assembly, the Ohio Board of Regents, and the Ohio Department of Education.

The General Assembly created the Ohio Department of Higher Education and made

the chancellor a cabinet-level appointee, responsible to the governor instead of a nine-

member independent board. It also and moved adult career and technical education from

the Ohio Department of Education to the newly created Ohio Department of Higher

Education consisting of adult workforce centers, community colleges, and public universities

(Fingerhut, 2008). Armed with direct control over postsecondary education, Governor

Strickland named Eric Fingerhut, a former member of the Ohio State Senate and the U.S.

House of Representatives, chancellor of the Ohio Department of Higher Education and

"made him the point man on one of the governor's most high profile issues" (Marcus, 2010,

p. 181).

In a document prepared for the Ohio Board of Regents, Chancellor Fingerhut

(2008b) argued that these moves were not symbolic acts (p. 29). Ohio made significant

progress toward the establishment of an integrated, adult education system that provides

high quality, yet affordable educational pathways for Ohioans seeking greater economic

opportunities. "The decision to include the adult workforce centers in the state's higher

education system was made carefully and deliberately by Governor Strickland and the

General Assembly" (Fingerhut, 2008b, p. 58), and it helped advance the implementation of the career and technical credit transfer policy—making it easier for adult learners to prepare themselves for satisfying and productive careers (Fingerhut, 2008). When asked about the benefits of alignment, Ms. C. Hawthorn (personal communication, March 18, 2014), a member of the steering committee, said that Chancellor Fingerhut and some members of the Ohio Board of Regents felt that moving adult workforce centers from the Ohio Department of Education to the Ohio Board of Regents would make it easier for career and technical students to transfer coursework from adult workforce centers to community colleges and public universities. These institutions are addressing their differences and moving forward in a new, more integrated environment (Fingerhut, 2008).

Chancellor Fingerhut (2008b), in a document prepared for the Ohio Board of Regents, argued that Ohio must continue to mobilize its "extensive network" (p. 9) of adult workforce centers, community colleges, and public universities to graduate more students. Mr. J. Butternut (personal communication, June 9, 2014), an adult education director, described how hard it was to get the Ohio Department of Education's adult workforce centers and the Ohio Board of Regents' community colleges and public universities to work together:

> It was difficult to get the systems to work together for the good of the [adult] workforce students. The Ohio Department of Education was made up of primary and secondary schools, including adult workforce centers. Whereas the Ohio Board of Regents was made up of postsecondary, including community colleges and public universities. To align all three types of educational institutions, adult workforce centers were moved from the Ohio Department of Education to the Ohio Department of Higher

Education....Having all three types of institutions under one roof made it

easier to work across institutions.

According to an article published in *State Budgeting Matters*, these changes moved adult

workforce education from two non-cabinet agencies to a single cabinet agency, made the

Ohio Board of Regents an advisory board (Thomas, 2012), and assured the General

Assembly and the public that the governor and the chancellor were "united in the direction"

(Fingerhut, 2008, p. 3) they were taking postsecondary education. The National Governor's

Association (2009) agreed, "These organizational changes ensure that…educational offerings

and programs are better aligned with the changing needs of the state's labor market and

economy" (p. 5).

On behalf of the governor, Chancellor Fingerhut set out to coordinate the state's

adult workforce centers, community colleges, and public universities. In a document

prepared for the Ohio Board of Regents, Fingerhut (2008b) stated, "A system of public

colleges and universities—which emphasizes cooperation over competition and seeks to

make the whole greater than the sum of its parts—should not be viewed as a controversial

concept" (p. 20). He suggested that the move made it easier for adult learners to earn

stackable credentials and prepare themselves for meaningful careers. It helped them connect

non-credit, career and technical learning experiences that meet agreed upon learning

outcomes to credit-bearing courses that lead toward a college degree. In a document

prepared for the Ohio Board of Regents, Fingerhut (2008b), explained:

Credit is based on demonstrated competencies, not just "seat time" in the

classroom. This approach to learning is strongly favored by employees and

many employers. Adult learners, most of whom are "employees who learn"

rather than "students who work," will also benefit from the flexibility (p. 58).

In a document about expanding educational opportunities for working adults, the National Governors Association (2009) recognized Ohio as one of "a few states participating in the Pathways to Advancement policy academy [that] changed governance or oversight of state programs to better align workforce development, economic development, and higher education policies" (p. 4). Ms. A. Shadbush (personal communication, June 24, 2013), a member of the advisory committee, described some of the benefits of the realignment:

> Adult workforce centers were a part of the Ohio Department of Education, a part of secondary education. But then they became a part of the Ohio Department of Higher Education as they should've been. It made a lot of sense. It helped students and reduced costs.

On the other hand, Mr. E. Hemlock (personal communication, July 14, 2014), a community college president, commented on the realignment of the adult workforce centers, community colleges, and public universities: "They're getting there; they're getting better. These institutions are more aligned than before, but there's still a lot of work to be done." Still, most agree that the new, more integrated environment helped adult workforce centers, community colleges, and public universities overcome many of their differences, and it helped put the career and technical credit transfer policy in place.

Political Pressure. Data gleaned from document analysis and interviews suggested that political pressure played a significant role in the implementation of the career and technical credit transfer policy. Bob Taft served as governor of Ohio from 1999 to 2007. According to a report published by the Governor's Commission on Higher Education & the Economy (2004), Governor Taft assembled the commission and instructed it to identify strategies that might increase educational attainment, particularly postsecondary certificates

and degrees, for all Ohioans; make Ohio more competitive in the post-manufacturing economy; and provide a return on the public's investment in education. In an article published in *The Lantern*, Karen Holbrook (as cited in Aldridge & Herzfeld, 2003), president of Ohio State University, declared that getting business, education, and government leaders to talk to each other was one of the commission's greatest accomplishments because these groups rarely get together (para. 7). These leaders indicated that the state's fragmented adult education system made it harder for career and technical students to earn valuable credentials for success in the knowledge-driven economy (Governor's Commission on Higher Education & the Economy, 2004). Governor Taft put together an advisory council to review the state's workforce development programs as well, and it also acknowledged that Ohioans would benefit from "a more seamless articulation and transfer model throughout the full range of adult, workforce, and postsecondary education programs" (National Governor's Association, 2009, p. 9).

To address these concerns, policymakers encouraged the Ohio Department of Education and the Ohio Board of Regents to reach agreements that would make it easier for career and technical students to move between adult workforce centers, community colleges, and public universities (Governor's Commission of Higher Education and the Economy, 2004). The General Assembly initiated similar conversations as early as 1988, yet educators' efforts waxed and waned before coming to halt. In 2003, the legislature passed H.B. 95 that made it possible for students to transfer lower-division courses from one public, postsecondary institution to another. According to *Bringing Down the Silos*, a document prepared for the Ohio Board of Regents, Representative Shawn Webster (as cited in Tafel, 2010) learned from the success of H.B. 95 and "made credit transfer a personal priority" (p. 5). He sponsored H.B. 66 and pushed it through the legislative process in 2005. The bill

directed the Ohio Board of Regents to collaborate with the Ohio Department of Education to establish criteria, policies, and procedures to transfer agreed-upon technical courses from one system to another (Ohio Board of Regents, 2006). Representative Webster (as cited in Tafel, 2010) said the following:

> I'd heard from students and families about their surprise—and frustration—when they discovered that courses completed at one institution had little or no value when they transferred to [a] college or university….So for lawmakers, the issue was pretty clear: Why do students and the state have to pay twice for the same course?….That's why state legislators directed the Ohio Department of Education and the Ohio Board of Regents to develop a statewide mechanism that would allow students to transfer credits from…one state institution to another (p. 21).

Still, Thomas (2012) indicated in an article published in *State Budgeting Matters* that many legislators are unwilling to pursue strategies such as the career and technical credit transfer policy "that lack an immediate payoff…. [as their] interests do not usually lie past the next electoral battle" (p. 12).

When asked how Ohio succeeded where other states might have failed, Mr. J. Butternut (personal communication, June 9, 2014), an adult education director, said, "To make it simple, there was a champion in the legislature, and the legislator's name was Shawn Webster." In *Bringing Down the Silos*, a document prepared for the Ohio Board of Regents, (Tafel, 2010) suggested that Ohio's state legislators, particularly Representative Shawn Webster, "made credit transfer a personal priority" (p. 5) for students seeking a foothold in the knowledge-based economy. Representative Webster (as cited in Tafel, 2010) described the legislature's commitment: "We were not going to mess around and let another

generation of college students lose time, money, and credits" (p. 21), and Representative Jim Carmichael (2006) agreed, "With reforms to the tax system and Medicaid established in the budget, the top priority for the coming year is to improve higher education" (para. 1).

Mr. T. Basswood (personal communication, April 24, 2914), a community college vice president, used an example to describe the benefits of the career and technical credit transfer policy:

> Some adult workforce programs have a credential attached (e.g., medical assisting) to them. Students can go to an adult workforce center, get one of those credentials, and go to work—but they don't get college credit. If a student in medical assisting wants to…get a two-year degree—and a lot of community colleges award two-year degrees in medical assisting—the legislature didn't want the student to repeat course work unnecessarily. For example, if a student completes a medical assisting certificate and goes to a community college, the student can apply some of their courses toward a medical laboratory technologist associate degree. Once the two-year college awards credit for their courses, the credits are in the system and are good at institutions that have similar programs, including a medical laboratory scientist bachelor's degree.

Lawmakers took steps to ensure that the state's adult workforce centers, community colleges, and public universities met their objectives, and findings suggest that the career and technical credit transfer policy may not have been implemented without legislative action. Ms. B. Cottonwood (personal communication, July 23, 2013), a member of the advisory committee, talked about the implementation of career and technical credit transfer policy: "You can fight it, but guess what will happen? The legislature will do it for you. So you

might as well do it and have a say." In a memorandum, Paula Compton (2010), associate vice chancellor of the Ohio Board of Regents, communicated that adult workforce centers, community colleges, and public universities are required to adhere to the career and technical credit transfer policy, and there participation is "backed by state statute" (para. 6).

Although the legislature passed H.B. 66 prior to Governor Strickland taking the oath of office, mounting job losses continued to provide an effective argument for reforming postsecondary education (Marcus, 2010). According to an article in the *Cincinnati Business Courier*, Ohioans expected "immediate and bold action" (Business Lessons, 2006, para. 5) following Ted Strickland's gubernatorial inauguration. An article that appeared in *State Budgeting Matters*, said he proposed a "broad vision for workforce development [that] was…potentially transformative" (Thomas, 2012, p. 11). In his *Turnaround Ohio Plan for Job Training and Lifelong Learning*, Governor Strickland (2006) called for the creation of workforce system that was demand driven, regionally focused, and adult friendly from the onset of his administration, and he partnered with the General Assembly to launch substantive changes to restore the state's postsecondary education system.

A combination of executive orders and legislation created the Ohio Department of Higher Education and furthered the implementation of the career and technical credit transfer policy. These actions made the chancellor of the Ohio Department of Higher Education a cabinet-level appointee, responsible to the governor instead of "an unresponsive" (Marcus, 2010, p. 183) nine-member independent board. It also moved adult career and technical education from the Ohio Department of Education to the Ohio Department of Higher Education that also included community colleges and public universities. These changes assured the General Assembly and the public that the governor and chancellor were united in their efforts (Fingerhut, 2008).

"Under the old system, Strickland would have been two years into his term before he was able to make even a single appointment to the Board of Regents; now the chancellor was directly accountable to him" (Marcus, 2010, p. 183). That got educators' attention, and if not, the state's major editorial pages did. The schools "must put away the daggers and one-upmanship," warned Gloria Milner (2008), online politics editor, for *The Cleveland Plain Dealer*. They had to "become team players in a way that they haven't before," wrote *The Columbus Dispatch* (as cited in Marcus, 2010, p. 183). Governor Strickland expected adult workforce centers, community colleges, and public universities to work together for the benefit of all Ohioans (J. Butternut (personal communication, June 9, 2014).

Mr. J. Butternut (personal communication, June 9, 2014), an adult education director, described Governor Strickland's commitment to the career and technical credit transfer policy: "Governor Strickland put more emphasis on it than the previous administration. When there's no pressure to act on the legislation, these types of policies just sit there." Mr. J. Butternut (personal communication, June 9, 2014), an adult education director, suggested that public institutions that enrolled a lot of students during the economic recession were not as receptive to the career and technical credit transfer policy as others. He said, "If an institution has 50,000 students [and] it doesn't struggle to attract students, it's just not that receptive to it. It just doesn't need it." Butternut said, "Governor Strickland and Chancellor Fingerhut put out some metrics for evaluating the Ohio Board of Regents. One of those objectives was to increase the number of credentials awarded to adult students, and that had a positive influence on Ohio taking steps to implement the policy."

According to a document prepared for the Ohio Board of Regents, Governor Strickland (as cited in Fingerhut, 2008b) made clear in his first State of State address that "graduating people is the core business of higher education, and the institutions in Ohio are

well aware of Governor Strickland's call, expressed in his first State of State address, to enroll 230,000 more students by 2017 and graduate an additional 20%" (p. 23). Ms. P. Sycamore (personal communication, July 11, 2014), a public university faculty member, indicated that the career and technical credit transfer policy was "very simplistic" at first; but he said, "The governor's agenda pushed us to do more. We came up with some great ideas. What you see today isn't what we started with." Governor Strickland challenged Ohio's adult workforce centers, community colleges, and public universities to be the "principal driver of Ohio's economic growth and prosperity in the 21st century" (Fingerhut, 2008, p. 11).

Document analysis and interviews indicate the career and technical credit transfer policy was not put in place overnight (College Credit Mobility, 2005). Policymakers passed legislation to compel the Ohio Department of Education and the Ohio Board of Regents to address the needs of career and technical students. Neither the legislature nor the governor relied on educators' good intentions (Marcus, 2010). Elected officials drove the implementation of the career and technical credit transfer policy through initial mandates and threats to create statewide policies and programs, yet lawmakers gave educators the flexibility to design policies and procedures to meets legislators' expectations in a timely manner (College Credit Mobility, 2005).

Faculty Involvement. Findings revealed that the General Assembly used a combination of top-down and bottom-up implementation strategies to increase the likelihood that the Ohio Department of Education and the Ohio Board of Regents would meet the objectives outlined in H.B. 66. Ms. B. Cottonwood (personal communication, July 23, 2013), a member of the advisory committee, suggested that colleagues in other states assume that legislative mandates such as H.B. 66 "are awful" but that has not been the case in Ohio. He said, "Lawmakers wrote the legislation, but they left it up to the institutions to

work out the details. They said 'This is the goal, you make it work.'" When asked about the legislature's involvement, Ms. W. Pignut (personal communication, July 11, 2014), a public university provost, concurred, "The General Assembly was very active, passing legislation and handing it off to the Ohio Department of Education and the Ohio Board of Regents to implement it."

A report published by the Ohio Board of Regents (2006), states that the Ohio Department of Education and the Ohio Board of Regents convened an advisory committee and a steering committee to manage the implementation of the career technical credit transfer policy. The advisory committee was co-chaired by Marsha Leonard, superintendent of the Greene County Career Center, and Charlotte Hatfield, president of Washington State Community College. The steering committee was led by Paula Compton, director of articulation and transfer for the Ohio Board of Regents. Both committees consisted of career and technical educators at the secondary and postsecondary levels. The advisory committee developed an implementation strategy to meet the requirements of H.B. 66, and the steering committee supported the implementation of the career and technical credit transfer policy.

When asked about the role of faculty in the implementation of the career and technical credit transfer policy, Ms. B. Cottonwood (personal communication, July 23, 2013), a member of the advisory committee, said, "faculty were the backbone of the process." Mr. E. Hemlock (personal communication, July 14, 2014), a community college president, explained the state's commitment to faculty involvement:

> From the very beginning, the Ohio Board of Regents and the Ohio
> Department of Education made a commitment to include faculty in the
> implementation process. This commitment led to the creation of panels

made up of faculty from adult workforce centers, community colleges, and

public universities. Pulling together faculty from across the state was an

expensive endeavor; but by including faculty in the implementation process,

it gave the career and technical credit transfer policy credibility with

educators at all levels—adult workforce centers, community colleges, and

public universities. The General Assembly allocated about $2 million to

support the implementation process, and it's continued to appropriate similar

amounts every biennium to expand the scope of the career and technical

credit transfer policy.

Ms. P. Sycamore (personal communication, July 11, 2014), a public university faculty

member, said, "Faculty from adult workforce centers, community colleges, and public

universities were represented, and they were involved throughout the implementation

process." Although the General Assembly passed the legislation that led to the career and

technical credit transfer policy, the faculty played the lead role in implementing a policy that

would benefit Ohio's students and educational institutions.

Michael McDaniel, superintendent of Ashland County-West Holmes Career Center,

served on the advisory committee. In a document prepared by the Association of Career and

Technical Education, he asserted that the implementation of the career and technical credit

transfer policy "was a big step for the state….it was the first time that all the participating

institutions were at the table" (as cited in Hyslop, 2008, p. 2). Ms. B. Cottonwood (personal

communication, July 23, 2013), a member of the advisory committee, described an early

meeting of the adult workforce center, community college, and public university faculty:

When we brought the faculty together, we established some ground rules for

the group. We challenged them to put students' needs first, work together,

and get something done—not to fight for their institutions' interests or to keep something good from happening.

Multiple interviewees stressed the importance of getting people together. Ms. C. Hawthorn (personal communication, July 23, 2014), a member of the steering committee, said, "Relationship building is important….You have to connect with people face to face. If not, it's going to be really hard to get buy in." Mr. T. Basswood (personal communication, April 24, 2014), a community college vice president, agreed when talking about the career and technical credit transfer policy: "To make it work, the major players had to be involved. They had to be won over, and I think that tempered some of their negativity." Other interviewees agreed that these face-to-face gatherings were beneficial, but they described some of the initial meetings as mentally taxing.

Ms. F. Chestnut (personal communication, June 24, 2013), a member of the steering committee, said, "They put us in a room together; they tolerated our discomfort and our suspicions of each other." Mr. J. Butternut (personal communication, June 9, 2014), an adult education director, concurred, "All of the really hard issues were hammered out in the advisory committee and the steering committee meetings. There was a lot of truth telling. Those were some rough meetings." Ms. A. Shadbush (personal communication, June 24, 2013), a member of the advisory committee, shared how faculty involvement helped implementing agents resolve conflicts: "At one meeting, faculty were reviewing career and technical courses at adult workforce centers, but there was no consistency among them. Some of them issued transcripts, and some of them didn't." It took a while for adult workforce center, community college, and public university representatives to cultivate positive, working relationships with each other. When asked about faculty contributions to implementation process, Ms. B. Cottonwood (personal communication, July 23, 2013), a

member of the advisory committee, said, "It's been a journey of trust. It wasn't easy at the beginning, but the more we worked together, the more we trusted each other, and the more progress we made."

Career and technical faculty from adult workforce centers, community colleges, and public universities from across the state came together to discuss learning objectives, review courses, and align curriculums. Ms. B. Cottonwood (personal communication, July 23, 2013), a member of the advisory committee, said, "The faculty did the work." Interviewees continued to emphasize the importance of faculty involvement. Ms. W. Pignut (personal communication, July 11, 2014), a public university provost, maintained, "If faculty members aren't involved somehow, someway in the process, it falls apart and barriers get erected where they don't need to be." When asked how faculty involvement shaped the career and technical credit transfer policy, Ms. C. Hawthorn (personal communication, March 18, 2014), a member of the steering committee, shared the following example:

> If I get faculty from Toledo and faculty from Cleveland and faculty from
> Cincinnati involved in this, then the other faculty say, 'Oh okay, it's not just
> some bureaucrat from Columbus who did this; faculty like me helped do
> this.' It helped get buy in.

Faculty involvement helped adult workforce centers, community colleges, and public universities put aside their self-interests and buy into the career and technical credit transfer policy. In *Bringing Down the Silos*, a document prepared for the Ohio Board of Regents, Tafel (2010) wrote, "This is what Ohio's articulation and transfer story is all about" (p. 9). Elected officials urged educators to abandon self-serving practices and marshal the state's network of adult workforce centers, community colleges, and public universities to assist more Ohioans

in earning postsecondary certificates and degrees and make Ohio more attractive to current and prospective employers (Fingerhut, 2008).

When asked about opportunities for faculty to give input, Mr. S. Hornbeam (personal communication, June 9, 2014), an adult education director, said, "The legislature let us implement it. We know it better than they do." Ms. B. Cottonwood (personal communication, July 23, 2013), a member of the advisory committee, agreed that lawmakers initiated the process, but faculty shaped the career and technical credit transfer policy. Educators, not legislators, chose how to meet the goals put forth in H.B. 66. According to a document published by the Ohio Board of Regents (2006), the Ohio Department of Education and the Ohio Board of Regents assembled faculty committees to explore the challenges associated with H.B. 66 and identify strategies for achieving its objectives. Chancellor Fingerhut (as cited in Tafel, 2010) said, "Credit transfer cannot be imposed from above….Faculty members are responsible for the higher education curriculum and are the stewards of their academic disciplines" (p. 4). Faculty participation enhanced the legitimacy of the career and technical credit transfer policy and the implementation process too.

According to an article in *The Daily Record*, Speaker of the House, Jon Hustead (as cited in Carmichael, 2006) challenged Ohio's adult workforce centers, community colleges, and public universities "to work collaboratively, rather than competitively, with members of the General Assembly, for the benefit of all of Ohio's students" (para. 1). Chancellor Fingerhut (2008) reminded educators and elected officials that the success of the career and technical credit transfer policy rested on stakeholders' willingness to share responsibility for its implementation. The Ohio Board of Regents, the Ohio Department of Education, public adult and secondary career-technical education institutions, and state-supported institutions of higher education eventually worked together to meet the educational needs of Ohioans.

As Governor Strickland (as cited in Marcus, 2010, p. 182) said, "I am not your enemy, I am your friend." The governor and the General Assembly worked with, not against the adult workforce centers, community colleges, and public universities.

In describing the role of lawmakers, Chancellor Fingerhut (2008b) said, "Throughout my tenure as chancellor, the General Assembly has been a valued partner on issues related to higher education" (p. 5). When asked about educators' relationship with the legislature, Dr. B Cottonwood (personal communication, July 23, 2013), a member of the advisory committee, said, "What had begun as a contentious relationship developed into broad-based support in the form of legislation, continued funding, and directives that helped put the career and technical credit transfer policy in place." Ms. W. Pignut (personal communication, July 11, 2014), a public university provost, described the experience: "I enjoyed working with colleagues from across the state."

In B*ringing Down the Silos*, a document prepared for the Ohio Board of Regents, Tafel (2010) stated "In higher education, inertia is a powerful force, and the 'just wait it out, it will go away' mentality can be pervasive" (p. 44). According to interviews and document analysis, the legislature played an important role in making the career and technical credit transfer policy a reality, but it recognized that a government-led, top-down implementation strategy was not the solution. When asked if implementation should be left up to the educators, Ms. W. Pignut (personal communication, July 11, 2014), a public university provost, said, "I think so. I think that's necessary if you want people to innovate."

The General Assembly encouraged the Ohio Department of Education and the Ohio Board of Regents to work with career and technical faculty at Ohio's adult workforce centers, community colleges, and public universities to implement a robust career and technical credit transfer policy as opposed to some of the simple solutions envisioned by

past legislators. Representative Sean Webster (as cited in Tafel, 2010) said, "I grew to understand and appreciate more fully the nuances and complications…around credit transfer….Over time, I became more of a friendly critic [and] advocate of their work. So we gave them the legislation and resources needed to build capacity" (p. 21). In a document prepared for the Ohio Board of Regents, Chancellor Fingerhut (2008b) stated, "It is impossible to overstate the role of faculty" (p. 61). Faculty participation in the implementation of the policy, particularly in the development of the curriculum review process, helped the General Assembly, the Ohio Board of Regents, and the Ohio Department of Education gain the confidence of educators across the state and gave the policy credibility with stakeholders. It might seem easier to impose something such as the career and technical credit transfer policy from the top down, but Ohio's successes suggest that a combination of top-down and bottom-up methods might lead to greater success.

Sensemaking. Although I suggested that sensemaking might play a significant role in the implementation of the career and technical credit transfer policy, it did not emerge as a major them in document analysis and interviews. Sensemaking has been described as drawing on one's prior knowledge to make sense of unexpected events and make decisions in ambiguous situations, yet it can occur without one's knowledge (Eddy, 2003; Honig & Hatch, 2004; Ross School of Business, 2008; Spillane et al., 2002; Weick, 1995). When asked what factors positively shaped the implementation of the career and technical credit transfer policy, Ms. F. Chestnut, personal communication, June 24, 2013), a member of the steering committee, said, "Ohio put the stakeholders in a room together and urged them to get to know each other….At first, it was very hierarchical. Some of the community colleges insulted the adult workforce centers, and the adult workforce centers walked away angry after the first meeting."

Interviewees described activities that sounded like sensemaking, but they never used the term sensemaking, Interviewees described meetings where they struggled to figure out H.B. 66 (see Appendix A). Ms. P. Sycamore (personal communication, July 11, 2014), a public university faculty member, said the following:

> It was hard. We were building the car as we were driving it. It was brand new. Nobody had ever done it before. We tried somethings, somethings that didn't work, and ripped them up and started over….Like any relationship, it evolved over time. The more faculty worked together, the more effective they became….It wasn't perfect, nothing is, but it helped that we had the right people at the table—faculty members who cared about students, were willing to learn from each other, and work together. Most of them hadn't worked…with each other before, but they learned from each other and benefited from the experience.

Although Dr. Sycamore's description depicts a group who might be making sense of the legislation and exploring strategies for meeting the legislature's objectives, interviewees appeared to emphasize alignment, faculty involvement, and student-centered attitude more than sensemaking.

Interviewees talked about the importance of faculty involvement, communication, and listening. Ms. B. Cottonwood (personal communication, July 23, 2013), a member of the advisory committee, said, "Making it better and moving it forward…means acknowledging that your colleague down the street can do just as good a job educating students as you can." Sensemaking may have played a larger role than interviewees indicated, but it did not emerge as a major theme.

CHAPTER 5

Recommendations

Drawing on my research findings, I will present five recommendations for practitioners to consider when implementing strategies similar to the career and technical credit transfer policy or when putting policies into practice that span multiple institutions, systems, or both. Alignment, faculty involvement, student-centered attitude, past successes, and political pressure may aid practitioners seeking to reform higher education. State policymakers flexed their political muscles to assist career and technical students pursuing postsecondary certificates and degrees at Ohio's community colleges and public universities. The Ohio House of Representatives passed H.B. 66 (ORC 3333.162) (see Appendix A), and lawmakers made changes to the Ohio Department of Education and the Ohio Board of Regents to encourage collaboration among adult workforce centers, community colleges, and public universities and make it easier for career and technical students to further their educations. State leaders recruited educators to adapt H.B. 66 to local conditions, and educators built on past successes to implement the career and technical credit transfer policy to achieve the legislature's intentions. Ohio's success provides five important lessons for practitioners.

Alignment

Alignment appeared to play a significant role in the implementation of the career and technical credit transfer policy. It helped unite adult workforce centers, community colleges, and public universities, and it made it easier for these institutions to align their career and

technical curriculums. In 2005, the Ohio House of Representatives passed H.B. 66, and it directed the Ohio Board of Regents to work collaboratively with the Ohio Department of Education's Office of Career-Technical and Adult Education, public adult and secondary career-technical education institutions, and state-supported institutions of higher education to establish criteria, policies, and procedures to transfer agreed-upon technical courses from one system to another (Ohio Board of Regents, 2006). In a document prepared for the Ohio Board of Regents, Roy Church (as cited in Tafel, 2010) said, "Change, especially system change is hard work" (p. 30) when referring to the implementation of the career and technical credit transfer policy. Interviewees concurred that implementing a policy that spanned multiple systems (e.g., Ohio Department of Education, Ohio Board of Regents) and multiple institutions (e.g., adult workforce centers, community colleges, public universities) was challenging. While describing the relationship between adult workforce centers, community colleges, and public universities, Ms. B. Cottonwood (personal communication, July 23, 2013) suggested that overcoming the chasm between these institutions was one of the biggest challenges that implementing agents had to overcome. She and others indicated that the state's public institutions tended to compete against each other rather than work together.

The Governor's Commission on Higher Education & the Economy recommended that the state leverage the strengths of its adult workforce centers, community colleges, and public universities; and educators from across the state lobbied to bring all adult related educational programs under one state agency (E. Hemlock, personal education, July 14, 2014). Still, these changes were not initiated until 2007, after Ted Strickland's gubernatorial inauguration. The chancellor of the Ohio Board of Regents became the chancellor of the Ohio Department of Higher Education, a cabinet-level agency, directly responsible to the

governor, and adult career and technical education was moved from the Ohio Department of Education (i.e., secondary education) to the Ohio Department of Higher Education. "Having all of these agencies under one roof…made it easier to work across institutions" (J. Mullins, personal communication, June 9, 2014). Moving adult career and technical education from secondary education to postsecondary education helped unite adult workforce centers, community colleges, and public universities, and it made it easier to align their curriculums as they were all responsible to the same office—the chancellor of the Ohio Department of Higher Education. These changes made adult workforce centers, community colleges, and public universities accountable to the chancellor and to the governor and increased the likelihood that they were moving in the same direction. Since moving adult career and technical education from secondary education to postsecondary education, the career and technical credit transfer policy has grown from 5 to more than 20 subject areas.

According to the National Governors Association (2009), these changes were not unique to Ohio. A few other states made similar changes to align their postsecondary education institutions and workforce development efforts. While talking about the realignment of the state's adult workforce centers, community colleges, and public universities, Ms. A. Shadbush (personal communication, June 24, 2013) said, "It made a lot of sense." The data suggest that practitioners may want to align their educational systems and modify their educational governance structures in ways that help them realize their objectives. If not, their reform efforts may be foiled by competition between their state's educational institutions, systems, or both.

Past Successes

Data suggest that past successes facilitated the implementation of the career and technical credit transfer policy. The data from multiple interviews and document analysis

indicate that the Ohio Board Department of Education and the Ohio Board of Regents built on past achievements to implement "one of the most comprehensive and expansive reforms" (Zimpher as cited in College Credit Mobility, 2005, p. 20) in adult education. Granting credit for career and technical courses that are equivalent to college-level courses taught at Ohio community colleges and public universities was a natural extension of the state's prior efforts. According to Mr. S. Hornbeam (personal communication, June 9, 2014), implementing agents should "start with the easy stuff, the programs [they] are most familiar with, and work towards the more difficult programs." His recommendation is consistent with professional literature that suggests that momentum increases over time as organizations meet their goals. In *Good to Great*, Collins (2001) suggested that organizations achieve cumulative success "step by step, action by action, decision by decision, [and] turn by turn of the flywheel—that adds up to sustained and spectacular results" (p. 165). Ohio educators did not put the career and technical credit transfer policy in place overnight. Minor adjustments and small victories "laid the ground work" (C. Hawthorn, personal communication, March 18, 2014) for significant changes later.

The Ohio Department of Education and the Ohio Board of Regents initially evaluated career and technical learning experiences in five technical areas, including automotive technology, engineering technology, information technology, medical assisting, and nursing. Since the beginning of the implementation process in 2005, educators "championed the transformation of their student mobility and transfer practices" (Zimpher as cited in Tafel, 2010, p. 35) and expanded opportunities for career and technical students in over 20 subject areas. Ms. B. Cottonwood (personal communication, July 23, 2013) said, "Past success leads to success….Like any relationship, it evolved overtime. The more faculty worked together, the more effective they became." Findings indicate that implementing

agents' confidence in each other and their commitment to implementing the career and technical credit transfer policy grew as they successfully realized smaller, less challenging objectives.

Mr. T. Basswood (personal communication, April 24, 2014) said, "At first we focused on [subject] areas that had some kind of [industry] credential attached to them. That was the low-hanging fruit….But then we developed end-of-program assessments for programs that didn't have industry credentials attached to them." Implementing agents focused on these areas first and developed models for additional career and technical areas that followed. These and other past successes served as a catalyst for the implementation of the career and technical credit transfer policy, and their importance is supported by professional literature. Scholars agree that cohesion, efficacy, and potency are essential to collaborative efforts such as the implementation of the career and technical credit transfer policy, and that these attributes tend to grow as groups succeed over time (Beal, Cohen, Burke, & McLendon, 2003; Kozlowski & Ilgen, 2006; Mullen & Copper, 1994). Group efficacy refers to the group's confidence in its ability to thrive in a specific context (e.g., subject areas that have an industry credential attached to them) whereas group potency describes the group's confidence in its ability to succeed in multiple contexts (e.g., subject areas that do not have an industry credential attached to them) (Kozlowski & Ilgen, 2006). The implementation of the career and technical credit transfer policy was far more difficult than past initiatives, and it represented the culmination of Ohio's commitment to articulation and transfer efforts aimed at helping more students earn postsecondary certificates and degrees. Based on my findings, I encourage practitioners to pursue safer, smaller victories before attempting to put riskier, far-reaching reforms in place.

Faculty Involvement

Faculty involvement appeared to play a significant role in the implementation of the career and technical credit transfer policy. Findings suggest that many educators and institutions did not embrace the Ohio General Assembly's legislative mandate right away, yet faculty involvement swayed some naysayers. "A lot of people thought it was being forced upon them" (A. Shadbush, personal communication, June 24, 2013), and many faculty were very "protective of their discipline" (J. Butternut, personal communication, June 9, 2014). Many institutions, including adult workforce centers, were more interested in establishing bilateral agreements with neighboring institutions than implementing policies that made it possible for career and technical students to receive college credit and earn postsecondary credentials at community colleges and public universities across the state.

The Ohio General Assembly recognized that educators, particularly teaching faculty, were more likely to meet the objectives outlined in H.B. 66 if they played a significant role in shaping the implementation of the career and technical credit transfer policy. Most faculty serve as thinkers, not doers (Philpott & Strange, 2003, p.91), and they do not think of themselves as laborers (Fish, 2007). Organizations such as colleges and universities that are made up of highly educated professionals turn the traditional top-down management philosophy upside down and challenge conventional decision-making patterns (Kezar, 2003; Lapworth, 2004). Expectations may vary from one institution to another, but most teaching faculty expect to participate in institutional decision-making, particularly those decisions that affect their academic disciplines (Miller, 2003; Morphew, 1999). Ms. B. Cottonwood (personal communication, July 23, 2013) said, "Lawmakers wrote the legislation, but they left it up to the institutions to work out the details." Representative Sean Webster (as cited in Tafel, 2010) said, "I grew to understand and appreciate more fully the nuances and

complications…around credit transfer….Over time, I became more of a[n]…advocate of their work" (p.21). The Ohio General Assembly provided the legislative push and the resources (i.e., $2.5 million per biennium) to put the policy in place, but left the details up to the educators. The Ohio General Assembly gave the Ohio Department of Education and the Ohio Board of Regents a goal but directed them to draw on their experience as educators to figure out the best way to meet the legislature's objectives expressed in H.B. 66.

Although the legislation jumpstarted the implementation, lawmakers won over many detractors by handing the process off to adult workforce center, community college, and public university leaders. According to Ms. B. Cottonwood (personal communication, personal communication, July 23, 2013) policymakers said, "This is the goal; you make it work." Even though the state legislature passed a bill that required the Ohio Department of Education and the Ohio Board of Regents to establish criteria, policies, and procedures to transfer agreed-upon technical courses from one system to another (Ohio Board of Regents, 2006), the governor, the Ohio General Assembly, and the chancellor demanded that adult workforce centers, community colleges and public universities work together. They ensured that educators, particularly teaching faculty, were "the backbone" (E. Hemlock, personal communication, July 14, 2014) of the implementation process, and they allowed them to adapt H.B. 66 to local conditions. Educators, not policymakers, implemented the career and technical credit transfer policy. Other faculty appreciated that it was their colleagues, not "some bureaucrat from Columbus" (C. Hawthorn, personal communication, March 18, 2014) who put a policy in place that addressed the concerns of teaching faculty and met the needs of career and technical students.

Faculty participation helped the Ohio Department of Education and the Ohio Board of Regents win over the faculty, and it even convinced many of those members who were

not directly involved in the implementation process to buy in to the career and technical credit transfer policy as well (E. Hemlock, personal communication, July 14, 2014). The implementation of the career and technical credit transfer policy suggests that without faculty involvement, the implementation process would have "fallen apart" (W. Pignut, personal communication, Jul 11, 2014), and the objectives of H.B. 66 would not have been met. Their participation in the implementation of the policy, particularly in the development of the curriculum review process, helped the Ohio General Assembly, the Ohio Board of Regents, and the Ohio Department of Education gain the confidence of educators across the state and gave the policy credibility with stakeholders. It might have been easier to impose the career and technical credit transfer policy from the top down, but Ohio's successes suggest that a combination of top-down (i.e., legislation) and bottom-up (i.e., turning the implementation process over to educators) methods might lead to greater, long-term success. Lawmakers and others would do well to consider how they might involve faculty in meaningful ways when seeking to change postsecondary education.

Student-Centered Attitude

State leaders' and implementing agents' student-centered attitude appeared to facilitate the implementation of Ohio's career and technical credit transfer policy, yet Ohio's adult workforce centers, community colleges, and public universities have not always put students' interests ahead of their own needs. Chancellor Fingerhut (2008b) said, "Ohio has been ill-served by competition between institutions for students and resources, rather than the collaboration that would benefit all Ohioans" (p. 3). To ensure that the Ohio Department of Education and the Ohio Board of Regents addressed the needs of career and technical students, the Ohio General Assembly directed them to work together to establish criteria, policies, and procedures to transfer agreed-upon technical courses from one system

to another as described in H.B. 66 (see Appendix A). Speaker of the House, Jon Hustead (R-Kettering) challenged Ohio's adult workforce centers, community colleges, and public universities "to work collaboratively…for the benefit of all of Ohio's students" (as cited in Carmichael, 2006, para. 1). State leaders and implementing agents, in particular, did not adopt a student-centered attitude by happenstance.

When describing the selection of faculty and staff to assist in the implementation of the career and technical credit transfer policy, Ms. B. Cottonwood (personal communication, July 23, 2013) said, "Academic leaders identified the right people. They could have sent people who would've fought for their individual institution's interests, but they sent people who had a vision, who worked together, and who moved the process forward." The selection process is reminiscent of the "get the right people on the bus" (Collins, 2001, p. 41) strategy expressed in *Good to Great*. Describing the actions of executives who transformed good companies into great organizations, Collins (2001, p. 41) wrote the following:

> The executives who ignited the transformations from good to great did not
> first figure out where to drive the bus and then get people to take it there.
> No, they *first* [emphasis in original] got the right people on the bus (and the
> wrong people off the bus] and *then* [emphasis in original] they figured out
> where to drive it.

Ohio leaders took a similar approach to ensure that adult workforce centers, community colleges, and public universities put students' interest first and encouraged others to do the same. Ohio's success suggests that "you need the right mix of people" (W. Pignut, personal communication, July 11, 2014) with the right attitude to implement a policy that spans multiple systems (e.g., Ohio Department of Education, Ohio Board of Regents) and multiple institutions (e.g., adult workforce centers, community colleges, public universities).

According to Ms. A. Shadbush (personal communication, June 24, 2013), "You need open-minded, progressive people who value education regardless of where it occurs." State leaders challenged implementing agents and implementing agents challenged local actors (e.g., faculty) to "put students' needs first, to work together, and to get something done— not to fight for their institution's interests or to keep something good from happening" (B. Cottonwood, personal communication, July 23, 2013). The Ohio Department of Education and the Ohio Board of Regents ensured that local actors understood that H.B. 66 was passed to help career and technical students earn college credit and attain postsecondary certificates and degrees at community colleges, public universities, or both, and they engaged local actors in "building a culture committed to transfer" (E. Hemlock, personal communication, July 14, 2014). Ohio's student-centered attitude helped the Ohio Department of Education and the Ohio Board of Regents overcome a lot of the reluctance expressed by adult workforce centers, community colleges, and public universities about the career and technical credit transfer policy.

In describing the activities surrounding the implementation of the career and technical credit transfer policy, Ms. W. Pignut (personal communication, July 11, 2014) suggested that Ohio was exploring a lot of options for enlarging the pipeline between adult workforce centers, community colleges, and public universities to meet the needs of students. He also indicated that Ohio's commitment to students helped implementing agents work through difficulties. Many faculty acknowledged that the career and technical credit transfer policy was not ideal, but they recognized it as necessary. Eddy and Armey (2014) indicated that institutions are more likely to work together rather than against each other if they are seeking the same goal (p. 57), and this proved to be true in Ohio. When describing the implementation of the career and technical credit transfer policy, one interviewee

compared it to building a car. Ms. P. Sycamore (personal communication, July 11, 2014) said. "We were building the car as we were driving it. It was brand new. Nobody had ever done it. We tried somethings, somethings that didn't work, and ripped them apart and started over." Implementing agents' commitment to helping career and technical students attain postsecondary credentials helped them identify strategies for achieving the objectives in H.B. 66 (see Appendix A) and addressed the needs of adult, career and technical students.

Documents and interviewees attributed Ohio's success to its "determination to make…student mobility a shared responsibility…that benefit[s] all Ohioans" (Tafel, 2010) and "the resilience of those involved" (F. Chestnut, personal communication, June 23, 2013) in making the career and technical credit transfer policy a reality. This scenario suggests that implementing policies that span multiple systems (e.g., the Ohio Department of Education, the Ohio Board of Regents), multiple institutions (e.g., adult workforce centers, community colleges, public universities), or both, may depend on implementing agents' willingness to abandon individual self-interest in favor of objectives that address student, institutional, and state needs. It also provides concrete examples for fostering a student-centered philosophy that moves local actors to buy in to the end goal.

Political Pressure

Although the implementation of the career and technical credit transfer policy was student-centered and faculty-driven, findings suggest that the Ohio Department of Education and the Ohio Board of Regents would not have initiated the career and technical credit transfer process on their own. Several stakeholder groups encouraged the Ohio Department of Education and the Ohio Board of Regents to address the concerns of adult, career and technical students seeking postsecondary credentials at Ohio's community colleges and public universities, yet they disregarded their recommendations. When

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describing the Ohio General Assembly's involvement in postsecondary education, Ms. F. Chestnut (personal communication, June 24, 2013) said, "Most educators don't like being told what to do." Legislators, specifically Representative Shawn Webster, made "credit transfer a personal priority" (Tafel, 2010) and directed the Ohio Board of Regents to collaborate with the Ohio Department of Education to establish criteria, policies, and procedures to transfer agreed-upon technical courses from one system to another (Ohio Board of Regents, 2006).

When the legislature passed H.B. 66 in 2005, Ohio was continuing to lose traditional manufacturing jobs and many constituents began looking to postsecondary institutions to prepare U.S. workers for jobs in the knowledge-based economy, including high-skill factory jobs (Education Commission of the States, 2009). *The Cincinnati Business Courier* (2006) reported that Honda Motor Company built a $500 million plant in Indiana instead of Ohio because of Indiana's commitment to workforce development. Ohio's loss cost Representative Webster's district over 4,000 manufacturing jobs. Many of Ohio's career and technical students took the shortest path to full-time, seeking employment as soon as possible. Yet, others found out that coursework completed at adult workforce centers was of no value when they transferred to postsecondary institution, even when seeking technical certificates and degrees in the same subject area (Webster as cited in Tafel, 2010).

Bolman and Deal (2013) argued that bureaucracies made up of highly educated professionals "change at a glacial pace" (p. 80). The Ohio General Assembly came to the same conclusion regarding the Ohio Department of Education and the Ohio Board of Regents. Regarding the Ohio legislature's decision to pass H.B. 66 and give the Ohio Department of Education and the Ohio Board of Regents an aggressive timeline to meet its expectations, Ms. F. Chestnut (personal communication, June 24, 2013) summed up the

legislature's stance: "Enough is enough! If they won't do it on their own, we'll legislate it."

While discussing the career and technical credit transfer policy, Ms. A. Shadbush (personal

communication, June 24, 2013) said, "I don't think I would make it mandatory." But other

educators admitted that political pressure was necessary. Mr. J. Butternut (personal

communication) said, "When there's no pressure, these policies just sort of sit there." Eddy

and Amey (2014) claimed that mandates rarely achieve desired results (p. 9), but Ohio's

success suggests that legislative directives may assist other policymakers in seeking similar

objectives.

In addition to passing H.B. 66, the Ohio General Assembly partnered with Ted

Strickland, the state's newly elected governor, to make changes to the Ohio Department of

Education and the Ohio Board of Regents to facilitate the implementation of the career and

technical credit transfer policy. A combination of executive orders and legislation made the

chancellor of the Ohio Department of Higher Education a cabinet-level appointee,

responsible to the governor instead of "an unresponsive" (Marcus, 2010, p. 183) nine-

member independent board. It also moved adult career and technical education from the

Ohio Department of Education to the Ohio Department of Higher Education that already

included community colleges and public universities (Fingerhut, 2008).

These changes got the attention of educators who recognized that Governor

Strickland, the Ohio General Assembly, and Chancellor Fingerhut were united in their desire

to make higher education a principal driver of Ohio's economic growth and prosperity in the

21st century. In reference to the career and technical credit transfer policy, Ms. P. Sycamore

(personal communication, July 11, 2014) said, "The governor's agenda pushed us to do

more. We came up with some great ideas. What you see today isn't what we started with."

As in Ohio, policymakers are beginning to use legislative mandates and political pressure

more frequently to ensure that state agencies achieve lawmakers' directives (Eddy & Amey, 2014, p. 11). The implementation of the career and technical credit transfer policy demonstrates that political pressure, particularly when coupled with strategies that are sensitive to the needs of highly educated professionals can go a long way in implementing far-reaching policies.

Summary

Tafel (2010) asserted that "inertia is a powerful force, and the 'just wait it out, it will go away' mentality can be pervasive" (p. 44) in higher education. Nevertheless, this single, descriptive case study demonstrates how policymakers, implementing agents, local actors, and others shaped the implementation of the career and technical credit transfer policy. Ohio's success suggests that concerted attention to alignment, faculty involvement, student-centered attitude, past successes, and political pressure might facilitate similar efforts in other settings. To facilitate the implementation of strategies such as the career and technical credit transfer policy that span multiple institutions, systems, or both, practitioners should consider the following recommendations.

1. Apply political pressure (e.g., legislation) to increase the likelihood that implementing agents act on lawmakers' recommendations and implement policies that fulfil their objectives.

2. Align institutions (e.g., adult workforce centers, community colleges, and public universities) and modify reporting lines to promote cooperation and increase accountability.

3. Recruit individuals who possess a student-centered attitude and encourage implementing agents and local actors to put students' interests ahead of self-interests.

4. Involve faculty in meaningful ways and empower them to draw on their experience as educators to figure out the best way to realize legislators' intentions.

5. Build on past successes. Pursue smaller, safer victories to increase group cohesion, efficacy, and potency before attempting larger, riskier challenges.

Eddy and Amey (2014) stated that "policy mandates seldom achieve their targeted objectives or changes to the system" (p. 23), yet legislation did motivate the implementation of Ohio's career and technical credit transfer policy. Since the passage of H.B. 66 in 2005, the policy has grown from 5 to more than 20 subject areas. Governor Strickland, the Ohio General Assembly, and Chancellor Fingerhut recognized the unique characteristics of Ohio's educational institutions (i.e., adult workforce centers, community colleges, public universities) and systems (i.e., Ohio Department of Education, Ohio Board of Regents). In addition to legislative mandates, they employed strategies that considered these differences and achieved policymakers' intentions.

This study described the implementation of the career and technical credit transfer policy and identified strategies for implementing similar policies that span multiple institutions, systems, or both. However, others may want to ask questions that were beyond the scope of this study. Specifically, how might awarding college credit for courses completed at non-degree granting institutions (e.g., adult workforce centers) affect accreditation? In Ohio, adult workforce centers, community colleges, and public universities must adhere to accreditors' requirements (S. Hornbeam, personal communication, June 9, 2014). The Commission on Accreditation and School Improvement accredits Ohio's adult workforce centers, and the Higher Learning Commission accredits the state's community colleges and public universities. The Higher Learning Commission responded favorably to

the implementation of the career and technical credit transfer policy, and it supported Ohio's decision to award college credit for equivalent career and technical courses completed at Ohio's adult workforce centers (Ryan Cupp, personal communication, November 16, 2015).

How might changes in alignment shape other aspects of the state's postsecondary education system? The Ohio legislature made the chancellor of the Ohio Board of Regents the chancellor of the Department of Higher Education, a cabinet-level agency, directly responsible to the governor instead of a nine-member independent board. These changes appeared to contribute to the implementation of the career and technical credit transfer policy, yet they may influence Ohio's adult workforce centers, community colleges, and public universities in unexpected ways.

How did Ohio overcome inertia? Findings suggest that political pressure played a significant role in overcoming the pecking order that exists among adult workforce centers, community colleges, and public universities. Yet, a more in-depth look into how Ohio overcame the "just wait it out, it will go away" mentality in higher education, may identify additional drivers that helped Ohio overcome implementing agents' reluctance to change. Answering these questions might further assist others interested in reforming postsecondary education.

REFERENCES

Advisory Committee on the Transfer of Adult Career Technical Programs. (2008, January

    15). Advisory committee on the transfer of adult career and technical programs.

    [Meeting minutes]. Retrieved from

    http://uso.edu/network/workforce/documents/meetings

    /notes/Jan15AdultTransferAdvisoryCommitteeFinal.pdf

Aldridge, A., & Herzfeld, J. (2003, October 26). Committee looking to boost Ohio colleges.

    The Lantern. Retrieved from http://www.thelantern.com

Alssid, J.L., Gruber, D., Jenkins, D., Mazzeo, Roberts, B., & Stanback-Stroud, R. (2005).

    Engaging institutions in workforce development: Career pathways for disadvantaged

    adults. *New Directions for Institutional Research, 128,* 83-97.

Altbach, P.G. (2005). Harsh realities: The professoriate faces a new century. In P.G. Altbach,

    R.O. Berdahl, & P.J. Gumport (Eds.), *American higher education in the twenty-first century:*

    Social, political, and economic challenges (pp. 287-314). Baltimore, MD: Johns Hopkins

    University Press.

American Association of Community Colleges, & American Association of State Colleges

    and Universities. (2004). Improving access to the baccalaureate. Washington: DC:

    American Association of Community Colleges, & American Association of State

    Colleges and Universities.

American Association of University Professors. (2006). *Statement on government of colleges and*

    universities. Retrieved from

http://www.aaup.org/AAUP/pubsres/policydocs/contents/governancestatement.h
tm.

Ashburn, E. (2006, December 15). Former autoworkers resist colleges' call. *Chronicle of Higher Education*. Retrieved from http://chronicle.com/article/Former-Autoworkers-Resist/27872.

Ashburn, E. (2009, September 21). A community college gets into the thick of job training. *Chronicle of Higher Education*. Retrieved from http://chronicle.com/article/A-Community-College-Gets-Into/48505/.

Awbrey, S.M. (2005). General Education Reform as Organizational Change: The Importance of Integrating Cultural and Structural Change. *Journal of General Education, 54*(1), 1-21.

Ayers, D.F. (2002). Mission priorities of community colleges in the southern United States. *Community College Review, 30*(3), 11-30.

Banachowski, G. (1996). Review of part-time faculty in the community college. *Community College Review, 24*, 49-62.

Barrett, S.M. (2004). Implementation studies: Time for a revival? Personal reflections on 20 years of implementation studies. *Public Administration, 82,* 249-262.

Bastedo, M.N. (2005). Curriculum in American higher education: The historical roots of contemporary issues. In P.G. Altbach, R.O. Berdahl, & P.J. Gumport (Eds.), *American higher education in the twenty-first century: Social, political, and economic challenges* (pp. 462-485). Baltimore, MD: Johns Hopkins University Press.

Beal, D.J., Cohen, R.R., Burke, M.J., & McLendon, C.L. (2003). Cohesion and Performance in Groups: A meta-analytic clarification of construct relations. *Journal of Applied Psychology, 88*(6), 989-1004.

Benjamin, R., and Carroll, S. (1998). The implications of the changed environment for

    governance in higher education. In W. Tierney (Ed.), *The responsive university* (pp. 92-

    119). Baltimore, MD: Johns Hopkins University Press.

Benton, C.J. (1997). *Faculty involvement in two-year college governance* (Doctoral dissertation).

    Available from ProQuest Dissertations and Theses database. (UMI No. 9738344)

Berry, J.M. (2009). *An examination of partnership development between community service agencies and*

    an institution of higher education: Implications for service learning (Doctoral dissertation).

    Available from ProQuest Dissertations and Theses database. (UMI No. 3340403)

Biswas, R.R., Mills, J., Prince, H. (2005, January). *Building skills, increasing economic vitality: A*

    handbook of innovative state policies. Boston, MA: Jobs for the Future.

Boggs, G.R. (2004). Community colleges in a perfect storm. *Change, 36*(6), pp. 6-11.

Bolman, L. G., & Deal, T. E. (2013). *Reframing organizations*: Artistry, choice, and leadership

    (5th ed.). San Francisco, CA: Jossey-Bass Publishers.

Bragg, D.D. (2001). The past, present, and future role of federal vocational legislation in U.S.

    community colleges. *Journal of Applied Research in the Community College, 9*(1), 57-76.

Brooks, D. (2008, July 29). The biggest issue. *New York Times.* Retrieved from

    http://www.nytimes.com/2008/07/29/opinion/29brooks.html.

Brown, S.C., Stevens, R.A., Troiano, P.F., & Schneider, M.K. (2002). Exploring complex

    phenomena: Grounded theory in student affairs research. *Journal of College Student*

    Development, 43(2), 173-183.

Brynard, P.A. (2009). Mapping the factors that influence policy implementation. *Journal of*

    Public Administration, 44, 557-577.

Bureau of Labor Statistics (2009). *Education pays in higher earnings and lower unemployment rates.*

    Retrieved from http://www.bls.gov/emp/ep_chart_001.htm.

Business lessons from Indiana. (2006, December 25). *Cincinnati Business Courier.* Retrieved

    from http://www.bizjournals.com/cincinnati/stories/2006/12/25/editorial1.html

Calhoun, M. A., & Starbuck, W. H. (2003). Barriers to creating knowledge. In M. Easterby-

    Smith & M. A. Lyles (Eds.), *The Blackwell handbook of organizational learning and*

    knowledge management (pp. 473-492). Malden, MA: Blackwell Publishing.

Campbell, D.T. (1975). Degrees of freedom and the case study. *Comparative Political Studies, 8,*

    178-193.

Campbell, D.T., & Russo, M.J. (2001). *Social measurement.* Thousand Oaks, CA: Sage

    Publications.

Campbell, D.T., & Stanley, J.C. (1966). *Experimental and quasi-experimental designs for research.*

    Chicago, IL: Rand McNally.

Carmichael, J. (2006, February 3). *The Daily Record.* Retrieved from http://www.the-daily-

    record.com/opinion/2006/02/03/a-goal-to-first-educate-then-earn-all-in-ohio

Carnevale, A. (2009). Higher education jobs. *Forum for the Future of Higher Education, 2009.*

    Retrieved from https://net.educause.edu/forum/ff09.asp

Carnevale, A., & Rose, S. (2011). *The undereducated American.* Washington, DC: Georgetown

    Center on Education and the Workforce.

Carnevale, A.P., Rose, S.J., & Hanson, A.R. (2012, June). *Certificates: Gateway to gainful*

    employment and college degrees. Retrieved from Georgetown University, Center on

    Education and the Workforce website: https://cew.georgetown.edu/wp-

    content/uploads/2014/11/Certificates.ExecutiveSummary.071712.pdf

Clark, B.R. (1988, March). The absorbing errand. Paper presented at the National

    Conference of the American Association of Higher Education, Washington, DC.

Paper retrieved from

http://www.eric.ed.gov/ERICWebPortal/detail?accno=ED297620.

Clark, L. (2012). Lawmakers continue to focus on college costs, completion. *Business Officer, 45*(7), 10-12.

Clinton, W.J. (1995, April 10). [Remarks and question and answer session]. Speech delivered to the American Society of Newspaper Editors, Dallas, TX.

Coburn, C. (2001). Collective sensemaking about reading: How teachers mediate reading policy in their professional communities. *Educational Evaluation and Policy Analysis, 23*(2), 145–170.

Coburn, C. E. & Russell, J. L. (2008). District policy and teachers' social networks. *Educational Evaluation and Policy Analysis, 30*(3), 203-235.

Coburn, C.E., & Stein, M.K. (2006). Communities of practice theory and the role of teacher professional community in policy implementation. In M.I. Honig (Ed.), *New Directions in Education Implementation: Confronting Complexity* (pp. 25-46). Albany, NY: State University of New York Press.

Cohen, A., Timmons, J.C., & Fesko, S.L. (2005). The Workforce Investment Act: How policy conflict and policy ambiguity affect implementation. *Journal of Disability Policy Studies, 15,* 221-230.

Cohen, A.M., and Brawer, F.B. (1996). *Policies and programs that affect transfer.* Washington, DC: American Council on Education.

Cohen, A.M., & Brawer, F.B. (2008). The American community college (5th ed.). San Francisco, CA: Jossey-Bass.

Cohen, A.M., Brawer, F.B., & Kisker, C.B. (2013). The American community college (6th ed.). San Francisco, CA: Jossey-Bass.

College credit mobility: Can transfer of credit policies be improved? Hearing before the

    Subcommittee on 21st Century Competiveness of the Committee on Education and

    the Workforce, House of Representatives, 109th Cong. 1 (2005)

Collins, C.L. (2008). *Using collaboration theory to learn about articulation and transfer between selected*

    community colleges and a local university (Doctoral dissertation). Available from ProQuest

    Dissertations and Theses database. (UMI No. 3314140).

Collins, J. (2001). Good to great: Why some companies make the leap…and others don't.

    New York, NY: Harper Collins.

Compton, P. (2010, January 19). *The statewide nature of (CT)^2 vs. bilateral local transfer agreements.*

    [Memorandum]. Retrieved from

    http://regents.ohio.gov/careertechtransfer/fundamental-

    information/memos/mandatory_bilateral_memo_january_19_2010.pdf

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

    ed.). Thousand Oaks, CA: SAGE Publications.

Creswell, J.W. (2007). *Qualitative inquiry and research design: Choosing among five approaches* (2nd ed.).

    Thousand Oaks, CA: SAGE Publications.

Deleon, P., & Deleon, L. (2002). Whatever happened to policy implementation? An

    alternative approach. *Journal of Public Administration Research and Theory, 12,* 467-492.

Denzin, N. (2006). *Sociological methods: A sourcebook.* Piscataway, NJ: Transaction Publishers.

Dervin, B. (2004). *Welcome to the sense-making methodology site.* Retrieved from

    http://communication.sbs.ohio-state.edu/sense-making.

Diamond, R.M. (2006). Why colleges are so hard to change. Retrieved from

    http://www.insidehighered.com/views/2006/09/08/diamond.

Dougherty, K.J. (2001). *The contradictory college: The conflicting origins, impacts, and futures of the community college.* Albany, NY: State University of New York Press.

Dougherty, K.; Reid, M; & Nienhusser, H.K. (2006). Helping students enter and succeed: Access, success, accountability policies in the "achieving the dream" states. *Community College Journal, 77,* 42-47.

Dougherty, K., & Townsend, B.K. (2006). Community college missions: A theoretical and historical perspective. *New Directions for Community Colleges, 136,* 5-13.

Dukakis, M.S., & Portz, J. (2010). *Leader-managers in the public sector: Managing for results.* Armonk, NY: M.E. Sharpe.

Eckel, P., & Kezar, A. (2003). Key strategies for making new institutional sense: Ingredients to higher education transformation. *Higher Education Policy, 16*, 39-53.

Eddy, P. (2003). Sensemaking on campus: How community college presidents frame change. *Community College Journal of Research and Practice*, *27*, 453-471.

Eddy, P., & Amey, M.J. (2014). Creating strategic partnerships: A guide for educational institutions and their partners. Sterling, VA: Stylus Publishing.

Edwards, G.C. (1980). *Implementing public policy.* Washington, DC: Congressional Quarterly Press.

Fernandez, S., & Rainey, H.G. (2006). *Public Administration Review, 3,* 168-176

Fingerhut, E. (2008). Report on the condition of higher education in Ohio: Meeting the state's future needs. Retrieved from the Ohio Department of Higher Education website: https://www.ohiohighered.org/board/condition-report

Fingerhut, E. (2008b). Strategic plan for higher education. Retrieved from State Library of Ohio Digital Collection website: http://www.ohiomemory.org/cdm/ref/collection/ p267401ccp2/id/2822

Fish, S. (2007). Shared governance. Democracy is not an educational idea. *Change, 39*(2), 8-13.

Florida, R. (1996). Regional creative destruction: Production organization, globalization, and the economic transformation of the Midwest. *Economic Geography, 72,* 314-334.

Freebody, P. (2003). *Qualitative research in education. Interaction and practice.* Thousand Oaks, CA: Sage Publications.

Freeman, M.L., Conley, V.M., & Brooks, G.P. (2006). Successful vertical transitions: What separates community college transfers who earn the baccalaureate from those who don't? *Journal of Applied Research in the Community College, 13,* 141-150.

Gay, L.R., Mills, G.E., & Airasian, P. (2006). *Educational research: Competencies for analysis and applications.* Upper Saddle River, NJ: Pearson Education, Inc.

Gayle, D. J., Tewarie, B., & White, A. Q. (2003). *Governance in the twenty-first-century university: Approaches to effective leadership and strategic management.* San Francisco, CA: Wiley Subscription Services.

Glaser, B.G. (1978). *Theoretical sensitivity.* Mill Valley, CA: Sociology Press.

Glover, P.M. (2008). *Shared boundaries: A case study of the development of collaborative relationships between closely situated public community colleges and public four-year institutions* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3340567).

Gomm, R. Hammersley, M, and Foster, P. (2000). *Case study method.* Thousand Oaks, CA: Sage Publications.

Gonzalez, J.M. (2008). *An exploration of the sensemaking process during the implementation of academic tracking systems at three public universities* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3376182)

Governor's Commission on Higher Education & the Economy. (2004). *Building on knowledge, investing in people: Higher education and the future of Ohio's economy.* Retrieved from http://www. ohiomemory.org/cdm/ref/collection/p267401ccp2/id/807/

Greer, D.G. (2013). *New assumptions and new solutions for higher education reform.* Retrieved from Stockton University, William J. Hughes Center for Public Policy website: http://intraweb.stockton.edu/eyos/page.cfm?siteID=135&pageID=123

Hancock, D.R., & Algozzine, B. (2006). *Doing case study research: A practical guide for beginning researchers.* New York, NY: Teachers College Press.

Harbour, C.P., & Wolgemuth, J.R. (2015). The reconstruction of community college vocational education: A vision for renewing American democracy. *Community College Review, 43*(4), 315-328.

Harris, M.S. (2007). From policy design to campus: Implementation of a tuition decentralization policy. *Education Policy Analysis Archives, 15*(16), 1-16.

Hatch, J.A. (2002). *Doing qualitative research in education settings.* Albany, NY: State University of New York Press.

Higher Education Research and Development Institute. (2011, January 20). Interesting facts about community colleges. Retrieved from http://herdi.org/community-college-market-2/interesting-facts-about-community-colleges/.

Hill, H.C. (2003). Understanding implementation: Street-level bureaucrats' resources for reform. *Journal of Public Administration Research and Theory, 13,* 265-282.

Holzer, H.J. (2012). *Raising job quality and skills for American workers: Creating more-effective education and workforce development systems in states.* Washington, DC: Georgetown Public Policy Institute.

Holzer, H. (2015). *Higher education and workforce policy: Creating more skilled workers (and jobs for them to fill).*Washington, DC: Brookings Institution.

Honig, M.L. & Hatch, H. (2004). Crafting coherence: How schools strategically manage multiple, external demands. *Educational Researcher, 33*(8), 16-30.

Hopkins, J.L., Monaghan, C.H., & Hansman, C.A. (2009). Conflict and collaboration: Providers and planners implementing the Workforce Investment Act (WIA). *Adult Education Quarterly, 59,* 208-226.

Hughes, K.L., & Karp, M.M. (2006). Strengthening transitions by encouraging career pathways: A look at state policies and practices (CCRC Brief No. 30). New York: Columbia University, Teachers College, Community College Research Center.

Hurley, D.J. (2009, November). Considerations for state colleges and universities in a post-recession America. Washington, DC: American Association of State Colleges and Universities.

Hyslop, A. (2008, February). Ensure portability and transferability of credits and skills attained. *Techniques.* Retrieved from http://www.acteonline.org

Implementation of the workforce investment act: Promising practices in workforce development; Hearing before the Subcommittee on 21st Century Competiveness of the Committee on Education and the Workforce, 107th Cong., 2nd Sess. 7 (2002) (opening statement of Buck McKeon).

Jackson, J.F.L., & Ebbers, L.H. (1999). Bridging the academic-social divide: Academic and student affairs collaboration. *College Student Journal, 33*(3), 380-383.

Jacobs, J., & Dougherty, K.J. (2006). The uncertain future of the community college workforce development challenge. *New Directions for Community Colleges, 138,* 31-38.

Jacobson, L.S., LaLonde, R.J., & Sullivan, D.G. (1993). Earnings losses of displaced workers.
American Economic Review, 83, 685-709.

Jencks, C., & Riesman, D. (1968). *The academic revolution.* New York, NY: Doubleday.

Jenkins, D. (2006, August). *Career pathways: Aligning public resources to support individual and regional economic advancement in the knowledge economy.* New York, NY: Workforce Strategy Center.

Jenkins, D. (2011, January). *Redesigning community colleges for completion: Lessons from research on high-performance organizations.* New York, NY: Community College Research Center.

Joliet Community College (2012). History. Retrieved from http://jjc.edu/about/college-info/pages/history.aspx.

Kahlenberg, R. (2011). The challenge for community colleges. Retrieved from http://chronicle.com/blogs/innovations/the-challenge-for-community-colleges/29654.

Kahn, M.E. (1999). The silver lining of the rust belt manufacturing decline. *Journal of Urban Economics, 46*(3), 360-376.

Kahn, R.L., & Cannell, C.F. (1957). *The dynamics of interviewing: Theory, technique, and cases.* New York, NY: Wiley.

Kamensky, J.M., Burlin, T.J., & Abramson, M.A. (2004). Networks and partnerships: Collaborating to achieve results no one can achieve alone. In J.M. Kamensky & T.J. Burlin (Eds.), *Collaboration: Using networks and partnerships* (pp. 3-20). Lanham, MD: Rowman & Littlefield Publishers.

Kanter, R.M. (1994). Collaborative advantage: The art of alliances. *Harvard Business Review, 77*(4), 186-193.

Kater, S., & Levin, J. S. (2004). Shared governance in the community college. *Community College Journal of Research & Practice, 29*(1), 1-23.

Keith, B. (1996). The context of educational opportunity: States and the legislative organization of community college systems. *American Journal of Education, 105*(1), 67-101.

Kenney, S.G. (2009). *Policy implementation and teacher beliefs regarding the Virginia alternate assessment program* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3400935).

Kezar, A. (2001). *Understanding and facilitating organizational change in the 21st century.* Washington, DC: ASHE-ERIC Higher Education Reports.

Kezar, A. (2003). Enhancing innovative partnerships: Creating a change model for academic and student affairs collaboration. *Innovative Higher Education, 28*(2), 137-156.

Kezar, A. (2005a). Moving from I to we: Reorganizing for collaboration in higher education. *Change, 37*(6), 50-58.

Kezar, A. (2005b). Redesigning for collaboration within higher education institutions: An exploration into the developmental process. *Research in Higher Education, 46*(7), 831-860.

Kezar, A. J. (2006). Redesigning for collaboration in learning initiatives: An examination of four highly collaborative campuses. *Journal of Higher Education, 77,* 804-838

Kezar, A., & Eckel, P. (2002). Examining the institutional transformation process: The importance of sensemaking, interrelated strategies, and balance. *Research in Higher Education, 43,* 295-328.

Kirsch, I., Braun, H., Yamamoto, K., & Sum, A. (2007). *America's perfect storm: Three forces changing our nation's future.* Princeton, NJ: Educational Testing Service.

Klitgaard, R., & Treverton, G.F. (2007). Assessing partnerships: New forms of collaboration. In J.M. Kamensky & T.J. Burlin (Eds.), *Collaboration: Using networks and partnerships* (pp. 21-60). Lanham, MD: Rowman & Littlefield Publishers.

Kozlowski, S.W.J., & Ilgen, D.R. (2006). Enhancing the effectiveness of work groups and teams. *Psychological Science in the Public Interest, 7* (3), 77-124.

Kvale, S. (1996). *Interviews: An introduction to qualitative research interviewing.* Thousand Oaks, CA: Sage Publications.

Lapworth, S. (2004). Arresting decline in shared governance. Towards a flexible model for academic participation. *Higher Education Quarterly, 58,* 299-314.

Levin, J.S. (2001). Public policy, community colleges, and the path to globalization. *Higher Education, 42,* 237-262.

Levin, J.S., Kater, S., & Wagoner, R.L. (2006). Community college faculty at work in the new economy. New York, NY: Palgrave Macmillan.

Lincoln, Y.S., & Guba, E.G. (1985). But is it rigorous? Trustworthiness and authenticity in naturalistic evaluation. In D.D. Williams (Ed.), *Naturalistic evaluation.* San Francisco, CA: Jossey-Bass.

Lipsky, M. (2010). Street-level bureaucracy: Dilemmas of the individual in public services (2nd ed.). New York, NY: Russell Sage Foundation.

Lubell, M., & Fulton, A. (2007). Local policy networks and agricultural watershed management. *Journal of Public Administration Research and Theory, 18,* 673-696.

Marcus, J. (2010, May). Reform of public higher education is intended to change perceptions and retain graduates. *National CrossTalk.* Retrieved from http://www.highereducation.org/ crosstalk/ct0510/news0510-ohio.shtml

Marshall, C. (1988). Bridging the chasm between policymakers and educators. *Theory into Practice, 27*(2), 98-105.

Marshall, C., & Rossman, G.B. (2006). *Designing qualitative research* (4th ed.). Thousand Oaks, CA: Sage Publications.

Matland, R. E. (1995). Synthesizing the implementation literature: The ambiguity-conflict model of policy implementation. *Journal of Public Administration Research and Theory, 5,* 145-174.

Maykut, P., & Morehouse, R. (1994). *Beginning qualitative research: A philosophic and practical guide.* London: Falmer Press.

Maynard-Moody, S., Musheno, M., & Palumbo, D. (1990). Street-wise social policy. Resolving the dilemma of the street-level influence and successful implementation. *Western Political Quarterly, 43,* 833-848.

Mazmanian, D.A., & Sabatier, P.A. (1989). *Implementation and public policy.* Lanham, MD: University Press of America.

McCabe, R.H. (1997). *The American community college: Nexus for workforce development.* Mission Viejo, CA: League for Innovation in the Community College.

McGuinness, A.C. (2005). The states and higher education. In P.G. Altbach, R.O. Berdahl, & P.J. Gumport (Eds.), *American higher education in the twenty-first century: Social, political, and economic challenges* (pp. 198-225). Baltimore, MD: Johns Hopkins University Press.

McLendon, M.K., Hearn, J.C., & Deaton, R. (2006). Called to account: Account the origins and spread of state performance-accountability policies for higher education. *Educational Evaluation and Policy Analysis, 28*(1), 1-24.

McMillan, J.H., & Wergin, J.F. (2006). *Understanding and evaluating educational research.* Upper Saddle River, NJ: Pearson Education, Inc.

Melendez, E. (2004). Communities and workforce development. Kalamazoo, MI: W.E.

    Upjohn Institute for Employment Research.

Merriam, S.B. (1998). *Qualitative research and case study applications in education.* San Francisco,

    CA: Jossey-Bass Publishers.

Miles, M.B., & Huberman, A.M. (1984). *Qualitative data analysis: A sourcebook of new methods.*

    Newbury Park, CA: Sage Publications.

Miles, M.B., & Huberman, A.M. (1994). *Qualitative data analysis: An expanded sourcebook.*

    Newbury Park, CA: Sage Publications.

Miller, M., McCormack, T., Maddox, J., & Seagren, A. (1996). Faculty participation in

    governance at small and large universities: Implications for practice. *Planning and*

    Changing, 27(3/4), 180-190.

Miller, M.T. (2003). The status of faculty senates in community colleges. *Community College*

    Journal of Research and Practice, 27, 419-428.

Miller, M.T., & Miles, J.M. (2008). Internal governance in the community college: Models

    and quilts. *New Directions for Community Colleges, 141,* 35-44.

Mills, M. (1998). From coordinating board to campus: Implementation of a policy mandate

    on remedial education. *Journal of Higher Education*, *69*, 672-697.

Milner, G. (2008, December 7). Colleges must be collegial. *The Cleveland Plain Dealer.*

    Retrieved from http://www.cleveland.com/

Mitchell, J.C. (1983). Case and situation analysis. *Sociological Review, 32* (2), 187-211.

Morphew, C.C. (1999). Challenges facing shared governance. *New Directions for Higher*

    Education, 105, 71-79.

Morse, J.M. (1994). Designing funded qualitative research. In N.K. Denzin & Y.S. Lincoln

    (Eds.). *Handbook of qualitative research* (pp. 220-235). Thousand Oaks, CA: Sage

    Publications.

Mullen, B., & Copper, C. (1994). The relation between group cohesiveness and performance

    integration. *Psychological Bulletin, 115*(2), 210-227.

National Governors Association. (2009). *The pathways to advancement project: How states can*

    expand postsecondary educational opportunities for working adult. Retrieved from

    http://www.nga.org/cms/home.html

Never, B. (2007). The challenge of leading through networks: Institutional analysis as a way

    forward. In R.S. Morse, T.F. Buss, & C.M. Kinghorn (Eds.), *Transforming public*

    leadership for the 21st century (pp. 243-262). Armonk, NY: M.E. Sharpe.

Orr, T., & Bragg, D. (2001). Policy directions for K-14 education: Looking to the future. In

    B.K. Townsend & S.B. Twombly (Eds.). *Community college: Policy in the future context*

    (pp. 101-127). Westport, CT: Ablex Publishing.

Mulgan, G. (2009). *The art of public strategy.* New York, NY: Oxford University Press.

National Governors Association. (2011). *Degrees for what jobs? Raising expectations for universities*

    and colleges in a global economy. Retrieved from

    http://www.nga.org/files/pdf/1103degreesjobs.pdf.

Obama, B.H. (2009, February 24). [Obama's speech to Congress]. Speech delivered to a joint

    session of Congress, Washington, DC.

Ohio Board of Regents (2006). Progress on the implementation of the career technical credit

    transfer policy. Retrieved from https://www.ohiohighered.org/transfer/ct2/archives

Ohio Board of Regents (n.d.) *Just the facts about career and technical credit transfer.* Retrieved from

    https://ohiohighered.org/files/uploads/transfer/CT2/JTF-web-6-20-2011_0.pdf.

Ohio Department of Higher Education (2015). *Career-technical assurance guide descriptions.*
Retrieved from https://www.ohiohighered.org/transfer/ct2/ctags

Orr, T., & Bragg, D. (2001). Policy directions for K-14 education: Looking to the future. In
B.K. Townsend & S.B. Twombly (Eds.). *Community college: Policy in the future context*
(pp. 101-127). Westport, CT: Ablex Publishing.

O'Toole, L.J. (2004). The theory-practice issue in policy implementation research. *Public
Administration, 82,* 309-329.

Patton, M.Q. (1985, April). *Quality in qualitative research. Methodological principles and recent
developments.* Paper presented at annual meeting of the American Educational
Research Association, Chicago, IL.

Patton, M.Q. (1987). *Creative evaluation.* Thousand Oaks, CA: Sage Publications.

Patton, M.Q. (1990). *Qualitative evaluation methods.* Thousand Oaks, CA: Sage Publications.

Pfeffer, J. (2006). Like ships passing in the night: The separate literatures of organization
theory and public management. *International Public Management Journal, 9*(4), 457-465.

Phillips, C.M. (2011). *A case study examination of an engineering articulation process between a
community college and a university* (Doctoral dissertation). Available from ProQuest
Dissertation and Theses database. (UMI No. 3471181).

Philpott, J.L., & Strange, C. (2003). On the road to Cambridge: A case study of faculty and
student affairs in collaboration. *Journal of Higher Education, 74,* 77-95.

Pollitt, C. (2008). *Time, policy, management: Governing with the past.* New York, NY: Oxford
University Press.

Prather, J.E., & Carlson, C.E. (1993). When four-yea and community colleges collide: Studies
in planning for enrollment maximization. Paper presented at the Annual Forum of

the Association for Institutional Research, Chicago, IL. (ERIC Document
Reproduction Service No. ED356812).

Pressman, J.L., & Wildavsky, A. (1973). *Implementation.* Berkeley, CA: University of California
Press.

Pusser, B., Breneman, D.W., Gansneder, B.M., Kohl, K.J., Levin, J.S., Milam, J.H., Turner,
S.E., (2007). *Returning to learning: Adult's success in college is key to America's future. (New
Agenda Series).* Indianapolis, IN: Lumina Foundation for Education.

Pusser, B., & Levin, J.L. (2009). *Re-imagining community colleges in the 21ˢᵗ century: A student-centered
approach to higher education.* Washington, DC: Center for American Progress.

Riessman, C.K. (1993). *Narrative analysis.* Newbury Park, CA: Sage Publications.

Rogers, E.M. (2003. *Diffusion of innovation.* New York, NY: Free Press.

Ross, H. (1963). University influence in the genesis and growth of junior colleges in
California. *History of Education Quarterly, 3*(3), 143-152.

Ross School of Business. (2008). *What is sensemaking.* Retrieved from
http://webuser.bus.umich.edu/organizations/sensemaking/Sensemaking.htm.

Rudolph, F. (1990). *The American college & university: A history.* Athens, GA: University of
Georgia Press.

Saetren, H. (2005). Facts and myths about research on public policy implementation: Out-of-
fashion, allegedly dead, but still very much alive and relevant. *Policy Studies Journal, 33,*
559-582.

Schmidtlein, F.A., & Berdahl, R.O. (2011). Autonomy and accountability: Who controls
academe? In P.G. Altbach, R.O. Berdahl, & P.J. Gumport (Eds.), *American higher
education in the twenty-first century: Social, political, and economic challenges* (pp. 69-67).
Baltimore, MD: Johns Hopkins University Press.

Schuh, J.H., & Upcraft, M.L. (2001). *Assessment practice in student affairs: An applications manual.* San Francisco, CA: Jossey-Bass.

Seidman, I.E. (1991). *Interviewing as qualitative research.* New York: Teachers College Press.

Selingo, J. (1998, December 4). Ohio board's hard-charging new chancellor takes his cues from the consulting world. *Chronicle of Higher Education.* Retrieved from http://www.chronicle.com

Sharkansky, I. (1997). What a political scientist can tell a policymaker about the likelihood of success and failure. In J.M. Shafritz, J.M., & A.C. Hyde (Eds.), *Classics of Public Administration* (pp. 514-522). Fort Worth, TX: Harcourt Brace & Company.

Shinn, L. D. (2004). A conflict of cultures. *Change, 36*(1), 18-26.

Smylie, M.A., & Evans, A.E. (2006). Social capital and the problem of implementation. In M.I. Honig (Ed.), *New Directions in Education Implementation: Confronting Complexity* (pp. 187-208). Albany, NY: State University of New York Press.

Snyder, W.M., & Briggs, X. (2003). Communities of practice: A new tool for government mangers. In. J.M. Kamensky & T.J. Burlin (Eds.). *Collaboration: Using networks and partnerships* (pp. 171-272. Lanham, MD: Rowman & Littlefield Publishers.

Spillane, J., Halverson, R., Diamond, J. (2004). Towards a theory of school leadership practice: Implications of a distributed perspective. *Journal of Curriculum Studies, 36*(1), 3-34.

Spillane, J.P., Reiser, B.J., & Gomez, L.M. (2006). The role of human, social, and distributed cognition in framing policy implementation. In M.I. Honig (Ed.), *New Directions in Education Implementation: Confronting Complexity* (pp. 47-64). Albany, NY: State University of New York Press.

Spillane, J.P., Reiser, B.J., & Reiner, T. (2002). Policy implementation and cognition: Reframing and refocusing implementation research. *Review of Educational Research, 72,* 387-431.

Stake, R.E. (1995). *The art of case study research.* Thousand Oaks, CA: Sage Publications.

Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: Grounded theory procedures and techniques* (2nd ed.). Newbury Park, CA: Sage Publications.

Sutter, W.N. (2006). *Introduction to educational research: A critical thinking approach.* Thousand Oaks, CA: Sage Publications.

Tafel, J. (2010, April). Bringing down the silos: A primer on credit transfer and student mobility. Retrieved from the Ohio Board of Regents website: http://regents.ohio.gov/transfer/ documents/bringing-down-the-silos.pdf

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

Thornton, S.J. (1993). The quest for emergent meaning: A personal account. In R. Emerson (Ed.), *Contemporary Field Research: A Collection of Readings* (pp. 216-234). Prospect Heights, IL: Waveland.

Tierney, W. G. (2008). *The impact of culture on organizational decision-making: Theory and practice in higher education.* Sterling, VA: Stylus Publishing.

Tierny, W.G. (1988). Organizational culture in higher education: Defining the essentials. *Journal of Higher Education, 59*(1), 2-21.

Thomas, T.M. (2012, April). New approaches to Ohio economic and workforce development. State Budgeting Matters. Retrieved from http://www.communitysolutions.com/

Trochim, W.M.K. (1989). Outcome pattern matching and program theory. *Evaluation and Program Planning, 12,* 355-366.

Tsuchina, H., & Casto, R. (2010, April). Career technical credit transfer: An update. Paper presented at the meeting of Ohio Association of College Admissions Counselors, Columbus, OH.

Turnaround Ohio. (2006). Columbus, OH: Office of the Governor, State of Ohio. Retrieved June 19, 2008, from http://ohioworkforce411.gov/docs/ Attach_C_TurnaroundOhio-JFS.pdf

Upcraft, M.L., & Schuh, J.H. (1996). *Assessment in student affairs: A guide for practitioners.* San Francisco, CA: Jossey-Bass.

Vaughn, G.B. (2006). *The community college story.* Washington, DC: Community College Press.

Vedder, R. (2012). What Teresa Sullivan's ouster means for higher education. Retrieved from http://chronicle.com/article/What-Teresa-Sullivans-Ouster/132413/.

Weick, K.E. (1991). The nontraditional quality of organizational learning. *Organization Science, 2,* 116-123.

Weick, K.E. (1995). *Sensemaking in organizations.* Thousand Oaks, CA: Sage Publications.

Wenger, E., McDermott, R., & Snyder, W.M. (2002). *A guide to managing knowledge: Cultivating communities of practice.* Cambridge, MA: Harvard Business School Press.

Wolcott, H.F. (1994). *Transforming qualitative data: Description, analysis, and interpretation.* Thousand Oaks, CA: Sage Publications.

Wood, J.L. (2008). *Zero tolerance: A policy implementation study* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3378214).

Yin, R.K. (1993). *Applications of case study research.* Thousand Oaks, CA: Sage Publications.

Yin, R.K. (1994). *Case study research: Design and methods.* Thousand Oaks, CA: Sage

    Publications.

Zumeta, W. (2001). Public policy and higher education accountability: Lessons from the past

    and present for the new millennium. In D. Heller (Ed.). *Access, affordability, and*

    accountability: The states and public higher education policy (pp. 155-197). Baltimore, MD:

    Johns Hopkins University Press.

APPENDICES

Appendix A: H.B. 66 (ORC 3333.162)

Transfer of career-technical education coursework to state institutions of higher

Education (as passed by the House and the Senate)

The bill expands the scope of the current articulation and transfer system to include career-technical institutions by requiring the Board of Regents to develop criteria, policies, and procedures by April 15, 2007, to enable students to transfer technical courses completed through an adult career-technical education institution or a public secondary career-technical institution to a state institution of higher education "without unnecessary duplication or institutional barriers." The Board is directed to develop these criteria, policies, and procedures in consultation with the Department of Education, public adult and secondary career-technical education institutions, and institutions of higher education. The criteria, policies, and procedures must build upon the existing articulation agreement and transfer initiative course equivalency system, where applicable. The Board must report its progress on this issue to the General Assembly by April 15, 2006.

Background

The Ohio Board of Regents has developed an Articulation and Transfer Policy, which is intended to ensure that credits will transfer between state institutions of higher education. Under the policy, the transfer of credits and the application of those credits to the transferring student's program of study is dependent on whether the transferring student has completed an associate degree, the student's grade point average, and what courses the student has completed. The policy also requires state institutions to develop a "transfer module," which is a set of general education curriculum courses, such as English composition, mathematics, social and behavioral sciences, arts and humanities, and natural and physical sciences that represent a common body of knowledge required at all state institutions. A student who completes transfer module courses at one institution can transfer

those courses to another state institution and have those courses fulfill the corresponding general education courses at the receiving institution.

In addition, the Revised Code directs the Board to implement several policies designed to facilitate the transfer of students and credits between state institutions of higher education. These include:
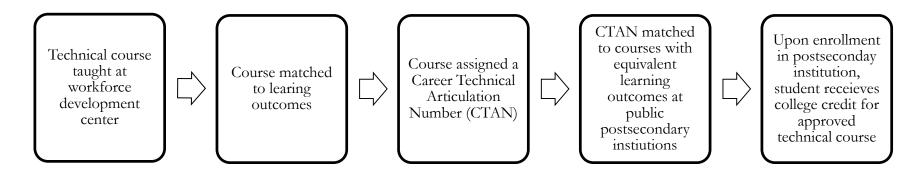
1) The development of policies and procedures that state institutions must comply with to ensure that students can transfer between state institutions without unnecessary duplication of coursework or institutional barriers;

2) The development of a "universal course equivalency classification system";

3) The development of a transfer system whereby a student who completes an associate degree program that includes approved transfer module courses will be admitted to another state institution's baccalaureate program, will have priority over out-of-state students with associate degrees and transfer students without such degrees in regards to admittance to the program, and will compete on the same basis as students native to that institution for admission to specific programs;

4) A study of the feasibility of developing a transfer marketing agenda to both inform Ohioans of the availability of transfer options and to encourage adults to return to higher education;

5) A study of the feasibility of articulation and transfer policies for students with associate degrees from career schools and colleges that have certificates of registration from the State Board of Career Colleges and Schools who transfer to state institutions of higher education; and

6) A requirement of all state colleges and universities to fully implement the Course Applicability System, which is an internet-accessible database that provides information on course equivalency between participating institutions, in advising transfer students.

Transfer of career-technical education coursework to state institutions of higher education (as passed by the General Assembly)

The act expands the scope of the current articulation and transfer system to include career-technical institutions by requiring the Board of Regents to develop criteria, policies, and procedures by April 15, 2007, to enable students to transfer "agreed upon" technical courses completed through an adult career-technical education institution, a public secondary career-technical institution, or a state institution of higher education to a state institution of higher education "without unnecessary duplication or institutional barriers." The Board is directed to develop these criteria, policies, and procedures in consultation with the Department of Education, public adult and secondary career-technical education institutions, and state institutions of higher education. The criteria, policies, and procedures must build upon the existing articulation agreement and transfer initiative course equivalency system, where applicable. The Board must report its progress on this issue to the General Assembly by April 15, 2006.

Appendix B: Career and Technical Credit Transfer Policy

| Technical course taught at workforce development center | → | Course matched to learing outcomes | → | Course assigned a Career Technical Articulation Number (CTAN) | → | CTAN matched to courses with equivalent learning outcomes at public postsecondary instiutions | → | Upon enrollment in postseconday institution, student receieves college credit for approved technical course |

1. Workforce development centers are encouraged to teach courses that meet industry standards and criteria for college credit.

2. Content experts from public institutions of higher education and career-technical institutions review courses for equivalent learning outcomes needed to transition from career-technical education to public institutions of higher education.

3. The course is assigned a Career Technical Articulation Number (CTAN) that can be found in the Career-Technical Assurance Guide (CTAG) and utilized in the Course Equivalency Management System (CEMS).

4. Once the CTAN is verified, course credit must be transcripted and applied to the matriculating student's technical major, or in the absence of an equivalent course, and when the institution offers the technical program, the receiving institution must grant credit. Workforce development center, community college, and public university participation is mandatory and is backed by state statute.[5]

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[5] Process map adapted from the *Credit for Career-Tech: The (CT)² Guarantee* video and the *Career Technical Credit Transfer (CT)²: Just the Facts* document. The video and document are available online: http://tinyurl.com/ct2-process and http://tinyurl.com/ct2-facts.

Appendix C: Career Pathways

Job[6]	Median Salary	10-Year Growth
Air Transportation - Aircraft Mechanic	$57,530	2%
Air Transportation - Commercial Pilot	$63,340	18.1%
Air Transportation - Airline Pilot	$77,410	2.6%
Automotive Technology - Technician	$33,590	5.7%
Automotive Technology - Certified Technician	$42,440	8.2%
Automotive Technology - Master Technician	$57,110	2.6%
Emergency Medical Service - EMT	$19,300	30.6%
Emergency Medical Service – Advanced EMT	$27,600	30.6%
Emergency Medical Service - Paramedic	$44,600	30.6%
Electrical Engineering Technology - Production Worker	$23,720	7.4%
Electrical Engineering Technology - Technician	$54,540	-.2%
Fire Science Technology - Firefighter	$41,205	4.4%
Health Information Management - Medical Secretary	$29,350	31.3%
HVAC - Mechanic	$42,580	28.9%
HVAC - Site Superintendent	$89,770	1.3%
Information Technology - Computer User Support	$42,750	13.4%
Information Technology - Web Developer	$54,230	15.7%
Information Technology - Network Administrator	$65,150	23.1%
Information Technology - Computer System Analyst	$76,210	21.5%
Information Technology - Project Manager	$80,030	1.7%
Massage Therapist	$35,630	22%
Medical Assisting Technology - Medical Assistant	$27,620	21.5%
Medical Assisting Technology - Respiratory Therapist	$52,490	23.6%
Medical and Clinical Laboratory Technologist	$56,243	10.4%
Medical and Clinical Laboratory Technicians	$1,226	23.4%
Nursing - Licensed Practical Nurse	$39,910	17.1%
Nursing Registered Nurse	$60,010	20.4%
Pharmacy Technician	$26,740	19.5%
Phlebotomy - Phlebotomist	$28,766	20.9%
Surgical Technician	$41,600	24.1%

[6] Data collected from Career Pathways and Career Technical Assurance Guide Program. Original source material is available online: http://tinyurl.com/ndj65qz and http://tinyurl.com/nnmrtva.

Appendix D: Interview Request

Dear [insert interviewee's name]

I am a doctoral student in higher education at the University of Virginia, and I am writing a descriptive case study about the implementation of the career and technical credit transfer policy. I am collecting data from individuals associated with the Ohio Board of Regents, the Ohio Department of Education, and other stakeholder groups, and I would like to interview you for the study.

The entire interview will consist of about 9 questions and last about 45 minutes. The interview will be recorded and transcribed, and I will share the transcript with you so that you may review it for accuracy. I will not refer to you or your employer by name in the data analysis or subsequent write up. At the conclusion of the study, I will make my findings available to you.

Please let me know if you are willing to participate in this study, and if so, how I should contact you to schedule an interview. If you have any questions, you may call me at 540-241-4284 or email me at todd-parks@virginia.edu. The Institutional Review Board at the University of Virginia has approved this study. Thank you for your time and consideration. I look forward to hearing from you soon.

Sincerely,

Todd Parks, doctoral candidate
Curry School of Edication
University of Virginia
Telephone: (540) 241-4284
Email: todd-parks@virginia.edu

Appendix E: Interview Participants

Name (pseudonym)	Affiliation	Role
Mr. T. Basswood	Ohio Board of Regents	Community college vice president
Mr. J. Butternut	Ohio Department of Education	Adult education director
Ms. F. Chestnut	Ohio Department of Education	Steering Committee
Ms. B. Cottonwood	Ohio Board of Regents	Advisory Committee
Ms. C. Hawthorn	Ohio Department of Education	Adult education director
Mr. E. Hemlock	Ohio Board of Regents	Community college president
Mr. S. Hornbeam	Ohio Department of Education	Adult education director
Ms. W. Pignut	Ohio Board of Regents	Public university provost
Ms. A. Shadbush	Ohio Department of Education	Advisory committee
Ms. P. Sycamore	Ohio Board of Regents	Public university faculty member

Appendix F: Interview Protocol

Before the session:

Check the proper functioning of all recording equipment prior to the interview.

At the beginning of the session (scripted text noted in italics):

My name is Todd Parks and I am a graduate student at the University of Virginia. Thank you [insert interviewee's name] for agreeing to participate in the study.

The purpose of the study is to describe the implementation of the career and technical credit transfer policy. To that end, I am interviewing individuals from the Ohio Board of Regents, the Ohio Department of Education, Ohio's community and technical colleges, Ohio's workforce development centers, Ohio's public universities, and other stakeholder groups. After collecting and analyzing my data, I am willing to share my findings with you so that your participation might assist you in implementing future policies.

To facilitate my note taking, I would like to record our conversation today. Only my advisors and I will be privy to the recording, which will be stored in a secure file until it is transcribed and destroyed. After the recording is transcribed, you may review the transcription for accuracy. Do you have any objections to our conversation's being recorded?

Please remember that your participation is voluntary. You may skip any questions that make you uncomfortable, and you may withdraw from the study at any time. As agreed to earlier, I have planned this session to last about 45 minutes. Thank you again for participating in this study. Do you have any questions before we begin?

Begin recording the session:

My name is Todd Parks and I am interviewing [insert interviewee's name, position, and institution]. Today's date is [insert date, e.g. Monday, October 5, 2012].

The following questions will be used as a guide. Some may not be asked if the answer is gleaned from a previous response. Probing questions may be used to elicit more details.

The Ohio House of Representatives directed the Ohio Board of Regents to work collaboratively with the Ohio Department of Education's Office of Career-Technical and Adult Education, public adult and secondary career-technical education institutions, and state-supported institutions of higher education to establish criteria, policies, and procedures to transfer agreed-upon technical courses from one system to another. This mandate led to the implementation of the state's career and technical credit transfer policy which awards college credit for over 500 selected courses in five technical areas, including automotive technology, engineering technology, information technology, medical assisting, and nursing (Ohio Board of Regents, 2006).

1. How did the career and technical credit transfer policy originate?

2. How has the career and technical credit transfer policy shaped workforce development and postsecondary education in the state of Ohio?

3. Have the Ohio Board of Regents and the Ohio Department of Education's Office of Career-Technical and Adult Education achieved the goals put forth by the Ohio House of Representatives?

4. What factors positively shaped the implementation of the career and technical credit transfer policy?

5. What factors negatively shaped the implementation of the career and technical credit transfer policy?

6. What strategies did policymakers, implementing agents, or both, employ to implement the career and technical credit transfer policy?

    a. What role did the consultants, Vicki Melvin and Robert Casto, play in the implementation of the policy?

    b. What role did the advisory committee play in the implementation of the policy?

    c. What role did the steering committee play in the implementation of the policy?

    d. Did policymakers allow implementing agents (institutions, systems, or both) to adapt the policy to local conditions?

7. What recommendations would you make to others seeking to implement policies similar to the career and technical credit transfer policy that span multiple systems, institutions, or both?

8. Are there any additional issues related to the implementation of the career and technical credit transfer policy you would like to discuss?

9. Are there other policymakers, postsecondary leaders, or stakeholders that I should interview for this study?

At the end of the session (scripted text noted in italics):

Do you have any questions before we conclude our conversation? Should you have questions regarding this study, please do not hesitate to contact me by e-mail, todd-parks@virginia.edu. Thank you again [insert interviewee's name] for agreeing to participate in this study.

Appendix G: Informed Consent Agreement

Informed Consent Agreement

Please read this consent agreement carefully before you decide to participate in the study.

Purpose of the research study: The purpose of the study is to describe the implementation of the career and technical credit transfer policy.

What you will do in the study: You will be asked to complete one interview. You may skip any question that makes you uncomfortable, and you can stop the interview at any time. Your interview will be digitally recorded and transcribed, and I will share the transcript with you so that you may review it for accuracy. I will not refer to you or your employer by name in the data analysis or subsequent write up.

Time required: The interview session will require about 45 minutes of your time.

Risks: There are no anticipated risks in this study.

Benefits: There are no direct benefits to you for participating in this research study. My findings may clarify the policy implementation process and help policymakers and implementing agents put policies into practice more effectively, particularly efforts that span multiple institutions, systems, or both. At the conclusion of the study, I will make my findings available to you.

Confidentiality: The information that you give in the study will be handled confidentially. Your information will be assigned a code number, and the list connecting your name to this code will be kept in a locked file cabinet. I will not refer to you or your employer by name in the data analysis or subsequent write up (pseudonyms will be used). Electronic files will be stored on a password-protected computer, and paper documents will be stored in a locked file cabinet in my residence. I will be the only one with access to the computer and file cabinet. Once the study is completed, all files will be stored in a locked safe for five years. At the end of five years, paper documents will be shredded and recycled, and electronic documents will be removed from data storage devices using appropriate commercial software. No sensitive data (e.g., social security numbers) will be collected.

Voluntary participation: Your participation in the study is completely voluntary.

Right to withdraw from the study: You have the right to withdraw from the study at any time without penalty. All audio recordings and transcripts will be destroyed upon your withdrawal from the study.

How to withdraw from the study: If you want to withdraw from this study, please tell the interviewer to stop the interview. There is no penalty for withdrawing. If you would like to withdraw after your interview has been completed, please contact Todd Parks at the number below.

Payment: You will not receive compensation for participation in this study.

If you have questions about the study, contact:
Principal Investigator
Todd Parks
Doctoral Candidate
Curry School of Education, P.O. Box 400265
University of Virginia, Charlottesville, VA 22903
Telephone: (540) 241-4284
Email: todd-parks@virginia.edu

Faculty Advisor
Brian Pusser, Ph.D.
Associate Professor
Curry School of Education, P.O. Box 400265
University of Virginia, Charlottesville, VA 22903
Telephone: (434) 924-7731
Email: bp6n@virginia.edu

If you have questions about your rights in the study, contact:
Tonya R. Moon, Ph.D.
Chair, Institutional Review Board for the Social and Behavioral Sciences
One Morton Dr., Suite 500
University of Virginia, P.O. Box 800392
Charlottesville, VA 22908-0392
Telephone: (434) 924-5999
Email: irbsbshelp@virginia.edu
Website: www.virginia.edu/vpr/irb/sbs

Agreement:
I agree to participate in the research study described above.

Signature: _____ Date: _____
You will receive a copy of this form for your records.

Appendix H: A Priori Codes

Code Name	Code	Description
Top-down	TD	Top-down implementation or management strategy
Bottom-up	BU	Bottom-up implementation or management strategy
Hybrid	HY	Hybrid implementation or management strategy
Coordinator	CR	Use of coordinator (i.e., consultant) facilitate implementation
Advisor Committee	AC	Use of advisory committee to facilitate implementation
Steering Committee	SC	Use of steering committee to facilitate implementation
Strategy-Cross Boundaries	ST-X	Strategy employed to cross organizational boundaries
Strategy-Collaboration	ST-C	Strategy employed to encourage collaboration
Relationship-Institutions	RL-I	Relationships between institutions (i.e., workforce development centers, community colleges, public universities
Relationships-Systems	RL-S	Relationships between systems (i.e., Ohio Department of Education, Ohio Board of Regents)
Adaption	AD	Adaption to local conditions
Strategic Alignment	SA	Alignment with intuitional objectives, system objectives, or both
Participation-Faculty	PF	Faculty participation in implementation process
Participation-Administration (Executive)	PA	Executive participation in implementation process
Participation-Staff	PS	Staff participation in implementation process
Participation-Trustees	PT	Trustee participation in implementation process
Stakeholder-Other	SO	Stakeholder (e.g., community leaders, employers) participation in implementation process
Equity-Imbalance	EQ-M	Equity imbalance between institutions, systems, or both
Equity-Balance	EQ-B	Equity balance between institutions, systems, or both

Appendix I: Revised Codes

Code Name	Code	Description
Coordinator	CR	Use of coordinator to facilitate implementation
Alignment	AL	Alignment with institutions, systems, or both
Hierarchy	EQ-B	Pecking order among adult workforce centers, community colleges, and public universities
Bottom-up Implementation	I-BU	Bottom-up implementation strategy
Hybrid Implementation	I-HY	Hybrid implementation strategy
Top-down Implementation	I-TD	Top-down implementation strategy
Participation-Administration	P-AD	Executive participation in implementation process
Participation-Faculty	PF	Faculty participation in implementation process
Relationship-Institutions	RL-I	Relationships between institutions (i.e., workforce development centers, community colleges, public universities
Relationships-Systems	RL-S	Relationships between systems (i.e., Ohio Department of Education, Ohio Board of Regents)
Participation-Steering Committee	P-SC	Use of steering committee to facilitate implementation
Strategic Alignment	SA	Alignment with intuitional objectives, system objectives, or both
Strategy-Collaboration	ST-C	Strategy employed to encourage collaboration
Strategy-Cross Boundaries	ST-X	Strategy employed to cross organizational boundaries
Pressure-Workforce	P-WF	Influence of workforce pressure on policymakers, implementing agents, or both to put policy in place
Pressure-Political	P-PL	Influence of political pressure on policymakers, implementing agents, or both to put policy in place
Reluctance	RL	Implementing agents toward implementing policy
Student Centered Attitude	SCA	Willingness to put students' interest ahead of self-interest
Past Successes	PS	Influence of past successes on current and future achievements
Hard work	HW	Amount of effort required to implement policy

Appendix J: Research Methods

Review data throughout

Data collection
(conduct interviews
using snowball
sampling and collect
documents)

Transcribe interviews

Return transcripts for
member checking

Read documents and
transcripts

Review data throughout

Compare data and findings (back and forth)

Reduce data

Group data

Revise codes

Report findings

Identify emerging
themes

Describe
recommendations

Code data
(documents and
transcripts)
using NVivo

Compare data and findings (back and forth)