Dissertations

3-2014

The Community College As Entrepreneur: Developing and Sustaining Effective Noncredit Workforce Training Partnerships

Kristine Michele Condon
National Louis University

Follow this and additional works at: https://digitalcommons.nl.edu/diss

Part of the Community College Leadership Commons, and the Educational Leadership Commons

NATIONAL LOUIS UNIVERSITY

THE COMMUNITY COLLEGE AS ENTREPRENEUR:

DEVELOPING AND SUSTAINING EFFECTIVE NONCREDIT WORKFORCE

TRAINING PARTNERSHIPS

A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE

DOCTOR OF EDUCATION

IN

COMMUNITY COLLEGE LEADERSHIP

BY

KRISTINE MICHELE CONDON

CHICAGO, ILLINOIS

MARCH 2014

Community College Leadership Doctoral Program

Dissertation Notification Completion

Doctoral Candidate: KRISTINE MICHELE CONDON

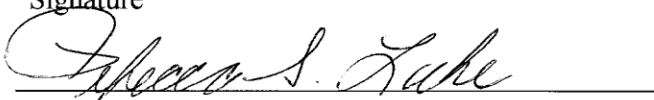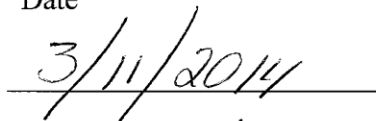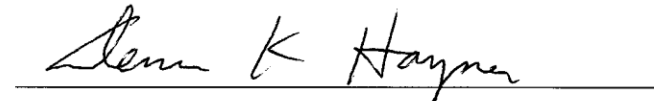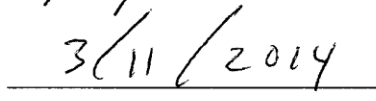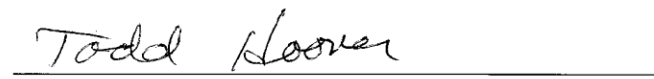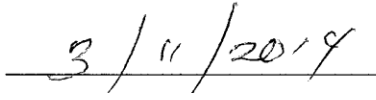Title of Dissertation: THE COMMUNITY COLLEGE AS ENTREPRENEUR: DEVELOPING AND SUSTAINING EFFECTIVE NONCREDIT WORKFORCE TRAINING PARTNERSHIPS

Dissertation Chair: REBECCA S. LAKE, Ed.D.

Dissertation Committee: DENNIS K. HAYNES, Ph.D.

TODD J. HOOVER, Ph.D.

Date of Final Approval Meeting: March 11, 2014

We certify this dissertation, submitted by the above named candidate, is fully adequate in scope and quality to satisfactorily meet the dissertation requirement for attaining the Doctor of Education degree in the Community College Leadership Doctoral Program.

Signature   Date

Rebecca S. Lake   3/11/2014

Dennis K. Haynes   3/11/2014

Todd Hoover   3/11/2014

Dedication

My father taught me to teach with my head; my mother taught me to teach with my heart. It is for those two simple reasons that this dissertation is dedicated to my father, Richard William Condon, and my late mother, Maridell Braham Condon.

My father, an engineer whose education was interrupted by the Korean War, is a first-generation college student and a community college alumnus. His education provided him with a forty-plus year career in a field where he earned 16 patents for his design work. Dad's creativity and innovation know no boundaries. As a youngster, I was in awe of how he could translate an idea to paper with the end result coming off an assembly line. As I designed this study's Noncredit Workforce Training Partnership Model, he looked at the preliminary sketches (upside down and in 3-D, of course) and saw nuances I could not. After three years of doctoral study, I am proud to say that I still ask Dad for help with my homework—and he still freely gives it. My admiration for him is immeasurable. I can only hope he knows that all the good I have had in my life has come from him.

My mother was the first woman in her family to graduate from college and attended a public university on a full scholarship of $50 per year. She earned the respect and admiration of her first- and second-grade students until illness took her from the classroom far too soon. Since my mother taught in the same elementary school I attended, I spent a lot of time watching her impart her own educational philosophy to her young charges. If you were a student of Mrs. Condon's, you modeled the behavior you expected from others; you acknowledged mistakes and learned from them; and you always gave your best to whatever you did. It is no wonder that to this day, students from her first years of teaching still tell me what an impact she had on them. Everything I

have learned about being the best educator I can be came from watching Mom. My only regret is that she did not live to see me complete this journey—but I know she has shepherded me through this experience with the guiding hand and loving smile that were both uniquely hers.

It is with indescribable gratitude that I dedicate this work to them.

Acknowledgements

When I made the decision to return to school in the spring of 2011, I knew that the work involved would be intense, but I could not have anticipated the ways in which this journey would change my life. With that in mind, I must thank so many people who have traveled this journey with me.

To my colleagues, "the South Side Girls"—Brenda and Irma—you and I have experienced so much as the three remaining members of this cohort. We have literally been through life and death situations together. Your smiles and your persistence inspired me onward during many difficult days. The journey was worth it to find two cherished friends like you in the process.

My colleagues at Kankakee Community College are valued friends and mentors who have supported me throughout this process. Mary Posing, Assistant Dean of Continuing Education and Career Services, has been a cheerleader, guidance counselor, keen eye, and a supervisor who is also my friend. It does not get any better than that. Dennis Sorensen, Vice President for Instruction and Student Success, always greeted me with an open door and a willingness to help. Dr. John Avendano, KCC's president, has my heartfelt appreciation for being my "Dissertation Coach Extraordinare." I have worked for many presidents over many years. I have never worked for a president who cared more about his employees' goals and aspirations than Dr. Avendano. From the day I walked into his office to discuss a return to school and he said, "So you want to be a doctor?," he has been steadfast in his support and encouraging in his words. He is leadership personified.

My thanks to all of the Illinois community college noncredit workforce training administrators and their business and industry partners who participated in this process.

While not everyone would describe the process of dissertation writing as a joy, I can say that one of the great joys of this process was the opportunity to work again with Dr. Todd Hoover, my master's program graduate advisor from Loyola University of Chicago. Dr. Hoover took a chance on me in 1990 when I was probably not such a good risk. His investment in me changed my professional life forever. I will always be indebted to him for that, and I am grateful that he sat as the third member of my dissertation committee.

Dr. Dennis Haynes of National Louis University, who sat as the second member of my dissertation committee, has been a motivator and a quietly driving force behind our cohort's success. No question was ever too insignificant; no concern was ever too minor. When you are in Dr. Haynes's presence, your concerns are the most important thing to him, and you have his total attention. He is a gentleman and a scholar, and we are all better educators for having learned from him.

Dr. Rebecca Lake had the unenviable role of coaching, mentoring, guiding, and nudging a student who was unsure of herself for most of this process. She saw the value in this study when I was skeptical. From her years of experience in chairing committees, she knew when it was time to prod and when it was time to step back and let me figure it out. She told us at the beginning of this process that if we just trusted her, she would guide us through, and that she did. National Louis University and community college leaders everywhere owe a debt of gratitude to her for her vision of the Community College Leadership program and her dedication to its mission. It is no understatement to say that a generation of community college leaders has been developed under her aegis; "onward" is her watchword. Thank you, Dr. Lake.

Abstract

In an era of increasingly tight community college budgets, noncredit workforce training partnerships with local business and industry are becoming critical sources of revenue. These partnerships can underwrite otherwise unaffordable projects and build effective bridges from non-credit to credit-bearing coursework for students. However, little research exists on the nature of community college noncredit workforce training partnerships or how those partnerships are built and maintained.

The purpose of this study is to identify how and in what ways Illinois single-campus community colleges develop and sustain effective noncredit workforce training partnerships. This qualitative case study of Illinois' single-campus community colleges and their business and industry counterparts examines the entrepreneurial orientation of noncredit workforce training partnerships, analyzes the methods by which partnerships are built and sustained, and examines the levels to which partnerships are evaluated. A sequential multi-method approach to data collection gathered data and information from five community college administrators and five noncredit workforce training partners. The conceptual framework for this study incorporates Lumpkin and Dess's (1996) Entrepreneurial Orientation Construct; Amey, Eddy, and Ozaki's (2007) Partnership Development Model; and Kirkpatrick and Kirkpatrick's (1993) Four Levels of Training Evaluation.

The findings indicate that community college administrators frequently demonstrate the Entrepreneurial Orientation Construct's salient dimensions of innovativeness, proactiveness, and autonomy; however, these administrators rarely demonstrate the salient dimensions of risk-taking and competitive aggressiveness. In addition, noncredit workforce training partnerships are normally initiated by a

community college champion who may or may not be the college president; however, this individual must be viewed as a champion by both partners. All study participants found that the key to successful noncredit workforce training partnerships involves the use of a knowledgeable, experienced *closer* who attends to the relationship's logistical details and keeps the champion apprised of partnership developments.

The findings also indicate that most noncredit workforce training administrators limit their use of training evaluation to measuring learners' reaction to training, which reaction is used almost exclusively for purposes of marketing and promotion. These administrators do not employ successive levels of evaluation to measure learning, behavioral change, or results, all of which could impact training effectiveness or future training initiatives. Interestingly, study participants also indicated a need for the community college to implement client resource management software, membership on local workforce investment and economic development agency boards, and noncredit advisory councils to assist in partnership development and maintenance. Finally, Condon's Noncredit Workforce Training Partnership Model is presented to guide community college administrators in developing and sustaining noncredit workforce training partnerships.

Table of Contents

List of Tables

List of Figures

Chapter 1: Introduction

Background and Context of the Issue

> Now is the time to build a firmer, stronger foundation for growth that will not only withstand future economic storms, but one that helps us thrive and compete in a global economy. It's time to reform our community colleges so that they provide Americans of all ages a chance to learn the skills and knowledge necessary to compete for the jobs of the future.
>
> —President Barack Obama, White House Summit on Community Colleges (2011)

> The community college system is an integral part of that strategy [the United States' leading the world in innovation and change]. It's an integral part so long as you're willing to listen to those who are looking for workers. It's an integral part so long as you continue to be entrepreneurial in the delivery of education. The community college system is a cornerstone of good economic policy.
>
> —President George W. Bush, American Association of Community Colleges (2004)

These two endorsements from the first two presidents of the 21st century speak to the increasingly visible role community colleges play in training workers to function in a global society. While community colleges have historically played the roles of post-secondary general education provider, community resource, and workforce training contractor (Levin, 2001), the role of workforce training contractor took on greater significance during the global economic boom of the 1990s. Levin notes that while noncredit workforce training was not a highly visible function of the community college in the years preceding this global economic upswing, an increasing number of institutions soon recognized that a more entrepreneurial vision was necessary to enhance their revenues. Faced with increasingly restricted government funding and increasingly restrictive government policy, noncredit workforce training units found that developing entrepreneurial relationships with business and industry gave them more visibility "in

colleges in which [they] had once occupied a lesser status and institutional priority"

(Levin, 2001, p. 6).

Noncredit workforce training in its formative years was often called *contract training* and was primarily underwritten in the community college by participant fees or by workforce grants. Contract training was specifically outside the scope of the traditional credit instruction provided by the community college. Such training, as described by Cohen and Brawer (2008), was occupation-specific and attractive to employers "because of their low cost, reliability, and responsiveness to employers' needs and . . . preferred over vocational schools because of the higher value attached to the credentials they offer" (p. 330). Noncredit workforce training units were considered effective adjuncts to community colleges when they covered direct costs and paid for their own overhead, thereby becoming useful supplements to the institutions' bottom lines. Because traditional community college funding formulas generally applied to credit instruction, these noncredit workforce training units became even more attractive when their revenues were allocated to the institutions' general operating budgets.

This is not to say, however, that noncredit workforce training initiatives have been without a variety of criticisms. A common critique has been that taxpayer dollars meant for community college education instead underwrite private business and industry training—an activity that is, in the view of some, inconsistent with the community colleges' mission of being publicly accessible to the community in which the institution resides. Additionally, critics have argued that providing public monies for training private business and industry gives the business and industry partner influence over the community colleges' decision-making processes. The competition between credit and

noncredit faculty for the same pool of students has also been a criticism of noncredit workforce training (Cohen & Brawer, 2008; Van Noy, Jacobs, Korey, Bailey, & Hughes, 2008). Questions concerning curricular strength and rigor also arise when noncredit workforce training coursework does not require the academic curriculum approval process required for comparable credit courses.

The seminal work in noncredit workforce training, authored by Michelle Van Noy and colleagues with the Community College Research Center at Teachers College, Columbia University (Van Noy et al., 2008), posits that community colleges are uniquely situated to establish training partnerships with business and industry. The authors present that community college noncredit workforce training units are the ideal location for serving both employer workforce development needs and employee workforce preparation and upgrade training needs.

One of the most powerful tools the noncredit workforce training unit provides is the ability to quickly design, develop, and deliver career- or employer-specific curricula, often providing such curricula as a bridge to credit coursework (Van Noy et al., 2008). With a noncredit workforce training unit's unique adaptability and responsiveness to business and industry partners' needs, community colleges can significantly impact how American workers are trained and retrained in a global economy. Community colleges can also assist those training participants in achieving their personal or professional post-secondary academic goals, which is consistent with the institutional mission of being responsive to stakeholder and community needs.

In Illinois, community colleges have recognized the increasingly important role that noncredit workforce training plays in developing skilled workers. The Illinois

Community College Board (ICCB) has placed noncredit workforce training at the forefront of its strategic planning priorities in both the Promise for Illinois (ICCB, 2001) and the Promise for Illinois Revisited (ICCB, 2006). In the 2001 strategic plan, the ICCB noted that community colleges need to be "customer/consumer driven" in order to provide flexible, responsive, and progressive workforce training (ICCB, 2001, "Address Workforce Development Needs," para. 1). The action steps to achieve this goal included "productive partnerships with business, industry, and government" and "escalated efforts to meet the growing demand for trained workers in high demand occupations such as information technology and e-commerce" (ICCB, 2001, "Competitive Workforce Actions," points 2 and 5).

The goal of being customer or consumer-driven to address workforce development needs gradually evolved to include targeted training that mapped to business and industry standards. By the time the 2006 strategic plan was issued, the goal of addressing workforce needs had been refined to include a *High Quality Promise.* The ICCB's quality commitment emphasized that participants in "noncredit business and industry programs meet national, state, and industry performance standards" (ICCB, 2006, "Objectives," point 1). This statewide emphasis on noncredit workforce training partnerships in both strategic plans speaks to the need for studying the characteristics of such partnerships in detail. Identifying the characteristics of effective noncredit workforce training partnerships demonstrates the role Illinois community colleges and its business and industry partners play in meeting the ICCB's Promise for Illinois Revisited.

Purpose of the Study

The purpose of this study is to identify how and in what ways Illinois single-campus community colleges develop and sustain effective noncredit workforce training partnerships.

Driving Questions

The following driving questions arise from the study's purpose:

1. How do noncredit workforce training units support the community college's mission?

2. What characteristics define effective community college noncredit workforce training partnerships?

3. How does the community college initiate community outreach to develop noncredit workforce training partnerships?

4. What characteristics or elements contribute to sustaining noncredit workforce training partnerships?

Significance of the Study

In an era where Illinois ranks next to last in funding for public education (Purinton & Mangan, 2010), and where community colleges are increasingly asked to do more with less, entrepreneurial partnerships with business and industry will be critical revenue sources for the institution. The revenue generated by noncredit workforce training partnerships can not only sustain a community college's budget to support its evolving missions; it can also underwrite projects that current state funding levels simply cannot provide. Additionally, the state's increasing demands for accountability and performance-based funding for institutions of higher education mean that noncredit workforce training partnerships have the potential to be a creative and flexible revenue generation source, funding auxiliary or remedial services required to meet those accountability demands.

The research is also valuable to community college leaders because accreditation agencies are increasingly focusing on noncredit workforce training outcomes as part of continuous quality improvement (CQI) processes. As these outcomes are added to the CQI focus, community colleges are "paying more attention [to] and tracking more information of the characteristics of students enrolled and their outcomes" (Van Noy et al., 2008, p. 93). Tying skills development to professional credentials, or building bridges between noncredit workforce training and credit coursework, can all occur as a result of effective partnerships between the community college and the businesses and industries it serves. Noncredit workforce training units that are attentive to current trends in business and industry training—and that can anticipate their workforce partners' training needs as a result—are better-positioned to serve the communities in which they are located (Flynn & Bernstein, 2007). The increasingly important role a noncredit workforce training unit plays in a community college's fiscal sustainability supports the need for this research.

This study is also significant because scant literature exists on the precise nature of community colleges' partnerships with business and industry or the methods by which these partnerships are developed and sustained. While multiple studies address the characteristics of entrepreneurial businesses and the broadly defined features of academic-community based partnerships, no comparable study applies entrepreneurialism to the community college and its unique relationships with noncredit workforce training partners. For these reasons, a study examining the characteristics of community college entrepreneurship can provide a process or matrix for other institutions seeking to build or improve upon their own noncredit workforce training partnerships.

Review of the Literature

A brief review of the literature assists in situating this study, the purpose of which is to identify how and in what ways Illinois single-campus community colleges develop and sustain effective noncredit workforce training partnerships. The literature review provides a context for the one construct and two models comprising the study's conceptual framework. The conceptual framework itself forms the lens through which the data will be analyzed and leads to the research findings.

The literature review provides a brief historical background of community colleges and the evolution of noncredit workforce training partnerships as one of the distinguishing features of community colleges. While a variety of concepts or models could be employed to identify the methods by which community colleges partner with business and industry, one construct from business management and two models from partnership development and training evaluation inform this study. Lumpkin and Dess's (1996) Entrepreneurial Orientation Construct, which focuses on five dimensions for characterizing effective entrepreneurial processes, will be examined. Amey, Eddy, and Ozaki's (2007) two-stage Partnership Development Model, which emphasizes the components of an interactive relationship between the community college and its business and industry partners, will also be reviewed. Finally, Kirkpatrick and Kirkpatrick's (1993) model of training evaluation, known as the *Kirkpatrick Four Levels of Training Evaluation*, will be examined as a framework for assessing training effectiveness and continually improving the training experience for the noncredit workforce training partner.

Background and Overview

A Brief Historical Perspective on the Community College

Community colleges have evolved into uniquely American institutions. At the turn of the twentieth century, scholars such as the University of Chicago's William Rainey Harper, the University of Illinois' Edmund James, and Stanford's David Starr Jordan suggested a post-secondary level of education patterned after the European model of higher education (Cohen & Brawer, 2008). This approach advocated that universities be responsible for upper division education with a level of junior colleges providing both lower division, general education coursework and two-year occupational or vocational training.

With the end of World War II, the Servicemen's Readjustment Act of 1944 (known as the GI Bill) prompted a dramatic increase in the number of veterans applying for housing and returning to college. This large-scale increase in educational funding sources, described as "democratization of access" (Cohen & Brawer, 2008, p. 31), set the stage for the role as workforce training provider that is a cornerstone of the community college today.

The focus on noncredit, occupation-specific workforce education increased with the economic boom of the 1980s and 1990s and was known as *contract training* (Cohen & Brawer, 2008). Many community colleges began to offer this training in continuing or corporate education departments, business and industry centers, or workforce development departments. The organizational structure of the department or center varied by institution, but the mission of the training was to be rapidly responsive to the business and industry partners served by the community college. Contract training was almost exclusively beyond the scope of credit coursework and met one of three

objectives: to train specific companies' employees; to train public agency employees; or to train target groups, such as the unemployed or those on welfare (Cohen & Brawer, 2008).

Contract training was frequently looked upon with disdain from faculty teaching credit courses as a dilution of the institution's roles of providing both transfer education and career and technical education (CTE) degrees and certificates. The training was often perceived as lacking the academic rigor and quality of credit courses. Yet during the two decades of the last century, contract training became an increasingly popular revenue source for the institution. Levin (2001) notes that *customized training* soon became a subset of *contract training* because of the community college's ability to establish business or entrepreneurial relationships with local employers and to respond rapidly and affordably to requests for curriculum development. Community college leaders soon became aware of not only the important role the institution could play in workforce development, but also the potential for additional revenues that contract training could provide.

The increased emphases on contract and customized training and the relationships with business and industry cited by Cohen and Brawer (2008) and Levin (2001) are also found in Illinois. Acknowledging the community college's role in fostering relationships with noncredit workforce training partners, the Illinois Community College Board (ICCB, 2012a, 2012b) offers complementary definitions of *workforce development* and *contract* or *customized training:*

> As partners with workforce and economic development, community colleges strengthen the economic base and "reskill" Illinois' workforce by helping adults prepare for the world of work or upgrade their work skills by providing opportunity for the development of higher levels of literacy, basic academic skills

and occupational/technical skills. Community colleges are the largest provider of workforce training in the state. (ICCB, 2012a)

Customized training continues to be one of the most requested services provided by the Business and Industry Centers at the community colleges. Individual companies require specialized training in order to meet specific technology and industry needs. Contract training assists companies in developing their workforce by providing basic educational skills, specific industry skills and highly developed technical skills. (ICCB, 2012b)

Today, customized, workforce-based training strives not only to be self-sustaining, but to be a profit center supporting other units in the community college (Van Noy et al., 2008). Van Noy et al.'s (2008) seminal study involved a review of noncredit workforce training policies on funding and regulation in all 50 states and case studies of 20 community colleges in 10 states. The study sought to identify how and in what ways training impacted the business and industries in the geographic areas served by the community colleges. Their research produced two major findings.

The research first found that since the community college is a nonprofit organization, the noncredit workforce training unit's revenue can be reinvested in the unit itself, thereby eliminating the need for funding from credit-generating courses or programs. This is particularly important in many states where no state funding is provided for noncredit workforce training. The research also found that community colleges can benefit financially when noncredit workforce training charges a market rate for its services. When it does so, it adds "value to the college and secures broader support within the college" (Van Noy et al., 2008, p. 2). Because community colleges are increasingly being asked to provide more services and opportunities despite shrinking state funding, the role of noncredit workforce training in developing and sustaining partnerships with business and industry is gaining increasing attention. This study

attempts to provide insights into how and in what ways noncredit workforce training units engage in those entrepreneurial partnerships with business and industry, thereby generating additional revenue so critical to community colleges in today's economic climate.

<div align="center">**Conceptual Framework for the Study**</div>

Merriam (2009) defines a *conceptual framework* as "the body of literature, the disciplinary orientation that you draw upon to situate your study" (p. 68). One construct and two models form the conceptual framework for this study.

Entrepreneurial Orientation Construct

G. T. Lumpkin, then an assistant professor of management with Northeastern State University, and Gregory G. Dess, a professor of management with the University of Texas at Arlington, co-authored a 1996 study conceptualizing the features of the entrepreneurial orientation construct. Acknowledging that high-performing businesses are broadly described as *entrepreneurial*, they also note a lack of consensus on exactly what *entrepreneurial* means. Their study draws distinctions between *entrepreneurship* and *entrepreneurial orientation*.

Lumpkin and Dess (1996) first classify *entrepreneurship* as the act of "new entry" (p. 136). New entry refers to the *what* of entrepreneurship. Businesses achieve new entry by joining a new or existing market with their own new or existing products, and it is the new entry itself that makes a business entrepreneurial. This is contrasted with *entrepreneurial orientation* (EO), which refers to the *how* of entrepreneurship, or the specific ways and means by which new entry is undertaken. EO refers to the specific "processes, practices, and decision-making activities that lead to new entry" (Lumpkin & Dess, 1996, p. 136).

The definition of EO can be applied to the community college as it develops noncredit workforce training partnerships with local business and industry. For example, community colleges may develop a new process for delivering an instructor-led training seminar in an online format in order to make the training more accessible to second- or third-shift employees in a business or industry. The impact of this decision can be "new entry" into markets where the community college had not previously offered such training.

Lumpkin and Dess (1996) further define a business's entrepreneurial orientation (EO) as consisting of five specific dimensions, all of which may be present to some degree as the business establishes processes and makes decisions leading to entrepreneurship itself. These five dimensions are:

1. *Autonomy*, which allows individuals the freedom and creativity to "champion" ideas that can result in new entry, or entrepreneurship (p. 140);

2. *Innovativeness*, which implies willingness to move beyond current practices and processes to experiment with new practices and processes (p. 142);

3. *Risk taking*, which involves borrowing, an extensive commitment of resources, or both, in exchange for a high-yielding return on investment (p. 144);

4. *Proactiveness*, which refers to actively seeking opportunities for new entry (entrepreneurialism), meeting consumer demand, and strategically introducing and eliminating practices and processes to respond to future needs (p. 146); and

5. *Competitive aggressiveness*, which competes for (as opposed to meets) consumer demand and responds aggressively to competitors (p. 147).

Lumpkin and Dess (1996) acknowledge that all five dimensions may exist when a business engages in new entry, and that businesses may successfully engage in new entry by utilizing some, but not all, of these dimensions. Their research offers two findings

that inform a community college's entrepreneurial orientation. The first finding is that these five dimensions are "salient" components of an entrepreneurially oriented business (Lumpkin & Dess, 1996, p. 149). The second finding is that these dimensions may exist and vary independently of each other based upon the business's organizational and environmental contexts. This study will gather data and information addressing the level to which these salient components exist in noncredit workforce training units' relationships with the business and industry clients they serve. The EO Construct will provide a useful framework for analyzing how entrepreneurially oriented the participants in this study—specifically, community colleges and their noncredit workforce training partners—are in working together to develop and maintain their partnerships.

Partnership Development Model

The Partnership Development Model was developed by Marilyn Amey, Pamela Eddy, and Casey Ozaki in 2007 in response to an increase in collaborative efforts between higher education and the public and private sectors. The authors note that such partnerships benefit three groups: (a) policymakers (who perceive partnerships as a strategic method of balancing a budget); (b) institutions (who perceive partnerships as resource-sharing opportunities); and (c) students (who perceive partnerships as a pathway to post-secondary education) (Amey et al., 2007). Interestingly, though, only anecdotal evidence exists on individual institutions' roles in sustaining training partnerships, and virtually no research exists on the community college's role in forging these relationships. A uniquely community college-oriented approach, the Partnership Development Model involves two stages, each containing multiple components, with overarching themes of feedback and a partnership champion.

The first stage of the model details the partnership creation and development process utilizing four factors: antecedents, motivation, context, and the partnership itself (Amey et al., 2007). *Antecedents* refer to the issues prompting the parties to establish the partnership and may include considerations such as resource shortages, past relationships with the partner, or a problem that only a partnership can help resolve. Noting that each party should understand the other's rights, roles, and responsibilities, these relationships can be described on an informal to formal continuum. *Motivation* refers to the reasons the partners engage in the partnership and an acknowledgement that each partner has its own unique motivators for pursuing the partnership. Both the community college and the business and industry partner may be motivated by their organization's *champions*, or individuals who possess a high level of social capital, trustworthiness, and respect that translates to a level of power in the development and maintenance of the partnership.

Closely related to motivation is *context*, which refers to the rationale for the partnership. A rationale could include economic, political, or sociological circumstances that provide a reason for both partners to pursue a partnership. Finally, the ways in which the partners frame the *partnership itself* is a factor. The partners not only acknowledge the strengths each party brings to build the partnership; they also acknowledge that the partnership's initial framework will occasionally adjust to continue meeting the partners' collective needs (Amey et al., 2007). These four factors round out the first stage of the model.

The model's second stage focuses on partnership sustainability and maintenance once the partnership has been established. In this stage, outcomes are considered and put into context, concluding whether the partnership is sustainable, untenable, or completed

because the partnership's goals have been met. The model also provides for both

positive-natural finishes, where the project's objectives are met, and negative-unnatural

finishes, where the project fails or is terminated by one of the parties (Amey et al., 2007).

The overlying themes of feedback and involvement of partnership champions are

key components of the process. The model provides for a feedback loop on both the

partnership's development and its progress to help the parties maintain focus and make

needed adjustments. The partnership champion, the person who "advocates for the

initiative" (Amey et al., 2007, p. 11), does not necessarily have organizational power, but

must have the support of the institution's leader. The authors submit that this role of

champion is distinguishable from other literature on organizational change, where the

champion is, by definition, the institution's designated or acknowledged leader.

The Partnership Development Model will provide a meaningful lens through

which to view how and in what ways community colleges and their noncredit workforce

training partners act entrepreneurially to develop and sustain their partnerships. The *a*

priori stages of Amey et al.'s (2007) model will be used to analyze the data collected for

this study. The study findings will yield entrepreneurial patterns and themes that can

inform practice for community college leaders looking to establish similar partnerships.

Kirkpatrick and Kirkpatrick's Four Levels of Training Evaluation

Long established as the father of training evaluation, Donald L. Kirkpatrick

initially developed a two-level training evaluation protocol as part of his doctoral

research. In the five years after he earned his doctorate, he expanded the protocol to a

four-part model now known as the *Kirkpatrick Four Levels of Training Evaluation*.

Kirkpatrick and his son James, who have co-authored multiple studies on the model, offer

three key reasons for evaluating the effectiveness of training: (a) to improve future training; (b) to determine whether training should be continued or discontinued; and (c) to justify the budget allotted to the training function (Kirkpatrick & Kirkpatrick, 1993). Those reasons provide the foundation for the four evaluation levels: *reaction, learning, behavior, and results.*

Level 1 evaluation is known as the *reaction* level, as the goal is to measure positive comments about the training. While Donald Kirkpatrick (2006) acknowledges criticism of Level 1 as a "smile sheet," he has no objection to that label, particularly because positive reaction denotes customer satisfaction (p. 6). Noting that learning is improved when reaction is positive, the elder Kirkpatrick believes that business and industry clientele will tell others if they perceive the training as worthwhile. In evaluating reaction to the training, the model requires that evaluators first decide upon the precise reaction to gauge, whether that be curricular content, assessment techniques, or instruction, and then design a form to quantify that reaction. Trainers should also use written, subjective comments and garner as close to 100% participation in the evaluation as possible by asking for immediate reaction, preferably before leaving the training environment. The model also suggests the use of anonymous evaluations to encourage honest answers and an established benchmark for acceptable responses (Kirkpatrick, 2006).

Kirkpatrick and Kirkpatrick's (1993) Level 2 evaluates participant *learning*, which is a performance-based evaluation and builds upon the Level 1 evaluation. Kirkpatrick believes trainers should not attempt to measure what participants learned from the training without first measuring their reactions to it. To foster optimal Level 2

learning evaluation, the model uses identical pre- and post-tests, with the difference between the results being what the participants have learned. The model strongly discourages the use of differing pre- and post-test forms, indicating that the difference may not necessarily cover the same curricular content or perceptions (Kirkpatrick, 2006). Level 2 *learning* evaluation also stresses the importance of 100% participant response so the benchmark can be as accurate as possible.

Level 3 of Kirkpatrick and Kirkpatrick's (1993) Four Levels of Training Evaluation measures *behavior*, or how and in what ways participants conduct themselves differently as a result of training. Just as trainers should evaluate at Level 1 *reaction* before progressing to evaluate at Level 2 *learning*, trainers should evaluate at Level 2 prior to evaluating at Level 3 *behavior*. While the model advocates the use of identical pre- and post-testing as in Level 2 *learning*, Level 3 *behavior* indicates that evaluation be conducted three to six months after the training concludes to track measurable behavioral change. The model also provides for 360-degree evaluation, in which others who could be impacted by a participant's behavioral change—such as supervisors, subordinates, customers, clients, and peers—can evaluate the training's effectiveness. Level 3 *behavior* includes an ancillary provision to repeat the evaluation in three months if the training participants respond that they plan to change their behavior, but have not done so at the time of the evaluation.

The highest of the Kirkpatrick Four Levels of Training Evaluation, Level 4, evaluates *results*, or whether the training has achieved quantifiable outcomes. Examples of such results include an increase in production; a decrease in product loss; an increase in quality; a higher return on investment or profit; or an increase in sales (Croes, 2012).

Level 4 *results* evaluation is also based upon an evaluation of Levels 1 through 3, and it requires the use of identical pre- and post-testing. Results-based evaluation is conducted six to twelve months after the conclusion of training and is repeated as appropriate. A unique characteristic of Level 4 *results* evaluation is that it involves the use of a control group (Kirkpatrick, 2006). Donald Kirkpatrick notes that while many organization administrators fail to evaluate at Level 4 because they either find it unnecessary or they are unsure of how to conduct the evaluation, it is a critical function. "In today's tough business climate, it is imperative that learning professionals link learning initiatives to business goals and prove their value in this new workplace" (D. Kirkpatrick, 2010, p. 16).

In an entrepreneurial partnership between the community college and a noncredit workforce training partner, training evaluation can benefit both parties. Not only can evaluation measure reaction to training, but it can also measure how well the learners have mastered the content developed by the community college in conjunction with the business and industry participants. Additionally, effective evaluation can measure how the participants' behavior has changed as a result of the training provided by the community college. Finally, the evaluation can be used to track training results leading to recommendations for future training or development of corrective training programs for employees. The community college's efforts to provide effective evaluation initiatives also demonstrate an entrepreneurial approach to the training function that the business and industry partner would expect from a private training organization. Evaluating training effectiveness is a key component in developing and sustaining an entrepreneurial partnership with a noncredit workforce training partner. The *a priori*

levels found in Kirkpatrick and Kirkpatrick's (1993) four-part model will be used to analyze the data collected for this study.

Methodology

A discussion of the methodology used to frame this research is necessary for two reasons. First, it offers a logically constructed and transparent design process for data collection and analysis. Equally important, a discussion of methodology ties this process to the purpose of the study, which is to identify how and in what ways Illinois single-campus community colleges develop and sustain effective noncredit workforce training partnerships. This research will be conducted through qualitative inquiry situated in the interpretive paradigm and the use of case study methodology.

Qualitative Paradigm

There are several reasons for selecting the qualitative paradigm for the design of a research study. Qualitative research is often utilized when little is known about a particular phenomenon or the context (for example, social, cultural, or political) in which the phenomenon occurs. Qualitative research is also applicable when there is a need to study a group in its natural environment in order to develop an in-depth understanding of the issue. Finally, qualitative research is used to determine how individuals interpret the phenomenon or context under study. For these reasons, using interpretation and induction to make meaning of insights, viewpoints, and experience is a hallmark of this paradigm. This research seeks to make meaning of the information from community colleges and their business and industry partners regarding the ways in which entrepreneurial noncredit workforce training partnerships are developed and sustained. This process involves both interpretation and induction, thereby making qualitative inquiry the most appropriate paradigm for this research.

Qualitative research is situated in the interpretive paradigm, in which individuals seek to make meaning of the information and data they collect (Creswell, 2007). While the interpretive paradigm allows readers to make their own meaning from the data and information gathered, it also provides multiple viewpoints and perspectives for the researcher to gather, analyze, and interpret. The goals of constructing meaning from this information, and viewing this information from the perspectives of both the participants and the researcher, make qualitative inquiry the most suitable approach for this research.

Stake (1995) defines four characteristics of qualitative inquiry. The first characteristic is that qualitative inquiry is *holistic*, or case-oriented, where the researcher seeks to understand the subject instead of distinguishing it from other subjects. Qualitative inquiry is also characterized as *empirical,* or field-oriented, where the participants' observations are emphasized. A third characteristic of qualitative inquiry is that it is *interpretive*, where researchers acknowledge interaction between the researcher and the subject. Finally, qualitative inquiry is characterized as *empathic*, or designed to acknowledge and respond to emerging themes, with the goal of providing the reader a "vicarious experience" (Stake, 1995, p. 47).

Stake's four characteristics are relevant to this research and make a qualitative inquiry situated in the interpretive paradigm appropriate for this study. Applying Stake's four characteristics to this study, the research will be holistic or case-oriented, with the goal of deeply understanding the subject. The resulting data analysis will be empirical, emphasizing observable patterns or themes. Interpretivism will also be present through this study, with interaction between the researcher and community colleges and their noncredit workforce training partners. The resulting data and information collected can

then be viewed through the lenses of both the research participants and the researcher. It is through these interpretations that patterns and themes will emerge, resulting in a better understanding of how noncredit workforce training partnerships are developed and maintained with business and industry. The ultimate goal of this research will be to determine how and in what ways these partnerships are built and sustained.

Case Study

Case studies provide a methodology to explore unique issues or phenomena. Yin (2009) notes that "the distinctive need for case studies arises out of the desire to understand complex social phenomena" (p. 4). He also opines that case studies are framed by three fundamental methodology considerations: (a) the research involves a *how* or *why* question; (b) the research does not require control of participants' behavior; and (c) the research focuses on contemporary events. The unique social phenomenon of how and why community colleges and business and industry build and sustain noncredit workforce training partnerships makes a case study the most appropriate method for this research.

This case study seeks to explore *how* and *in what ways* community colleges forge entrepreneurial partnerships. This research will also be informed by the participants' responses to both demographic surveys and in-person interviews, where the researcher would seek to gather as many views and perspectives as possible—not seek to control the participants' behavior. Finally, the research focuses on a contemporary phenomenon, or something that is not widely known: How and in what ways do community colleges develop and sustain entrepreneurial relationships with their business and industry

partners? These three considerations support the use of the case study as the methodology of choice.

Although case studies can vary in complexity, the hallmark of the methodology is the bounding of the case. Merriam (2009) explains the bounding effect of the case study by describing *bounding* as a unit of analysis characterizing the study, as opposed to the study being bound by the topic itself. When a case study is bounded, or delimited, Merriam describes a conscious effort by the researcher to "fence in" what will be studied (2009, p. 40). For this research, bounding this case study by its purpose, the community college sites and geographic distributions, and the colleges' business and industry participants provides that unit of analysis to which Merriam refers and further *fences in* what will be studied.

Data Collection

This case study will utilize a sequential multi-method approach to data collection. This approach is appropriate because a wide variety of data sources will provide what Yin (2009) refers to as "embedded units of analysis" within the case (p. 173). These individual units of analysis, collected through a variety of methods and at different points in time, are then incorporated into a completed case study. The data collection methods utilized for this case study will include (a) surveys; (b) semi-structured interviews with purposefully sampled community colleges and their business and industry partners; (c) documents relevant to the development and maintenance of these entrepreneurial partnerships; and (d) both observational and reflective field notes. These data sources will be triangulated in order to strengthen both the trustworthiness and validity of the findings and the rigor of the study.

Sampling

Qualitative inquiry gathers information that provides both breadth and depth to the issue or phenomenon under study. Because Illinois community colleges are unique in their varying sizes, locations, and noncredit workforce training unit structures, relevant data providing a wide range of perspectives on effective noncredit workforce training partnerships must be gathered. For this reason, purposeful sampling will be employed to collect data from both community colleges and business and industry partners involved with developing and sustaining these partnerships. Creswell (2007) defines purposeful sampling as "intentionally sampling a group of people that can best inform the researcher about the research problem under investigation" (p. 118).

The Illinois community college system consists of 48 colleges in 39 community college districts; eleven of those institutions are part of two community college systems (City Colleges of Chicago and Illinois Eastern Community Colleges). The administrative structures of the two community college systems differ from the administrative structures of their single-campus counterparts. For this study, Illinois' single-campus community colleges will provide the initial sample from which the study sites and participants (noncredit workforce training administrators and their business and industry partners) will be selected.

The initial demographic survey will include all 37 single-campus community colleges, including the institution employing the researcher. However, neither the researcher's community college nor its business and industry partner will be included in the second phase of data collection involving personal interviews. Therefore, the total number of single-campus community colleges in the sample pool will be reduced from 37

to 36. Although other studies might focus on the entire network of 48 community

colleges, this study is bounded by the 36 remaining Illinois single-campus community

colleges that can provide rich sources of data regarding their entrepreneurial relationships

with their business and industry partners. On the other hand, both the researcher's

community college and one of its business and industry partners will be utilized to pilot

test the data collection procedures.

Maximum variation, which complements purposeful sampling, will also be

utilized in this study. The goal of maximum variation is to provide differences or varying

perspectives among the sites or participants (Creswell, 2007). Illinois single-campus

community colleges are unique because they vary in size, geographic location,

demographics, and structure of noncredit workforce training units. In order for this

study's findings to be relevant and applicable to a greater cross-section of institutions in

the state and across the nation, the use of maximum variation sampling will gather data

from the largest possible group of participants to provide diverse and wide-ranging

perspectives on the characteristics of effective noncredit workforce training partnerships.

Site Selection Criteria

Purposeful sampling will require that three to five of Illinois' single-campus

community colleges and their respective business and industry partners be invited to

participate in the data collection process. This data will be collected from the community

colleges and their business and industry partners at multiple points in time and by

different means. A sequential multi-method approach to data collection will be employed

to gather a wide variety of perspectives from both noncredit workforce training units and

their business and industry partners.

In the first phase of the data collection, an initial survey with demographic and pertinent research questions involving entrepreneurial partnerships will be distributed to all Illinois single-campus community colleges, regardless of size or geographic location. Included in the initial demographic survey is a request to participate in a personal interview, which is the second phase of the multi-method data collection approach.

In order to provide maximum variation in this second phase of data collection, the three to five community colleges participating in a personal interview will be classified using the Carnegie Size and Setting Classifications: (a) small two-year, defined as having 500-1,999 FTE; (b) medium two-year, defined as having 2,000-4,999 FTE; and (c) large or very large two-year, defined as having 5,000 FTE or greater (Carnegie Foundation, 2012e). The participating institutions will, whenever possible, be further classified using the Carnegie Basic Classifications: (a) rural-serving large campus; (b) rural-serving medium campus; (c) suburban-serving multicampus; and (d) suburban-serving single campus (Carnegie Foundation, 2012a).

Those community colleges agreeing to participate in personal interviews will be asked for the names and contact information of two business and industry partners who would consent to participate in their own demographic survey and personal interview. Business and industry partners will be requested from two different occupational areas in order to provide an additional dimension to the maximum variation sampling necessary for this study. Only one of the two partners will receive a business and industry demographic survey and a request for a personal interview.

Participant Selection Criteria

A total of six to ten participants will be selected to take part in this study: three to five community college administrators and one business and industry partner from each of the selected community colleges. The administrators selected will be noncredit workforce training directors, deans, or vice presidents who have responsibility and accountability for the noncredit workforce training unit's daily operations and who have been in their positions for a minimum of two years. These administrators were chosen because of their in-depth knowledge of their unit's processes and procedures in developing and maintaining entrepreneurial partnerships. In addition, administrators with at least two years' experience will have familiarity with at least one budget cycle and should be knowledgeable as to the influences on and characteristics of their partnerships with business and industry. Illinois single-campus community colleges will receive a basic demographic survey to gather information regarding their institutions and their noncredit workforce training partnerships. The first three to five community college administrators agreeing to an interview and meeting the selection criteria will be invited to participate. To enhance the maximum variation of the community college respondents, both the Carnegie Size and Setting Classification and the Carnegie Basic Classification for geographic distribution will be used. Therefore, eligibility for participation in the study is contingent upon the institution's workforce training partner participating in an interview.

The other three to five participants will be business and industry partners who have a relationship with the community college participants. These partners will be plant managers, human resource directors, or others who are directly responsible for

implementing employee training in the business or industry. Therefore, eligibility for and participation in the study is contingent upon their community college partner participating in an interview.

Methods of Data Collection

Qualitative research requires a variety of data collection methods in order to document the study's objectivity, or its construct validity (Yin, 2009). The goal of using a variety of data collection techniques is to be able to triangulate the data obtained, to collect the greatest possible cross-section of relevant data, and to gather rich, thick data to address the purpose of the study. For this study, four methods of data collection will be used. These methods will include (a) demographic surveys; (b) semi-structured interviews with purposefully sampled community colleges and their business and industry partners; (c) documents relevant to the development and maintenance of these entrepreneurial partnerships; and (d) both observational and reflective field notes.

The demographic survey will initially be sent to all Illinois single-campus community colleges. This demographic survey will collect basic information about the institution and the participant and will question the nature of the community college's noncredit workforce training partnerships. To facilitate the ease of data collection with the study participants, the demographic survey will be distributed using SurveyMonkey, a web-based data collection tool (www.surveymonkey.com). The community college survey is included in Appendix A.

Once the responding community college has provided contact information in the demographic survey on two business and industry partners willing to participate in their own demographic survey and interview, a similar survey will be sent to those partners.

The partners will also be asked questions about the nature of their noncredit workforce training partnerships with their community colleges. This survey will also be distributed using SurveyMonkey. The business and industry partner survey is included in Appendix B.

Semi-structured interviews of community college administrators and business and industry partners will serve as the primary data collection method. Once the community colleges and noncredit workforce training partners have been identified for semi-structured interviews and have agreed to participate, appointments for those interviews will be scheduled. The participant consent form is included in Appendix C. Both the institutions and their partners will be asked questions about the community college's entrepreneurial orientation, their approaches to partnership development and sustainability, and their methods of evaluating training effectiveness. These questions will be mapped to components of each construct or model comprising the conceptual framework for this study: Lumpkin and Dess (1996); Amey, Eddy, and Ozaki (2007); and/or Kirkpatrick and Kirkpatrick (1993). The interview questions mapped to the study's driving questions are included in Appendix D. Additionally, each interview will be audio recorded and transcribed by a transcriptionist retained by the researcher. The transcriptionist's confidentiality agreement is included in Appendix E.

While interviews will be a primary data collection method for this case study, document review will also serve to provide multiple sources of data and information. Document review serves to provide an unbiased view of the phenomenon under study. Multiple document sources will include training contracts and forms used by the community college and the noncredit workforce training provider; statistical reports on

the number of noncredit contract courses the community college offers and the annual

revenue generated; organization charts showing the location of the noncredit workforce

training unit in the community college's hierarchy; and web site content on the unit's

mission, clientele, and content offered by contract training.

Field notes also add another important dimension to the process of data collection.

For this reason, both observational and reflective field notes will be kept throughout this

study. Observational field notes serve to provide descriptions of the setting, people, or

activities involved in the study. Reflective field notes document the observer's

commentary, feelings, reactions, or initial impressions of the interview (Merriam, 2009).

Both types of field notes are necessary to capture the essence of the interview and to

provide a useful recall tool for the researcher.

<div align="center">

Data Analysis Procedures

</div>

All data collected will be analyzed through the use of *a priori* themes found in the

conceptual framework of this study. The goal of this analysis is to look for patterns and

themes that will enhance the understanding of the ways in which community college

noncredit workforce training units and their business and industry partners develop and

maintain effective partnerships. The data will be analyzed using systematic categorizing

and coding processes. All data and information collected will be loaded into NVivo10®,

an application for qualitative data analysis produced by QSR International

(www.qsrinternational.com). All *a priori* themes and emerging themes will be assigned

NVivo10® digital codes (referred to as *nodes*), which can then be used to search against

all digital media gathered and uploaded for analysis. NVivo10® will also allow for

extensive reporting capabilities, which can subsequently be exported to other software

applications for continued analysis.

In order to maintain trustworthiness in analyzing complicated and complex data, Creswell's Data Analysis Spiral (2007) will be used. The spiral framework provides for multiple process loops that address managing the data; reading and memoing the data repeatedly to locate emerging themes; classifying or coding the data by categories and putting the data into context; and representing or visualizing the data with matrices or process loops (Creswell, 2007). This systematic data analysis process will insure that *a priori* themes found in the conceptual framework will be used in the coding of data and information collected. Additionally, great care will be taken to both recognize and capture emerging themes arising from the data analysis so that no data is lost.

Definition of Terms

In order to provide consistency to the terms used throughout this concept proposal, definitions of key terms are necessary.

Business and industry training. This includes customized job training on campus or on-site at a business; assisting entrepreneurs in business start-up; providing counseling and management assistance to small and medium sized business owners; helping businesses with government procurement opportunities; offering continuing education; developing training programs for unemployed and underemployed workers; and serving businesses with alternative education delivery systems, such as distance learning (ICCB, 2012c).

Carnegie Basic Classifications. A system of measuring institutions as public or private; suburban-, urban-, or rural-serving; and single-campus or multi-campus (Carnegie Foundation, 2012a).

Carnegie Size and Setting Classifications. A system of measuring institutional student enrollment by full-time equivalent, thereby "representing and controlling for

institutional differences . . . to ensure adequate representation of sampled students, institutions, or faculty" (Carnegie Foundation, 2012e).

Chain of Evidence ([SM]). A visual depiction of Kirkpatrick and Kirkpatrick's (1993) Four Levels of Training Evaluation, which shows the completion of higher evaluation levels predicated upon the successful completion of lower evaluation levels (Kirkpatrick Partners, 2009).

Classification of Instructional Programs (CIP). A coding system, developed in 1980 by the United States Department of Education's National Center for Education Statistics (NCES), providing "a taxonomic scheme that supports the accurate tracking and reporting of fields of study and program completions activity" (NCES, 2013).

Continuing education. Continuing education refers to noncredit, professional development coursework designed by the community college for "initial certification and continuing education units that are needed to continue [a professional worker's] professional status" (ICCB, 2012b).

Continuing education units (CEUs). The International Association of Continuing Education and Training (IACET) defines a CEU as "ten contact hours of participation in an organized continuing education and training experience, delivered under responsible sponsorship, capable direction and qualified instruction" (IACET, 2012).

Contract training. "Companies require specialized training in order to meet specific technology and industry needs. Contract training assists companies in developing their workforce by providing basic educational skills, specific industry skills and highly developed technical skills" (ICCB, 2012b).

CRM. Acronym for Client Resource Management, Constituent Relationship Management, or Customer Relationship Management (Fredette, 2013; Klie, 2012; Klie, 2013).

Customized training. Also known as contract training, "customized training continues to be one of the most requested services provided by the Business and Industry Centers at the community colleges" (ICCB, 2012b).

Entrepreneurial orientation (EO). Lumpkin and Dess (1996) define entrepreneurial orientation as the specific "processes, practices, and decision-making activities that lead to new entry" (p. 136), thereby distinguishing it from entrepreneurship.

Entrepreneurship. Lumpkin and Dess (1996) define *entrepreneurship* as "new entry," which is accomplished by joining a new or existing market with their own new or existing products (p. 136).

Employer Investment Training Program (ETIP) Grant. A grant program funded by the Illinois Department of Commerce and Economic Opportunity (IDCEO) to upgrade manufacturing workers' skills and encourage businesses to stay competitive with new technologies and business practices (IDCEO, 2013).

IACET. Acronym for International Association of Continuing Education and Training (IACET, 2012).

ICCB. Acronym for the Illinois Community College Board.

ICCET. Acronym for Illinois Council for Continuing Education and Training (ICCET, 2012a).

IDCEO. Acronym for Illinois Department of Commerce and Economic Opportunity (IDCEO, 2013).

NCES. Acronym for United States Department of Education's National Center for Education Statistics (NCES, 2013).

NCHEMS. Acronym for the National Center for Higher Education Management Systems (Collier, 1978).

NIMS. Acronym for National Institute for Metalworking Skills.

Noncredit workforce training unit. Noncredit workforce training units are departments or divisions in a community college providing training to business and industry (Dougherty & Bakia, 2000).

Program Classification Structure (PCS). A system developed by the National Center for Higher Education Management Systems (NCHEMS) in 1972, which ascribes each operation of a postsecondary institution to one of nine defined categories; this provides the community college with a framework for measuring progress towards institutional objectives in these categories (Collier, 1978).

Return on Expectations (ROE). A process of understanding the training outcomes sought by organization managers so that content can be designed and developed to achieve a positive outcome (Kirkpatrick Partners, 2011).

Single-campus community college. Illinois community colleges that are not part of the two community college systems (City Colleges of Chicago and Illinois Eastern Community Colleges) (ICCB, 2013d).

TABE. Acronym for Test of Adult Basic Education.

weTRaIN. Acronym for Illinois Community College Training Resource and Information Network (weTRaIN, 2012a).

Workforce development. Community colleges engage in developing a workforce by "helping adults prepare for the world of work or upgrade their work skills by providing opportunity for the development of higher levels of literacy, basic academic skills and occupational/technical skills. Community colleges are the largest provider of workforce training in the state" (ICCB, 2012a).

Workforce Development Grant. This method of funding is employed by the Illinois Community College Board (ICCB) to fund workforce training in Illinois community college districts (IBHE, 2010).

Organization of the Dissertation

Chapter 2 offers a review of the relevant literature as it relates to the nature of noncredit workforce training partnerships. An historical overview of the American community college system, and specifically the role noncredit workforce training initiatives plays in advancing community colleges' missions, provides critical context to this research. A discussion of current trends in entrepreneurial workforce education offers a foundation for the study's conceptual framework, which includes one construct and two models: (a) the Entrepreneurial Orientation Construct (Lumpkin & Dess, 1996); (b) the Partnership Development Model (Amey et al., 2007); and (c) the Four Levels of Training Evaluation (Kirkpatrick & Kirkpatrick, 1993).

Chapter 3 provides a discussion of the study's qualitative inquiry methodology, specifically a case study situated within the interpretive paradigm. The rationale for the case study's selection process is discussed in detail. Because this case study is limited to Illinois' single-campus community colleges and not the Illinois community college

system as a whole, a comprehensive explanation of the process for purposefully sampling those single-campus entities is offered, both by site and participant selection. Because both community college administrators and their business and industry partners participated in this study, a sequential multi-method approach is a critical component of the contact protocol. This two-phase approach, which involves completion of a web-based demographic survey and an in-person interview, is discussed in detail. The processes for collecting and analyzing the data, and the use of NVivo10® to expedite the analysis process, are addressed. An in-depth discussion of the study's ethical considerations is provided, and the study's limitations are defined and addressed.

Chapter 4 describes the process of data collection utilizing the sequential multi-method approach. Descriptive detail is offered about the community college administrators whose participation was limited to the first phase of the study (the web-based demographic survey) and those administrators who opted to participate in the second phase of the study (an in-person interview). Similar detail is also offered about the business and industry counterparts who participated in comparable surveys and interviews. In addition, a comprehensive summary of the documents provided by both community college administrators and their noncredit workforce training counterparts is offered to provide additional context to the *a priori* themes.

Chapter 5 provides continued analysis of the data through the lens of the conceptual framework and provides illustrations from study participants to substantiate the study's findings. Emerging themes of potential importance to community college administrators and their noncredit workforce training partners are also analyzed and discussed.

Chapter 6 provides a comprehensive conclusion of the study's findings and the implications of these findings for community college leaders. Based upon this study's findings and related implications, Condon's Noncredit Workforce Training Partnership Model and a related checklist are presented to assist community college leaders with developing and sustaining effective noncredit workforce training partnerships. The chapter concludes with recommendations for future research in this area.

Community colleges have long been key contributors to workforce education, but it has been within the past two decades that the role of noncredit workforce education has gained legitimacy within the institution, primarily because of its potential as a revenue source that can underwrite other institutional functions. A review of the literature suggests that community colleges and their noncredit workforce training partners can adopt characteristics of businesses possessing an entrepreneurial partnership orientation, and also that effective training evaluation can enhance the value those partnerships add to their respective organizations. The responsibility for building and maintaining such partnerships, according to Roueche and Jones (2005), will likely fall upon the next generation of community college leaders:

> An equally entrepreneurial, innovative breed of leaders is forging a new identity for community colleges. . . . They recognize that the entrepreneurial community college must think differently about how it is organized and about the roles and responsibilities of its employees. (p. xi)

Chapter 2: Review of the Literature

Introduction

To describe a *partnership* initially seems self-explanatory: a relationship between two entities pursued for the mutual benefit of each entity. Adding the adjective *training* to the definition of *partnership* refines it further: a relationship where one entity provides instruction and skill development to another in exchange for compensation.

The distinctions become less clear, however, when the concept of training partnerships is viewed through the lens of community colleges. In some community colleges, developing and sustaining training partnerships with business and industry is the responsibility of a noncredit workforce training unit. The lack of clarity is compounded, however, because of the myriad of synonyms used to describe noncredit workforce training units. A cursory review of Illinois community college web sites reflects a confusing blend of monikers for these units, including *continuing education*, *contract training*, *business and industry training*, *corporate and workforce training*, *community education*, or *business and career training*. In an attempt to mitigate this confusion, some community colleges have attempted to rebrand themselves as *workforce education* or *contract training* units, thereby illustrating the focus on customized training for business and industry. However, these monikers are often considered synonymous with credit-level job retraining for dislocated workers under the Workforce Investment Act, leaving the confusion and lack of clarity unresolved.

Research into the concept of community college training partnerships, which is limited, often reveals the same lack of clarity in the descriptive nature of those partnerships. This lack of clarity mirrors that which is found in community colleges' definitions of noncredit workforce training partnerships. Clearly, a demonstrable gap

exists in the research on the nature of noncredit workforce training partnerships and the methods by which they are developed and sustained. Research on how and in what ways community colleges and their noncredit workforce training partners develop and sustain partnerships should lend clarity to the meaning of *training partnerships* and their value to the institutions and the communities they serve.

This chapter provides an in-depth discussion of the applicable research on this topic and its relevance to the study. Such a review of the literature is necessary for two reasons. First, a review of the literature situates this qualitative research study, the purpose of which is to identify how and in what ways Illinois single-campus community colleges develop and sustain effective noncredit workforce training partnerships. In addition, a review of the literature provides a conceptual framework for this study.

This literature review begins with a discussion of the historical perspective on the American community college and the rise of noncredit workforce training as a major function of the institution. Next, a discussion of the study's conceptual framework will serve to situate the research and provide an appropriate lens through which the data and information gathered will be analyzed. Many theories, concepts, or models could be employed to identify the methods by which community colleges and their noncredit workforce training partners develop and sustain their relationships. For this study, one business management construct and two educational models inform the research. The first, Lumpkin and Dess's (1996) Entrepreneurial Orientation Construct, offers five dimensions for characterizing the effective entrepreneurial processes of business organizations; this construct will be applied to the community college's processes of building and sustaining its own relationships with business and industry. In addition, the

two-stage Partnership Development Model proffered by Amey, Eddy, and Ozaki (2007)

will be reviewed to examine the characteristics of an interactive relationship between the

community college and its noncredit workforce training partners. Finally, Kirkpatrick

and Kirkpatrick's (1993) training evaluation model, known as the *Kirkpatrick Four*

Levels of Training Evaluation, will be examined as a method by which the effectiveness

of a training partnership may be evaluated. With the well-documented gap in the

literature on this topic, the application of the construct and two models to this study

should also assist community colleges and their noncredit workforce training partners

who seek a framework for building and sustaining their own training or entrepreneurial

partnerships.

<div align="center">

Historical Context

</div>

The Historical Background of Community Colleges

Now in its second century of existence, the American community college has

grown from a post-secondary institution offering lower division, transfer-level

coursework and occupational training into an entity that responds affordably and

adaptably to the needs of the community it serves. Indeed, Edmund J. Gleazer, Jr., a

former president of the American Association of Community Colleges (AACC), believes

the word *community* is more important to the institution's name than is the word *college*,

because *community* implies "a resource to be used by individuals during their lifetime"

(Cohen & Brawer, 2008, p. 314). In order to understand more fully the community

college's evolution into its present-day role as a lifetime resource, a discussion of its

history and its role in twentieth century higher education is instructive.

Scholars such as William Rainey Harper of the University of Chicago, Edmund

James of the University of Illinois, and David Starr Jordan of Stanford were early, vocal

advocates of a post-secondary system of education modeled after European educational systems (Cohen & Brawer, 2008). Using the European model, universities would provide upper division education, and local *junior colleges* would provide both lower division coursework in general education and two-year training in vocational or career areas. Joliet Junior College, the United States' oldest public junior college, was established in 1901 with the goal of fulfilling both of these functions. During the Great Depression of the 1930s, community colleges extended their work into training and retraining unemployed Americans to return to the workforce; prior to the United States' entry into the Second World War, the number of American community colleges had increased nearly tenfold, as illustrated in Figure 1.
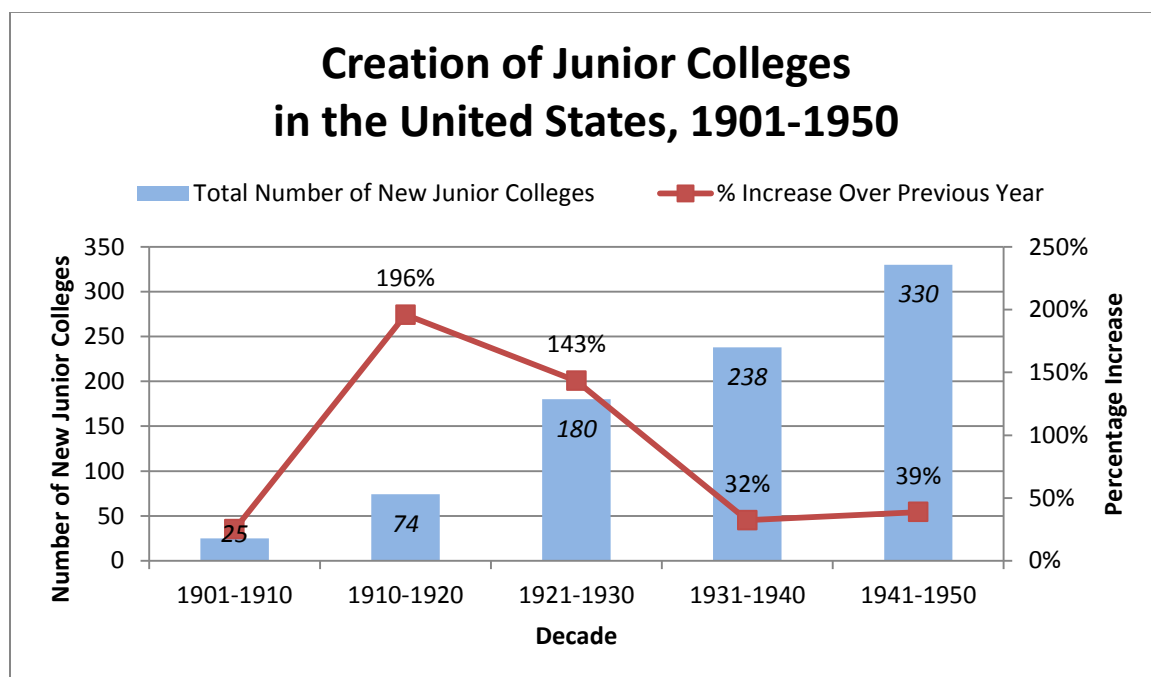
Figure 1. Creation of junior colleges in the United States, 1901-1950.
Adapted from "Community College Growth Over Past 100 Years," by American Association of Community Colleges, 2012, http://www.aacc.nche.edu/AboutCC/history/Pages/ccgrowth.aspx.

The GI Bill and The Truman Commission

By the end of World War II—specifically, two weeks after the D-Day invasion of Normandy on June 6, 1944—President Franklin Delano Roosevelt signed the Servicemen's Readjustment Act of 1944 into law (Lehrer & Beschloss, 2000). The bill, which was narrowly passed by Congress, was designed to assimilate returning veterans into a post-war economy, which was primarily accomplished by providing opportunities for affordable housing and a return to college. One of the bill's defining features was a large-scale increase in the funding supplied to education, which led to the "democratization of access" described by Cohen and Brawer (2008, p. 31). As presidential historian Michael Beschloss notes:

> The other thing I think really endures as a part of America's philosophy is [the GI Bill] linked the idea of service to education. You serve the country; the government pays you back by allowing you educational opportunities you otherwise wouldn't have had, and that in turn helps to improve this society (Lehrer & Beschloss, 2000, para. 26).

The idea of service to the country in exchange for education was one of many items on President Harry Truman's agenda upon the death of Roosevelt in April 1945. Truman, who was known for his love of history and books, came from a family unable to afford his college education and was the only president in the twentieth century not to graduate from college (Hutcheson, 2007). According to Beschloss (2012), Truman was determined that returning veterans would not miss a similar opportunity for a post-secondary education:

> The inspiring part of this is that when he became President, he did two things to make sure that future children would not be prevented from attending college as he had—first, the GI Bill, and less famously, he was the first great champion of the community college system in this country, and specifically mentioned that he was exerting himself on the latter because of his own experience. (M. Beschloss, personal communication, November 19, 2012).

By July 1946, Truman had created the President's Commission on Higher Education with two goals: first, to provide a broad, general education program for college students, and second, to improve the overall quality of college teaching (Hutcheson, 2007). The Truman Commission focused exclusively on the two-year institution, noting that nearly half of Americans were academically able to complete the first two years of a post-high school education and that broader, more inclusive access was required. The finished report, entitled *Higher Education for American Democracy*, was commonly known as The Truman Commission Report. Among its findings, the commission introduced the term *community college* to reflect more accurately the mission and goals of the first two years of post-secondary education:

> The Community college seeks to become a center of learning for the entire community with or without the restrictions that surround formal course work in traditional institutions of higher education. It gears its programs and services to the needs and wishes of the people it serves (President's Commission on Higher Education, 1947, pp. 69-70).

Post-World War II Growth of Community Colleges

While the first wave of these new community college entrants were returning veterans, Kim and Rury (2007) offer interesting statistics on the freshman class of 1948 in American colleges and universities. More than 500,000 Americans, exclusive of returning veterans, enrolled in post-secondary education during that academic year, with 70% of them enrolled in four-year institutions, 10% in teachers' colleges, and 18% in community colleges (pp. 311-312). By the 1960s and the 1970s, a second wave of community college entrants was appearing on campus: a composite of baby boomers graduating from high school and job-seeking women requiring job training or retraining (Hutcheson, 2007). As a result of this second wave, community colleges developed an

increasing focus on career and technical education, thereby relegating the primary

function of transfer-level education to a secondary one. In addition, new community

college districts were created to accommodate this burgeoning enrollment. Figure 2

illustrates the impact these two waves of community college entrants had on the creation

of new community colleges in the United States after World War II.
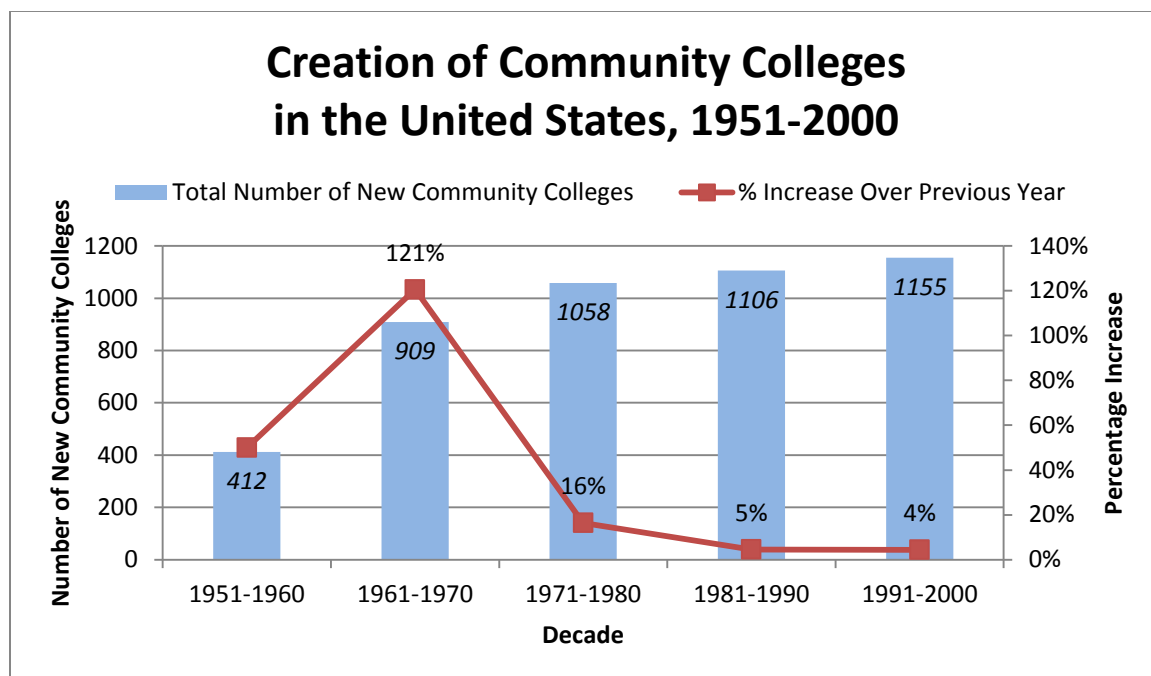
Figure 2. Creation of community colleges in the United States, 1951-2000.
Adapted from "Community College Growth Over Past 100 Years," by American
Association of Community Colleges, 2012, http://www.aacc.nche.edu/AboutCC/history/
Pages/ccgrowth.aspx. Copyright 2012 by American Association of Community Colleges.

Growth of Community Colleges, 1980s to Present

By the economic boom of the late 1980s and early 1990s, the community

colleges' focus on both transfer-level coursework and credit-level occupational curricula

had extended to another function: providing noncredit, occupation-specific workforce

education. This function was commonly known as *contract training* (Cohen & Brawer,

2008), which primarily served local community businesses, industries, and organizations.

The nomenclature used to describe the location of the contract training provider varied

across institutions, and the units were housed in community college continuing education departments, corporate training departments, business and industry centers, or workforce development units. Regardless of the nomenclature, the mission of such training was consistent with The Truman Commission Report: Provide affordable, accessible training to the noncredit workforce training partners served by the community college. Cohen and Brawer (2008) posit that community colleges accepted the challenge and accomplished the mission "because of their low cost, reliability, and responsiveness to employers' needs and [were] preferred over vocational schools because of the higher value attached to the credentials they offer" (p. 330).

As a rule, contract training was almost exclusively noncredit in nature and was designed for one of three participant demographics: (a) employees of specific businesses within the community college district; (b) public agency employees and government workers; and (c) the unemployed or those receiving public assistance (Cohen & Brawer, 2008). Because of the emphasis on the noncredit nature of the instruction, contract training was often viewed with skepticism and even disdain by administrators and faculty teaching credit-level coursework. The role of noncredit education was viewed by these individuals as a dilution of the institution's function to provide academically rigorous, high-quality coursework. Yet during the last two decades of the twentieth century, noncredit workforce training units began to develop a reputation for providing *customized training* to serve as an institutional revenue source. Levin (2001) suggests that *customized training* became a subset of the contract training a noncredit workforce training unit could offer because of the unit's ability to establish entrepreneurial relationships with local businesses and industries. Customization offered creative

approaches to the design, development, and delivery of workforce training and an affordable alternative to a business employing an in-house training staff. Noting that noncredit workforce training units were becoming increasingly *entrepreneurial* in locating these "creative routes to leveraging resources and generating revenue" (Roueche & Jones, 2005, p. 3), community college leaders soon realized that their institutions could play a key role in workforce development while simultaneously generating additional revenues.

The Entrepreneurial Community College and Workforce Education

By the late 1990s, the term *entrepreneurial community college* first appeared in the literature, although the focus continued to be primarily on credit-level coursework. The idea that an academic institution could be *entrepreneurial*, or could seek out and develop revenue-generating opportunities with local business and industry, was novel and readily embraced by many community colleges. In a 1997 study jointly published by the League for Innovation in the Community College, the National Center for Research in Vocational Education, and the National Council on Occupational Education, lead author W. Norton Grubb of Columbia University and his colleagues sought to document the salient characteristics of an entrepreneurial community college (Grubb, Badway, Bell, Bragg, & Russman, 1997). In this study of seven institutions, Grubb et al. sought to distinguish between three development roles community colleges undertake: (a) workforce development for local business and industry; (b) economic development to increase local employment opportunities; and (c) community development to enhance the well-being of the locale served by the institution. They found that effective entrepreneurial community colleges possess a "market-oriented drive and responsiveness

to external organizations" (Grubb et al., 1997, p. v), which parallels a characteristic that arises in the discussion of Lumpkin and Dess's (1996) Entrepreneurial Orientation Construct.

Grubb et al.'s (1997) study also described the entrepreneurial community college's role in identifying the circumstances under which workforce training can improve the company's bottom line. Interestingly, this contribution is also found in the discussion of Kirkpatrick and Kirkpatrick's (1993) Four Levels of Training Evaluation. In describing the relationship between one Ohio community college and a business and industry partner, Grubb et al. (1997) offer an anecdote illustrating how an entrepreneurially oriented community college plans for both the workforce training results the client wishes to achieve and the methods used to evaluate those results:

> One official in Ohio described the notion of "high impact training," which not only provides training to particular firms but also identifies the conditions under which it is likely to improve the company's performance: "In high impact training your whole discussion is framed around the issue of performance. . . . We're not going to give you good service by delivering training if it is not linked to an understanding of things that determine whether those trained ever get a chance to apply their new skills and achieve the results that you envision. Our interest is in your long-term success, NOT getting this contract tomorrow." (p. 31)

Grubb built upon the findings of this 1997 study in a subsequent study focusing on noncredit workforce education and training, which he co-authored with Norena Badway and Denise Bell for the 2002 annual meeting of the American Association of Community Colleges (Grubb, Badway, & Bell, 2002). In this study, the authors surveyed 13 noncredit workforce training administrators in California, Florida, North Carolina, and Wisconsin, as well as state officials. Additionally, the authors reviewed the data and information collected from a series of case studies conducted through the Community

College Research Center at Teachers College, Columbia University. Referring to the

inequity agenda faced by community college noncredit workforce training units, Grubb et

al. (2002) posit that these units face even more obstacles to training and educating the

workforce than their credit-bearing counterparts:

> Noncredit education in community colleges represents yet another form of the
> stratification within postsecondary education, with elite universities at the top,
> various gradations of progressively less selective universities below them, the
> credit programs of community colleges above the noncredit divisions, and the
> various short-term job training and adult education programs at the very bottom.
> This is what we might term a huge *inequity agenda* (p. 2).

It is apparent that the inequities faced by noncredit workforce training units far

overshadow the units' usefulness, both to the community colleges themselves and to the

businesses and industries they serve. Their research found that noncredit workforce

training units not only provide upgrade training and retraining for new careers, but also

preparation for prelicensing or licensing examinations, custom training exclusive to

business clientele, and avocational or personal interest training. All of these functions are

meant to be responsive to the community served by the institution (Grubb et al., 2002).

The problem, they note, is that there is no nationally mandated standard for tracking

noncredit workforce training clock hours or units. Further, because these methods of

tracking are left to the discretion of individual states, methods of reporting noncredit

workforce training enrollments are either wildly divergent or unreported altogether

(Grubb et al., 2002).

Grubb et al.'s (2002) research found several clear advantages to the community

college's noncredit workforce training function. The first such advantage is cost.

Noncredit workforce training units can provide instruction at a lower cost (and, when

funded with grants, at no cost) than that of their private industry counterparts. A second

advantage is open enrollment. Without the need for placement testing, layers of

prerequisites, or mandatory academic advisement, participants can move quickly into the

areas of content that they need or want. A third advantage is scheduling. Noncredit

courses are generally short in duration and can run more frequently than coursework that

only runs once per semester. A fourth advantage is responsiveness to industry needs.

Because noncredit workforce training courses do not have to be approved by a

curriculum committee, academic senate, or statewide governing body, the unit can

design, develop, and deliver courses to business and industry partners quickly and

efficiently. A fifth advantage is location of the noncredit workforce training. Courses

can be offered in a variety of locations, making access to the instruction accessible and

convenient for those enrolled. A sixth advantage is that participants in noncredit

education generally also have access to full support services, including disability

services, library access, and counseling; this makes participants feel a part of the college

community. Finally, many noncredit courses can be used as a bridge or transfer to credit-

bearing coursework, giving participants the opportunity to try a course or topic before

committing to the demands of a credit course (Grubb et al., 2002).

   While clear advantages to noncredit workforce training exist, Grubb et al. (2002)

acknowledge that such training also has disadvantages. One disadvantage is in the level

of funding noncredit education receives compared to its credit-bearing counterparts.

Citing an example in California where the noncredit-level funding per full time

equivalent (FTE) student is half the funding rate of its credit-level equivalent, the authors

note that a low (or nonexistent) funding level may make it difficult for the institution to

justify offering noncredit workforce training. Another disadvantage is in the levels of

faculty expertise and professional development in curricular content areas. Noncredit

workforce training is overwhelmingly staffed with adjunct faculty who often do not

receive the same level of professional development or training as their credit-level

counterparts, lending possible credence to the concern about academic quality among the

adjunct faculty. Grubb et al. (2002) also suggest that noncredit workforce training may

not truly be able to offer the full range of student services, such as tutoring or child care,

to its participants; when there is a lack of parity and support between noncredit students

and their credit-level counterparts, the notion of an equity agenda fails. Another

disadvantage, note the authors, is how employers view noncredit credentials. If noncredit

workforce training does not evaluate instructional effectiveness based upon any objective

standard, then employers may justifiably question how measurement of that skill may be

accurately assessed. Finally, Grubb et al. (2002) found that noncredit workforce training

is frequently ignored in the institutional planning processes, including strategic planning,

budgeting, or activities meant to strengthen the institution's mission. Without noncredit

workforce training's inclusion in those foundational institutional processes, and without

any standardized metric for assessing the unit's effectiveness, it is no wonder that the unit

is often relegated to a substandard role and perceived as a drain on the institution.

Grubb et al.'s (2002) findings regarding the inconsistencies in reporting noncredit

workforce training enrollments and revenues were revisited in a 2005 study conducted for

Schoolcraft College in Livonia, Michigan, by Dimitrios Frentzos, a market research and

public relations manager for EPI, Inc., also of Livonia. His study reviewed credit and

noncredit enrollment figures for Schoolcraft College over an 18-year period. Those

figures were then compared with Michigan's unemployment figures to note any

statistically significant correlations between enrollment fluctuation and unemployment.

His study found that at the institutional level, there was a strong negative correlation

between the state unemployment rate and the total enrollment for noncredit coursework,

yet no comparable negative correlation existed between the unemployment rate and the

total enrollment for credit coursework (Frentzos, 2005). In further exploring the reasons

why an increase in the unemployment rate would correlate to a decrease in noncredit

enrollment, Frentzos' research found that neither the American Association of

Community Colleges (AACC) nor the National Education Data Resource Center

(NEDRC) could offer a consistent definition of noncredit workforce training or tracking

of hours and units of instruction. Therefore, no truly reliable means of comparing

numbers exists. If a noncredit workforce training unit can function as a revenue-

generating source for the community college, then it is critical to understand the

circumstances under which noncredit enrollment may fluctuate. By better understanding

those circumstances, Frentzos (2005) suggests that community colleges are consequently

better positioned to budget, plan, and staff noncredit workforce training programs

meeting community needs. This finding also supports the premise that noncredit

workforce training could be more effectively integrated into the institution's mission and

strategic plan if a consistent metric were used to measure its impact.

With the effects of the 2007-2009 economic recession continuing into 2013 and

likely beyond, employers are continuing to assess the influence and impact of noncredit

workforce training on employees and organizational budgets in this slowly recovering

economy. In a September 2012 paper published by the University of Alabama Education

Policy Center, Stephen G. Katsinas, Mark M. D'Amico, and Janice N. Friedel surveyed

the role of community colleges in post-recession workforce development (Katsinas,

D'Amico, & Friedel, 2012). They note that community colleges are playing an

increasingly visible entrepreneurial role on the national stage in noncredit workforce

training initiatives, with community colleges being mentioned by name in every State of

the Union address from 1996 to the present time with one exception. Since 2003, the

Education Policy Center has conducted annual studies of state offices or agencies

overseeing community colleges, specifically members of the National Council of State

Directors of Community Colleges (NCSDCC). NCSDCC is an affiliated council of the

American Association of Community Colleges (AACC) with 51 state director members;

the president and chief executive officer of the Illinois Community College Board

(ICCB) is Illinois' state director member of NCSDCC (NCSDCC, 2012a). The council

provides a forum for sharing information and trends in community college systems

nationwide (NCSDCC, 2012b). In the Education Policy Center's 2012 survey, 45 state

directors agreed or strongly agreed with the statement that business and industry view

community colleges as the primary provider of workforce training in their

communities—up from 34 respondents in the 2011 survey (Katsinas et al., 2012).

Interestingly, Katsinas et al.'s (2012) research involving the characteristics of

credit-level and noncredit-level workforce training supports the findings of earlier

studies. As early as 1989, Katsinas and colleague Vincent Lacey had developed a table

distinguishing the characteristics of traditional and nontraditional roles of the community

college in economic development—characteristics which formed the basis of the

Education Policy Center's 2012 survey (Katsinas & Lacey, 1989). Noting that the

Education Policy Center's survey reflects interest among both state and federal

governments as well as private industry in developing workforce training options for

business and industry, a summary of selected distinguishing characteristics of credit-level

education and noncredit workforce training is summarized in Table 1.

Table 1. *Summary of Selected Distinguishing Characteristics of Credit-Level Education and Noncredit Workforce Training*

Characteristic	Credit-Level Education	Noncredit Workforce Training
Learning outcome	Earning two-year degree, certificate, or diploma	Receiving certificate of completion
Learning objectives	Mastering general skills and methods	Mastering specific skills and methods
Program duration	One to two years	Hours to weeks
Faculty	Primarily full-time faculty	Primarily adjunct, non-tenured faculty or subject matter expert trainers
Curriculum development	Developed by educators and curriculum specialists	Developed by third parties or subject matter expert trainers
Funding source	Federal, state, and local taxes; tuition	Employer or individual seeking training
Locus of control	Internal locus; institution controls	External locus; paying client controls
Evaluation of learning objectives	Educators evaluate objectives	Trainer and curriculum provider evaluate objectives
Accreditation	Normally by institution, by state governing body, and by regional accrediting bodies	Normally by the curriculum provider
Accountability	To the community served by the community college	To the employer or individual seeking training

Note. Adapted from "Community Colleges and Economic Development: Models of Institutional Effectiveness," by S. G. Katsinas & V. A. Lacey, 1989, *American Association of Community and Junior Colleges.* Copyright 1989 by American Association of Community and Junior Colleges.

The Evolution of the Noncredit Workforce Training Provider

While American community colleges increasingly focused on their roles as workforce education providers during the 1980s and 1990s, it soon became clear that this role would not be limited exclusively to credit-bearing coursework. In addition to traditional credit courses, noncredit workforce training, or contracted, customized curricula designed for rapid implementation and tied to an employer's needs, was gradually added to the roles played by the entrepreneurial community college. This increased focus on noncredit workforce training provided the basis for a study conducted by Michelle Van Noy, then a senior research assistant at the Community College Research Center (CCRC) of Teachers College, Columbia University. Van Noy and four colleagues—James Jacobs, Thomas Bailey, and Katherine Hughes of the CCRC and Suzanne Korey of City College of San Francisco—coauthored a 2008 comprehensive study that is considered the seminal authority on noncredit enrollment in workforce education (Van Noy et al., 2008).

The study, which was funded by the Sloan Foundation and conducted in partnership with the National Council for Continuing Education and Training (NCCET) and the National Council for Workforce Education (NCWE), examined noncredit workforce and contract training practices in community colleges. The authors utilized two specific data pools. First, all 50 states' community college noncredit workforce training policies on funding and regulation were reviewed by interviewing the governing bodies with control over the states' community colleges or workforce development agencies. In addition, community college administrators from 20 different institutions across 10 states were interviewed. The institutions were chosen based upon their

innovative noncredit workforce training practices and their demographic diversity. The

threefold goals of the study addressed *role, structure*, and *outcomes*. The study sought to

(a) examine how and in what ways noncredit workforce training plays a *role* in workforce

development; (b) determine how noncredit workforce training units should *structure* their

programs to maintain flexibility, yet provide bridges to credit-bearing coursework; and

(c) provide methods by which student *outcomes* should be tracked and made available.

Role of noncredit workforce training. Van Noy et al.'s (2008) study found that

the *role* of noncredit workforce training in today's community college serves three

critical functions: (a) providing employee workforce development; (b) providing

employer workforce preparation; and (c) providing revenue generation for community

colleges.

Role 1: Providing employee workforce development. While noting that many

community colleges receive state funding to support workforce development, the goal of

such underwriting is to provide job retraining or skill upgrading for unemployed or

underemployed citizens. The study found that all of the case study colleges surveyed

offered noncredit curricula in allied health, information technology, and business, from

entry- to advanced-level coursework (Van Noy et al., 2008).

In documenting the role of employee workforce development, the study noted a

common problem in tracking participation—primarily that demographic data on students

is often incomplete or not captured at all. Van Noy et al. (2008) note, however, that

noncredit workforce training participants often characterized themselves as "lifelong

learners or adult learners" and that several colleges reported the average age of a

noncredit workforce training participant at 36 to 42 years (p. 10).

Because employee workforce development is often billed as a pathway to both credit-level education and more advanced responsibility in the job market, Van Noy et al. (2008) found that many of the case study community colleges use noncredit education as a "recruitment tool" for credit-level degree and certificate programs (p. 10). They found that several methods of marketing and delivering noncredit workforce training, including "chunking" (breaking down a credit-level topic into shorter, noncredit-level topics); articulation between noncredit and credit programs; and permitting registration in a course as a credit or a noncredit participant all serve to build bridges between employee workforce development and credit-level education (Van Noy et al., 2008, p. 10). The goal of these alternative marketing and delivery methods is to give students a better understanding of a credit course's structure and expectations by registering as a noncredit student. When students can become acclimated to a credit-level classroom environment without the related expectations of grades and deadlines, the likelihood those students may be recruited into credit-level coursework increases.

Van Noy et al.'s (2008) research also explored the level of state general funding for noncredit training as an endorsement of employee workforce development. Their study found that a variety of methods for funding of noncredit workforce training were employed across the nation, including contact hour funding, fixed funding, and college discretionary funding. Figure 3 illustrates the variety of funding mechanisms utilized in noncredit workforce education.
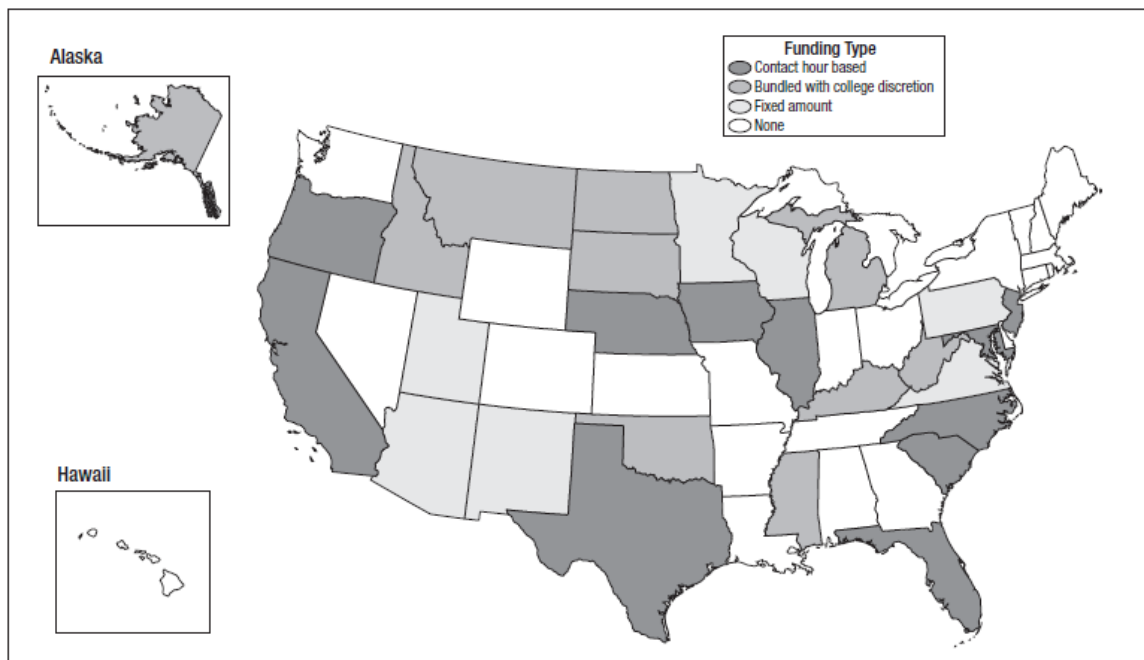
Figure 3. States providing general funding for noncredit workforce education. Adapted from "Noncredit Enrollment in Workforce Education: State Policies and Community College Practices [Report]," by M. Van Noy, J. Jacobs, S. Korey, T. Bailey, and K. L. Hughes, 2008, http://www.aacc.nche.edu/noncreditenroll. Copyright 2008 by American Association of Community Colleges.

Nearly half of the states are required to define by statute or administrative rule what qualifies as a noncredit workforce training course offered a post-secondary institution. In addition, eleven states, including Illinois, utilize the contact hour method for allocating funding to noncredit workforce training. The contact hour method allows the noncredit workforce training unit to receive funding based upon *seat time* in class, although the amount of funding for credit level *seat time* in many states may be higher than the amount of funding for its noncredit counterpart. In other states, Van Noy et al. (2008) note that funding for noncredit workforce training may be based upon a proportion of the credit full-time equivalent (FTE) rate as opposed to actual *seat time* in

class. The benefit to the contact hour method is that it is consistent and is directly tied to the number of hours a participant spends in class.

In seven states, the amount of noncredit workforce training funding is fixed by the legislature and is, according to the study's findings, often a fraction of the credit-level funding. The disadvantage to this approach is that when budgets are tight, the noncredit workforce training unit may be restricted by the legislature's mandate. In another 10 states, community colleges have the discretion to appropriate state funding for the support of noncredit workforce training. In this scenario, the state funding may not even be proportionately allotted among community colleges; some colleges may not receive any funding at all, making it an unreliable funding source. The remaining 22 states surveyed do not provide funding to their community colleges' noncredit workforce training units, meaning that the units must be self-supporting through grant funding or charges passed along to employers and students.

Van Noy et al. (2008) suggest that community colleges not receiving state funding for noncredit workforce training may offer the course in a credit-bearing format to maintain an affordable tuition rate and to generate revenue for the institution. However, the decision to offer a course in a credit format, as opposed to a noncredit format, is contingent upon four factors: (a) the state's funding policy; (b) the labor market demand; (c) the community college's policy and practice; and (d) the approach to instruction. If a state's funding policy provides more incentive for the community college to offer credit-level instruction as opposed to a noncredit course, then the institution will likely implement the credit-bearing alternative. If the labor market demand for a particular occupation requires a credit-level credential, then the institution

will similarly opt for the credit-bearing alternative. If the community college's policy

and practice is to consider how flexibly the institution may offer coursework—including

how rapidly the coursework can be approved and how long it will take to enter students

into the labor market—then the institution may instead opt for a noncredit workforce

training alternative. Finally, Van Noy et al. (2008) posit that if the community college's

approach to instruction does not require prerequisites or assessment of learning outcomes,

the institution will likely implement a noncredit workforce training option. Interestingly,

this very point—that noncredit workforce training outcomes are often poorly assessed, if

at all—is at the heart of Kirkpatrick and Kirkpatrick's (1993) Four Levels of Training

Evaluation comprising part of the conceptual framework employed in this study.

　　　Role 2: Providing workforce preparation for employers. In addition to the role

of *employee* workforce development trainer, Van Noy et al. (2008) submit that an

additional role of noncredit workforce training is to provide customized contract training,

or workforce preparation, for *employers* served by the community college. Noting that

most states provide workforce training funding for community colleges, the institutions

are then positioned to develop training programs that meet labor market needs and are

targeted to the specific skill sets required by local business and industry. In Illinois, this

workforce training funding is administered by the Illinois Community College Board to

local community college districts through a number of grants, including a Workforce

Development Grant (Illinois Board of Higher Education, 2010; M. Van Noy, personal

communication, January 7, 2013). Figure 4 illustrates the 35 states, including Illinois,

where the community college is denoted as the state's preferred workforce training
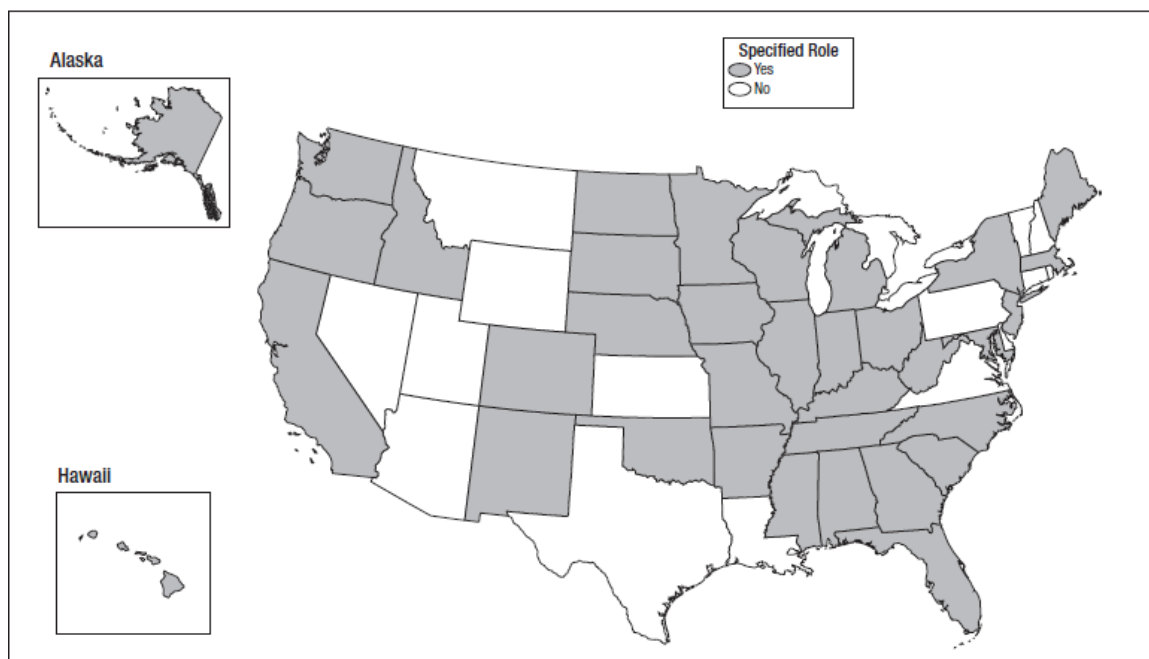
provider.

Figure 4. States where community colleges are denoted by legislation or administrative rule as preferred workforce training providers.
Adapted from "Noncredit Enrollment in Workforce Education: State Policies and Community College Practices [Report]," by M. Van Noy, J. Jacobs, S. Korey, T. Bailey, and K. L. Hughes, 2008, http://www.aacc.nche.edu/noncreditenroll. Copyright 2008 by American Association of Community Colleges.

Van Noy et al. (2008) note that when legislation or administrative rule specify the community college as the state's preferred workforce training provider, there is a greater likelihood that the funding may be used to support noncredit training initiatives for business and industry. Additionally, the use of state funding for these initiatives may result in creative and unique approaches to noncredit workforce training, such as entrepreneurial partnerships to design, develop, and deliver custom training curricula. The state funding may also be used to provide bridge training, which offers traditional credit-level courses in a noncredit format in order to adapt to business and industry demand.

Role 3: Providing revenue generation for the community college. In addition to designing and developing training for both prospective employees and area employers,

the third role of noncredit workforce training is to function as a revenue source for the

community college. This enhances the entrepreneurial role of the community college

because it provides an additional source of revenue that can be used to fund new

noncredit workforce training initiatives or to add to the college's general fund. Van Noy

et al.'s (2008) study found that only eight states limit the charges for noncredit

coursework, as illustrated in Figure 5.
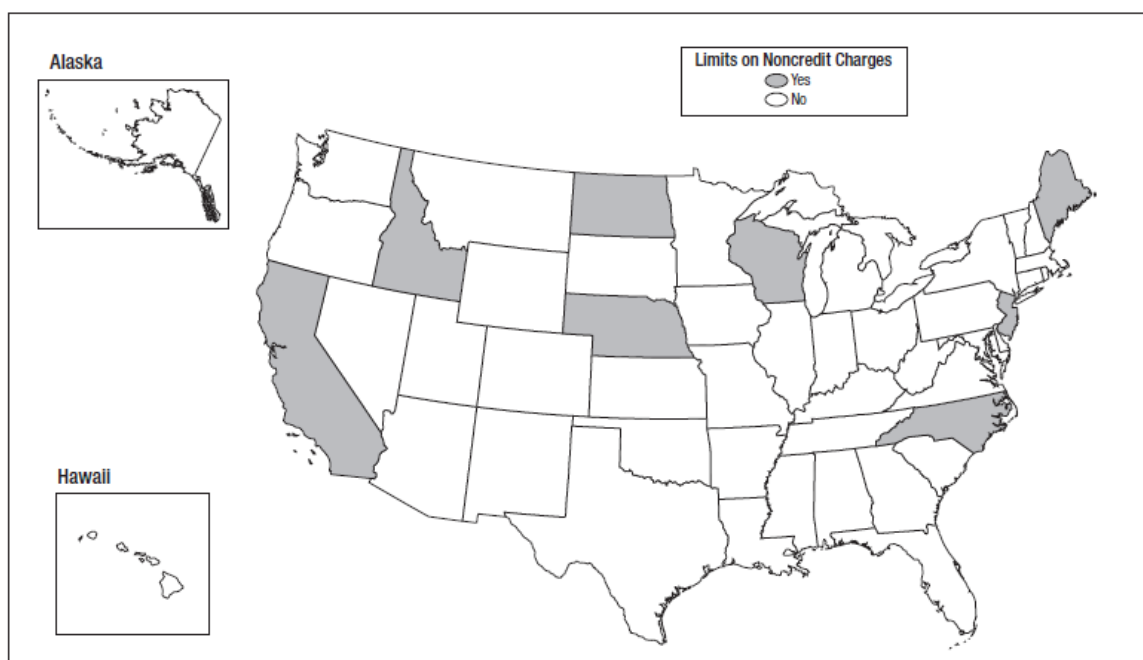
Figure 5. States where limits are placed on the cost of noncredit workforce training.
Adapted from "Noncredit Enrollment in Workforce Education: State Policies and
Community College Practices [Report]," by M. Van Noy, J. Jacobs, S. Korey, T. Bailey,
and K. L. Hughes, 2008, http://www.aacc.nche.edu/noncreditenroll. Copyright 2008 by
American Association of Community Colleges.

Van Noy et al.'s (2008) study determined widely varying guidelines for the ways

in which noncredit workforce training revenue was generated by the eight community

colleges that limit the cost of such training. For example, California does not charge for

community college noncredit workforce training courses when those courses are state-

funded. In other states, such as North Carolina, noncredit tuition is capped using a

formula driven by the number of course hours offered by the training. In North Dakota,

the state approves the community college's suggested tuition fee before a noncredit course is offered. In these examples, tuition limits are in place because the states' legislatures underwrite the operating costs of the training.

The approaches to tuition limits by these eight states are countered by the majority of states, including Illinois, in which the community colleges charge "what the market will bear" for noncredit workforce training (Van Noy et al., 2008, p. 17). The community colleges employing this free market approach to tuition opine that noncredit workforce education should be a revenue-generating source for the community college and, as such, should be able to sustain itself. The goal of generating this revenue is frequently to support the overhead costs of running the noncredit workforce training unit, to generate new training coursework, or to underwrite the cost of new college-wide initiatives that will benefit the entire institution. Many study respondents utilized noncredit workforce training's revenue-generating function to defeat the perception that noncredit education offers no fiscal benefit to the institution. In fact, with one case study participant referring to this approach as "entrepreneurial" (Van Noy et al., 2008, p. 18), it is clear that revenue-generating noncredit education can offer tangible financial benefits to its credit-bearing counterparts.

Structures of noncredit workforce training. Van Noy et al.'s (2008) study also found as much diversity in the structures of noncredit workforce training as it found in the roles of such training. Noting that internal strain between credit and noncredit departments may ensue when the departments follow differing procedures for designing and developing curricula, the study found four possible organizational structures for noncredit workforce training units, as noted in Figure 6.
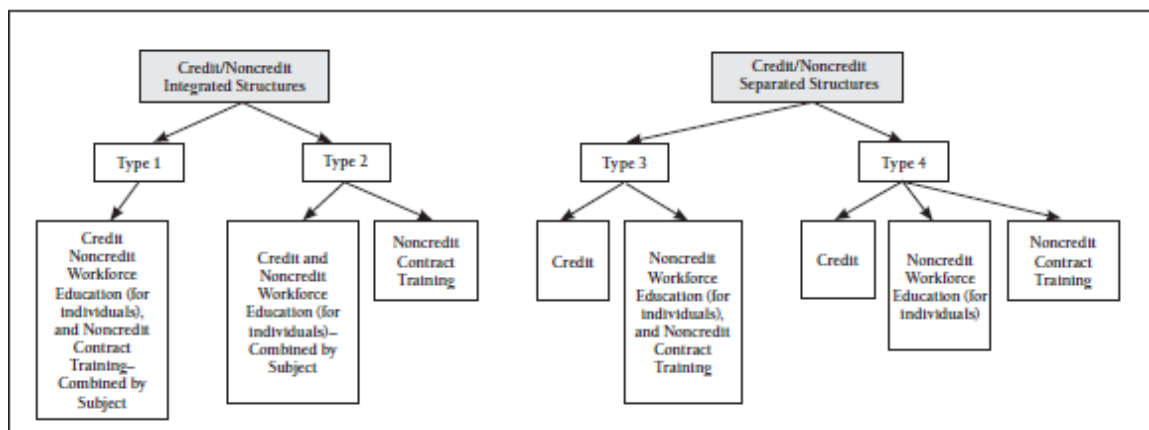
Figure 6. Types of organizational structures for noncredit workforce education. Adapted from "Noncredit Enrollment in Workforce Education: State Policies and Community College Practices [Report]," by M. Van Noy, J. Jacobs, S. Korey, T. Bailey, and K. L. Hughes, 2008, http://www.aacc.nche.edu/noncreditenroll. Copyright 2008 by American Association of Community Colleges.

Van Noy et al.'s (2008) study found that community colleges' credit and noncredit structures fall into one of two categories: *integrated* and *separated*. An *integrated* structure is one in which the credit and the noncredit programs are housed together. The researchers noted that integrated noncredit and credit units tend to collaborate more closely than their separated counterparts. In addition, the study found that those colleges with integrated structures were located in states providing general funding to support noncredit workforce education; funding was also based upon contact hours and at a level equivalent to credit-level education (Van Noy et al., 2008).

Integrated structures. Within this integrated structure, two subtypes exist. A *Type 1 integrated* structure is one in which credit education, noncredit education, and contract training are grouped in the same department by subject matter. For example, a computer course might be offered in a credit format, in a noncredit format, and in a custom contract training format for business and industry—and all three of those formats would be found under a computer information systems department. A *Type 2 integrated* structure is one in which credit and noncredit education are grouped in the same

department by subject matter, and a separate unit exists to conduct contract training for business and industry. The study found that integrated units had more cross-involvement between credit and noncredit faculty and more facilities sharing between the units than their structurally separated counterparts. Organizationally, the study also found that integrated structures benefited from a single contact person for employers (Van Noy et al., 2008).

   Separated structures. A *separated* structure is one in which the credit and the noncredit units are treated as distinct and separate entities within the community college. Like its integrated structural counterpart, two subtypes exist within this separated structure and are denoted as *Type 3* and *Type 4 separated* structures. A *Type 3 separated* structure is one in which the credit unit works independently from a combined noncredit and contract training unit. For example, a computer course might be offered by the credit unit or by the noncredit unit; however, one unit would not control the format, layout, or delivery of the other unit's course. A *Type 4 separated* structure is one in which the credit, noncredit, and contract training units are three freestanding entities, each working independently of the other. Van Noy et al.'s (2008) study found that noncredit units in a separated structure had the independence—and hence the ability—to be more entrepreneurial in rapidly responding to an employer's training needs. The noncredit units had fewer approval processes for coursework and often employed organizational hierarchies that differed widely from their credit-level counterparts, thus offering optimum flexibility in responding to their workforce training partners' needs.

   Van Noy et al.'s (2008) findings also included a variety of approaches to organize a separated structure. For example, many community colleges employed a coordinator to

ensure that no duplication occurred across credit and noncredit coursework. Regular communication between the credit and noncredit units resulted in less internal competition for the same student demographic and more ability to reframe existing credit courses in a noncredit format.

The structure of noncredit workforce education in the community college is also affected by the level of faculty involvement. Van Noy et al. (2008) found that full-time faculty were more fully engaged with noncredit workforce training when they had taught noncredit courses themselves. Many study participants noted, however, that teaching noncredit coursework in many institutions did not count towards a faculty's full-time teaching load; therefore, any noncredit instruction would have to be counted as overload. In some institutions, however, noncredit coursework could be counted towards a teaching load, or the academic dean could assign faculty to a noncredit course based upon the faculty member's skills and competencies. In addition, many study participants offered that a *champion* best demonstrates noncredit education's value to the institution. The use of a *champion*, or someone with the level of personal and social capital to build relationships between credit and noncredit education, is also proffered by Amey et al. (2007) in their Partnership Development Model. While this champion is often the community college president, the *champion* can also be an individual who can tie the significance of noncredit workforce training to the community college's mission of responsiveness and accessibility to the residents and businesses it serves.

Similarly, Van Noy et al. (2008) found that developing and maintaining connections to local business and industry demonstrated noncredit workforce training's importance to the community colleges' bottom lines. Their research found that solid

relationships between the institution and its business and industry partners generated

programs (a) meeting students' employment and educational needs, (b) meeting local

employers' needs for skilled workers, and (c) meeting the goal of generating economic

development in the community served by the institution. When noncredit programs can

be used as an "incubator" for eventual deployment into credit programs (Van Noy et al.,

2008, p. 24), they influence the institution's mission and vision. In addition, when

community colleges have a representative on its area chamber of commerce, economic

alliance, or Workforce Investment Board, they are best positioned to analyze economic

data and make recommendations for responsive and adaptable workforce training and

development.

Outcomes of noncredit workforce training. Van Noy et al. (2008) found that

noncredit workforce training is inconsistently tracked, monitored, and assessed

nationwide; for this reason, determining whether student outcomes have been met has

been unduly burdensome and complicated. They note that a variety of methods to record

and report outcomes would not only improve the process of data collection, but would

also improve the ability to quantify and qualify the success of noncredit workforce

training partnerships.

Recording outcomes. Van Noy et al.'s (2008) study recommended five methods

to improve the recording of outcomes: (a) noncredit transcripts; (b) industry

certifications; (c) continuing education units (CEUs); (d) retroactive credit; and (e)

articulation between credit and noncredit programs. The first recommendation is to

record outcomes through noncredit transcripts. The study found that only nine states

have guidelines for reporting noncredit coursework; however, these nine states'

guidelines are extremely diverse and cannot be consistently compared to each other. For example, while both credit and noncredit coursework appears on a North Carolina student's transcript, a similar noncredit course would appear on a Virginia student's transcript only if the student chooses to receive a grade. In Pennsylvania, that same student's transcript would include the noncredit course only if the course could transfer to a credit-bearing course. In Texas, the noncredit course would only appear on the transcript if it were classified as a workforce education course. In Georgia, the noncredit course would have to generate CEUs to appear on a transcript. Van Noy et al. (2008) suggest that consistent guidelines for transcripting noncredit workforce training credentials would result in a more seamless transition to credit-bearing coursework.

The second recommendation is to record outcomes by tracking industry certifications, which are popular in health, manufacturing, management, and technology careers. Many industry certifications, such as Microsoft Office® Specialist credentials, are not only valued by business and industry, but can be translated into credit coursework for a two-year degree or certificate. Van Noy et al. (2008) caution, however, that a nationally- or internationally-recognized credential is considered a preferred method of recording learning outcomes as opposed to a college-issued certificate of completion. Such a certificate would not be validated using the same standards as a professional certification and, consequently, would not have the same value to an employer.

The third recommendation is to record outcomes by ensuring that coursework generates Continuing Education Units (CEUs) for the student. Using the International Association of Continuing Education and Training's (IACET) definition of a CEU as "ten contact hours of participation in an organized continuing education and training

experience, delivered under responsible sponsorship, capable direction and qualified instruction" (IACET, 2012), these noncredit units are often mandatory for such professions as law and criminal justice, education, healthcare, and cosmetology. Again, however, the implementation of CEUs across the case study colleges varied widely, with some institutions using IACET guidelines, some using guidelines from professional organizations offering the training, and others only offering CEUs for workforce-based training.

The fourth recommendation is to record outcomes by offering retroactive credit for prior noncredit education, normally in the form of credit for life experience or prior learning. Again, guidelines differ across states, with 17 states offering policies for acceptance of life experience towards credit course completion. For example, a Colorado community college student could transfer a noncredit course to a credit-bearing course when the noncredit course is taught by an accredited faculty member and the student successfully demonstrates proficiency in the content. That same student in an Oregon community college could transfer a noncredit computer course taught by a private vendor, such as Microsoft, if the curricular content between the credit and noncredit courses matches. The diversity among these states' guidelines reflects the need for a system wherein outcomes are consistently tracked and recorded.

The fifth recommendation is to record outcomes by articulations between noncredit and credit curricula. Van Noy et al. (2008) found that articulations provide for a smoother, steadier transition from noncredit to credit-bearing coursework. Citing Kentucky as a model for its work in articulation, the study notes that faculty routinely review and align noncredit coursework outcomes with the outcomes of similar credit-

level coursework. Similar distinctive practices have been employed in New Jersey, where "career ladder programs" have allowed noncredit students in social service and education areas to bridge into credit-level coursework, and in New Jersey, where noncredit human services curricula can translate into credit-bearing coursework (Van Noy et al., 2008, p. 28).

Reporting outcomes. While recording outcomes provides a consistent method of tracking noncredit enrollments, protocols designed to report these outcomes are necessary to document the types of noncredit coursework in which employers, employees, or the unemployed participate.

Van Noy et al. (2008) found that 38 states, including Illinois, are required to report on their noncredit workforce training initiatives. While most states only require reporting on the total number of students enrolled, some states also require data on the employers served by the training, the contact hours delivered, or the amount of revenue generated by the training. The study notes that most states providing general funding for noncredit education often require demographic data on the participants, yet many of them do not require evidence of learning outcomes as a condition of such funding. The end result is a common theme: Each state varies widely on its reporting requirements, thereby yielding an inaccurate picture of the states' noncredit enrollment patterns.

The study also found that a variety of data collection systems are employed in the states requiring outcomes reporting. Of the 38 states required to report on their noncredit workforce training programs, 14 of those states, including Illinois, have statewide data collection and reporting systems. The remaining 24 states must track their own noncredit workforce training enrollment at the institutional level, again yielding inconsistencies and

irregularities when comparing enrollments across states (Van Noy et al., 2008). Within those state data collection and reporting systems, many of the survey participants noted obstacles to collecting accurate data. The first obstacle is that most data collection systems are configured for credit-level enrollments with specific start and stop dates, as opposed to noncredit workforce training's flexible open entry-open exit enrollments. This configuration issue results in college personnel entering the required data manually. Another obstacle is the reluctance of noncredit training participants to provide the extensive information, including social security number and date of birth, for a single course.

Van Noy et al. (2008) found that several states are attempting to overcome these obstacles. One possible solution is to develop technology designed specifically for noncredit workforce training. Another possibility is to replace the social security number with a student identification number. In addition, some institutions are employing program reviews, where employers and employees are surveyed about their reactions to and learning gained from training—which is, interestingly, at the heart of Kirkpatrick and Kirkpatrick's (1993) Four Levels of Training Evaluation comprising part of this study's conceptual framework. Overcoming these obstacles should provide more consistent mechanisms for recording and reporting noncredit workforce training enrollments, thereby providing a more accurate assessment of the ways in which this training serves the residents of the community college district.

Van Noy et al.'s (2008) study resulted in five recommendations to enhance the entrepreneurial role of the community college in being rapidly responsive to the community's noncredit workforce training needs. These recommendations include: (a)

promotion of state funding; (b) increase in coordination of training efforts with business and industry; (c) improvement in recruitment and articulation with credit-bearing coursework; (d) development of validation strategies for noncredit workforce training and a standardized system of reporting outcomes; and (e) collection of more information on outcomes.

The first recommendation is that states offering general funding for noncredit workforce education not only provide more effective pathways to career education, but also make such education available to low-income residents who need job training or retraining. In the absence of any findings that state funding restricts the community colleges' ability to respond creatively and rapidly to business and industry training needs, Van Noy et al. (2008) recommend that noncredit workforce training units can use state general funding to build bridges to credit-bearing coursework.

The study's second recommendation is that an integrated organizational approach to noncredit workforce training results in more effective intra-organizational partnerships which, in turn, better serves local businesses and residents. Additionally, noncredit workforce training can serve as a litmus test for the kinds of courses that might be developed for college credit, thereby offering another bridge or career pathway for participants.

A third recommendation of the study is that noncredit workforce training can not only be used as an effective recruitment tool, but can also be used as an articulation mechanism. Noting that many students participate in training to upgrade job skills and do not require the completion of a degree to do so, Van Noy et al. (2008) recommend developing guidelines for the possible integration of noncredit workforce training to

credit-bearing coursework. In addition, they recommend that noncredit workforce training can be used to provide "specific workforce skills with immediate value and, also, to pursue a college degree with broader labor market value" (p. 34).

The study's fourth recommendation is the development of both validation and outcomes recording systems. By developing a system for validating the mastery of content delivered in a noncredit workforce training course, participants can document a credential to a potential employer, and the community college can record an industry-accepted credential on the student's noncredit transcript.

The fifth and final recommendation offered by the study involves more thoroughly collecting and analyzing data related to the ways in which noncredit workforce training has impacted the participants, the employers, and the locale served by the community college. Referring to noncredit workforce education as the "hidden college" (Van Noy et al., 2008, p. 35), the study notes that recording and reporting the benefits of such education can be instructive to state government and the community college system's administration. Because much of the literature is silent on how and in what ways this training is evaluated, there is no tangible way to measure its ultimate impact on the workforce. This is an observation echoed by Kirkpatrick and Kirkpatrick (1993) as a rationale for the Four Levels of Training Evaluation. By continually assessing the ways in which the community college can improve training opportunities for its stakeholders, noncredit workforce education may emerge from *hiding* and demonstrate its true value to business and industry and to the economy as a whole.

Current Trends in Entrepreneurial Workforce Education

While Van Noy et al.'s (2008) study serves as the seminal work on entrepreneurial community colleges and the methods by which they can offer noncredit workforce training to employers and employees, the study also lays the foundation for subsequent research on the role of this *hidden college*. These studies acknowledge the important contributions noncredit workforce education has made to workforce retraining in response to the 2009 recession and the American economy's struggle to recover from that downturn.

2009 Business Roundtable study. In May 2008, Business Roundtable sponsored a forum of chief executive officers (CEOs) of leading companies to discuss the ways in which businesses and community colleges can prepare students to succeed in the global economy. Business Roundtable is an association of leading U.S. companies' chief executive officers, with these companies posting more than $7.3 trillion in annual revenues and employing nearly 16 million American workers. The Business Roundtable member companies make up nearly one-third of the U.S. stock market's total value and invest more than $150 billion annually on research and development, which is 61% of all private research and development spending in the United States today (Business Roundtable, 2012). Among the forum's findings was the need for an enhanced understanding of the role noncredit workforce training plays in developing and redeveloping a skilled pool of employees. To that end, the Business Roundtable asked Macomb Community College in Michigan; LaGuardia Community College in New York; and the Community College Research Center of Teachers College, Columbia University in New York, to offer metrics for assessing the impact of noncredit workforce on the

American economy. Their 2009 study lends additional support to the work of Van Noy

et al. (2008).

Noting that nearly half of the 11 million students enrolled in community colleges

in 2009 were enrolled in noncredit education courses (Business Roundtable, 2009), the

report also found that no quantifiable measure of enrollment or assessment exists for the

5 million students nationwide enrolling in at least one noncredit course annually. The

report concluded:

> [because] half of community colleges' activities will continue to be unrecognized
> . . . their degree programs will remain undervalued by traditional measures. As a
> result, community colleges face unfair disadvantages as they retool and rebuild to
> meet the workforce development needs of the 21st century (Business Roundtable,
> 2009, p. 2).

These disadvantages include the students' ineligibility for financial aid in noncredit

courses and the community colleges' inability to quantify the impact noncredit training

has had on the local community. Additionally, because no standard metric exists for

tracking and reporting noncredit enrollment, community colleges are hindered by the

inability to develop quality improvement or best practices initiatives, thereby impacting

the quality of the institution as a whole (Business Roundtable, 2009). As a result, the

Business Roundtable recommended two key changes to how noncredit workforce training

is tracked and reported: (a) the implementation of the *training hour* as the unit of

noncredit educational measurement; and (b) the implementation of a three-level

taxonomy to describe the levels of noncredit coursework provided by the community

college.

Change 1: Implementation of the training hour. Positing that the traditional

credit hour is "academic currency" representing one hour of class weekly in a 15- or 16-

week semester (Business Roundtable, 2009, p. 5), the report notes that no comparable

standard exists for noncredit activity. The resulting lack of a standard means no method

exists to measure the benefits produced by noncredit training. The report instead

suggests using a "common denominator" of clock hours, thereby streamlining the process

of monitoring the hours a noncredit student spends in training (Business Roundtable,

2009, p. 8). The focus on a noncredit *common denominator* is both timely and relevant in

light of current discussions of the credit hour's efficacy as a unit of measurement for

degree or certificate completion (Berrett, 2012).

The Business Roundtable study first advocates for the use of a *training hour* as a

unit of measurement. While acknowledging that the U.S. Department of Education's

Integrated Postsecondary Education Data System (IPEDS) tracks mandated information

on credit-seeking students enrolled in any college or university that accepts federal

student aid, the report notes that graduation and retention rates are currently considered

the acceptable performance standard. Paradoxically, this performance standard excludes

noncredit coursework which is often specifically geared toward workforce development,

such as customized training or technological skill building. By offering a standardized

unit of noncredit measurement, community colleges would more effectively compare

their performance to their counterparts nationwide, thereby making the *inequity agenda*

suggested by Grubb et al's. (2002) research somewhat less inequitable.

Change 2: Implementation of a three-level taxonomy. The Business

Roundtable study also advocates for the use of a three-level taxonomy to measure the

effectiveness of noncredit workforce training. The purpose of the taxonomy is to group

noncredit workforce training activities into similar categories, thereby facilitating the

consistent and effective evaluation of training outcomes. The taxonomy is unique in its

focus on classifying and measuring a variety and complexity of noncredit workforce

training offerings. Figure 7 illustrates the three-level taxonomy, with economic

advancement for individual employees denoted in shades of gray and economic

advancement for employers denoted in shades of red.
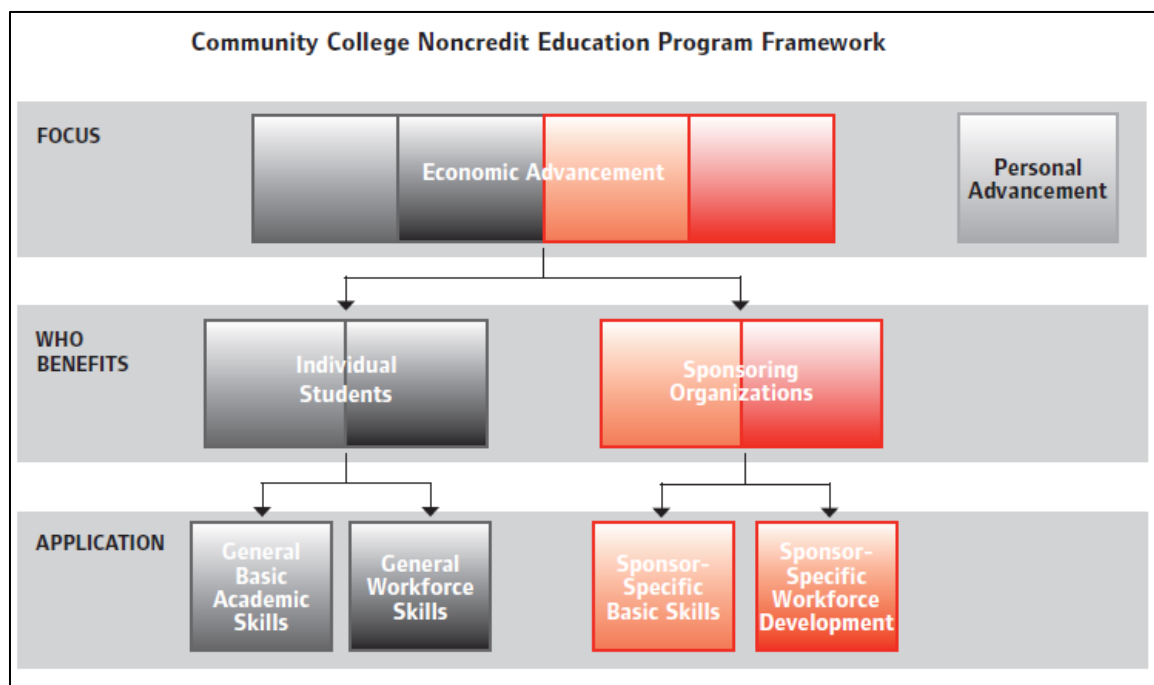
Figure 7. Three-level taxonomy representing proposed community college noncredit
education framework.
Adapted from "Counting the Hidden Assets: First Steps in Assessing the Impact of
Community College Noncredit Education Programs on the Workforce and Local
Economies [Report]," by Business Roundtable, 2009, http://www.businessroundtable.
org/initiatives/education/community_college. Copyright 2009 by Business Roundtable.

The taxonomy's first level addresses the *focus* of the training outcomes: whether

the training is for an employer or employee's economic advancement or for an

individual's personal advancement. Noncredit training activities focusing on economic

advancement would be grouped and their outcomes assessed; personal advancement

activities would be similarly grouped and assessed.

If the intent of the noncredit training is for economic advancement, the taxonomy's second level further classifies the training by the *beneficiary* of the outcome: the individual student or the sponsoring organization. Training activities meant to benefit an individual student, such as a word processing course underwritten by student tuition or government subsidy, would be grouped and its outcomes assessed. Similarly, training activities meant to benefit a sponsoring organization, such as organization-sponsored leadership training, would be grouped and the training outcomes assessed.

After determining whether an individual student or a sponsoring organization benefits economically from the training, the third level of the taxonomy addresses *application* of learning outcomes. Whether the outcomes are academic or employment-related is the focus of this level. If the outcomes are academic, they are meant to develop either basic academic skills, such as writing or computation, or general workforce skills, such as computer networking. If the outcomes are employment-related, they are meant to develop basic skills or workforce skills that the employer requires of its employees.

This model was tested at both Macomb and LaGuardia Community Colleges during 2007 and 2008 to measure noncredit workforce training's impact on the institutions. At Macomb Community College, the institution reported 424,987 training hours, or 88% of its total noncredit hours, were generated by noncredit workforce training during its 2007-2008 fiscal year (Business Roundtable, 2009, p. 15). At LaGuardia Community College, the institution reported 813,875 training hours, or 96% of its calendar year 2008 total noncredit hours, were generated by noncredit workforce training (Business Roundtable, 2009, p. 15). The implications for community colleges nationwide, particularly those with state funding predicated on enrollment, are clear.

Community colleges that work with noncredit workforce training partners to provide training activities to employees serve as a powerful revenue source for the institution and can offset funding shortfalls in difficult economic times. In addition, documenting noncredit enrollment in a systematic and consistent fashion is critical to building bridges to credit-level coursework and enhancing career opportunities for those training participants.

   Present-day emphases on noncredit workforce training. Noncredit workforce training has received increasing media attention during the first term of the Obama presidency. In June 2011, the U.S. Department of Labor suggested that more community colleges should assign credit to short-term, noncredit workforce training (American Association of Community Colleges, 2011). Noting that alignment between industry-standard credentialing and two-year degrees makes community college graduates more competitive in the workplace, Assistant Secretary for Employment and Training Jane Oates stressed the importance of noncredit workforce training as a bridge or pathway to credit-bearing credentials and subsequent employment:

> We are looking for acceleration. We're looking for different delivery styles.
> We're looking for that alignment between what is really sound curriculum and
> what businesses need and putting that together. . . . We're looking at bridges
> between—I don't want anyone to run from the room when I say this—the non-
> credit side of the house and the credit side of the house (AACC, 2011, para. 6).

Similarly, Anthony Carnevale, director of Georgetown University's Center on Education and the Workforce (Georgetown CEW), offers an interesting paradox in the 21st century workforce. He notes an influx of job openings with a dearth of qualified workers to fill those openings:

> Employers are turning to community colleges because those lining up at the door aren't qualified. The skills requirement has gone up and employers don't train entry-level workers anymore (CNNMoney, 2011, para. 3).

The Georgetown CEW, a not-for profit research institute, studies the relationships between workforce education and training, career pathways, and workforce skills (Georgetown University Center on Education and the Workforce, 2013). Carnevale's own 30-year career in workforce and industry training includes tenures with the Committee for Economic Development, the Educational Testing Service, and the American Federation of State, County, and Municipal Employees; in addition, the American Society for Training and Development (ASTD) named him the founding president of the Institute for Workplace Learning in 1983 (ASTD, 2013).

In a 2011 interview with CNN, Carnevale notes an uptick in both the quantity and quality of relationships between community colleges and companies. This increase is prompted by the need to forge effective noncredit workforce training partnerships and the desire to build educational bridges to sustainable jobs with living wages. He cites more company involvement in curriculum development and student internship opportunities as two means of closing the skills gap between college curricula and employer needs. Specifically, the Obama administration's launch of the Skills for America's Future initiative, with the mission of producing community college graduates qualified for local

workforce positions, is designed to eradicate the dearth of qualified workers to which

Carnevale refers (CNNMoney, 2011).

Carnevale's extensive research in workforce education is also recognized by the

American Society for Training and Development (ASTD), the largest association of

training and development professionals in the world. Each year, ASTD releases a *State*

of the Industry Report addressing current trends in workforce training. In the current

2011 report, ASTD surveyed 400 respondents across a large sampling of major industries

nationwide. Their findings underscore the importance of training and development to an

educated American workforce and a thriving American economy. The survey's findings

include the following:

- In 2010, American companies spent $1,228 per participant on training and development.

- Training activities constituted 2.7% of the total payroll.

- Of the training programs delivered in 2010, 12.8% of the programs were management or supervisory in nature (ASTD, 2011).

As Carnevale notes in an interview with ASTD, employers must seek to provide

continuous and stackable levels of training and development to maintain employees'

existing workforce skills and to gain new ones. For this reason, Carnevale posits that the

community college noncredit workforce training unit is best equipped to design, develop,

and deliver customized training for business and industry, particularly in the current post-

recession economy:

> We need to find new kinds of efficiency. The most obvious one is learning and earning at the same time—to try to somehow build a new version of the old apprenticeship system. . . . The most obvious reform—just not clear how much of it is possible—is to somehow mix schooling and work so that this learning is complementary in each of those places. Employers would have to participate in ways they haven't before (ASTD, 2013, paras. 22, 24).

Illinois' Focus on Noncredit Workforce Training

Van Noy et al.'s (2008) study found that legislation or administrative rules in 35 states, including Illinois, denote the community college as the state's preferred workforce training provider and prescribe how the state's general funding to the community college shall be distributed. In Illinois, the Public Community College Act (110 ILCS 805/1-1 et seq. (West 2013)) vests the Illinois Community College Board with the authority to distribute grant funding to the state's community colleges. In order to develop a fuller understanding of how noncredit workforce training provides a valuable revenue stream to the community college, three metrics require discussion: (a) the use of funding categories by Program Classification System (PCS) and Classification of Instructional Programs (CIP) code; (b) the use of the Base Operating Grant to fund enrollment in noncredit workforce training courses based upon PCS and CIP code; and (c) the use of grant reimbursement rates based upon PCS and CIP code.

Funding categories by PCS and CIP code. The Program Classification Structure, originally developed in 1972 by the National Center for Higher Education Management Systems (NCHEMS), ascribes each operation of a postsecondary institution to one of nine defined categories. This approach provides the institution with a framework for measuring progress towards institutional objectives in these categories (Collier, 1978). The Illinois Community College Board (ICCB, 2013a) utilizes a slightly modified version of the PCS, as shown in Table 2.

Table 2. *Program Classification Structure (PCS) and NCHEMS with Illinois Community College Board (ICCB) Equivalent Categories*

PCS Code	NCHEMS Equivalent Category	ICCB Equivalent Category
1	Instruction	Instruction
2	Research	Research
3	Public Service	Public Service
4	Academic Support	Academic Support
5	Student Services	Student Services
6	Institutional Administration	Institutional Support
7	Physical Plant Operation	Independent Operations
8	Student Financial Support	Scholarships and Fellowships
9	Independent Operations	N/A

Note. Adapted from "Course Classification and Funding," by Illinois Community College Board (ICCB), 2013, http://iccbdbsrv.iccb.org/generic/classfund.cfm. Copyright 2013 by Illinois Community College Board; and "NCHEMS Program Classification Structure (PCS), Second edition," by D. J. Collier and National Center for Higher Education Management Systems (NCHEMS), 1978, http://www.jstor.org/Stable/2486395. Copyright 1978 by NCHEMS.

Every course offered in an Illinois community college uses a PCS code of 1 to denote instruction. In addition, each course is assigned a subprogram code, which adds a clarifying descriptive two-digit classification (ICCB, 2013a). Table 3 illustrates the subcodes used to classify instructional programs.

Table 3. *Program Classification Structure (PCS) Codes and Subcodes and Illinois Community College Instructional Program Classifications*

PCS Code and Subcode	Instructional Program Classification
1.0	General Associate Degrees (AGE, ALS, AGS)

Table 3. *Program Classification Structure (PCS) Codes and Subcodes and Illinois Community College Instructional Program Classifications*

PCS Code and Subcode	Instructional Program Classification
1.1	Baccalaureate or Transfer Instruction
1.2	Occupational/Technical Education
1.3	Noncredit Community Education
1.4	Remedial Education
1.5	Nonfundable General Studies
1.6	Vocational Skills
1.7	Adult Basic Education
1.8	Adult Secondary Education
1.9	English as a Second Language

Note. Adapted from "Course Classification and Funding," by Illinois Community College Board (ICCB), 2013, http://iccbdbsrv.iccb.org/generic/classfund.cfm. Copyright 2013 by Illinois Community College Board.

In addition to the PCS coding schema employed by the ICCB, each course is also assigned a Classification of Instructional Programs (CIP) code. This ancillary coding system, developed in 1980 by the United States Department of Education's National Center for Education Statistics (NCES), "provides a taxonomic scheme that supports the accurate tracking and reporting of fields of study and program completions activity" (NCES, 2013, para. 1). Each CIP code consists of a six-digit number, the first two digits of which are a career-based or vocational topic number. The remaining four digits are used to code specific career clusters or areas and add specificity to the first two digits of the CIP code. Table 4 provides examples of CIP coding for selected Illinois community college curricula.

Table 4. *Samples of CIP Coding for Selected Illinois Community College Curricula*

CIP Code	Curriculum
09 (Communications)	
09.04 Journalism and Mass Communications	
09.0401	Broadcast Journalism
09.07 Radio and TV Broadcasting	
09.0701	Broadcast Journalism
22 (Law and Legal Studies)	
22.01 Law and Legal Studies	
22.0102	Pre-law Transfer Curriculum
22.0103	Paralegal/Legal Assistant
23 (English Language and Literature)	
23.01 English Language and Literature	College Transfer Curriculum
46 (Construction Trades)	
46.04 Construction/Building Finishers	
46.0401	Property Maintenance Manager
46.0402	Construction/Cement Mason
46.0408	Painter and Wallcoverer
51 (Health Professions and Related Sciences)	
51.06 Dental Services	
51.0602	Dental Hygienist
51.0801	Medical Assistant
52 (Business Management and Administrative Services)	
52.04 Administrative/Secretarial	
52.0407	Information Processing Technician

Note. Adapted from *Management Information Systems Manual,* by Illinois Community College Board (ICCB), 2009. Copyright 2009 by Illinois Community College Board.

Illinois Base Operating Grants. In Illinois, four funding sources exist for

institutions of higher education: (a) direct operating support; (b) indirect operating

support; (c) state tax dollars; and (d) ICCB-administered grant programs (IBHE, 2010).

The first funding source, *direct operating support*, is appropriated by the Illinois General

Assembly to fund such items as employee salaries, career and workforce education

programs, or contracts for goods and services. The second funding source, *indirect*

operating support, includes state-sponsored benefits paid to the college or university for

its employees, including health insurance and pension payments into the State

Universities Retirement System (SURS). The third funding source, *state tax dollars*,

provides financial assistance to students through the Illinois Student Assistance

Commission (ISAC). The fourth funding source consists of two ICCB-administered

grant programs used to fund community college operations and instruction: the Base

Operating Grant and the Equalization Grant (IBHE, 2010). The ICCB provides these

complex formula-based grants to offset the differences between the community college's

total operating budget and the revenues received from student tuition, fees, and local

property taxes.

When a community college develops a new course for approval, the ICCB

reviews the PCS and CIP coding and provides grant funding for the reimbursable hours

generated by the course enrollment on a census day (normally the tenth day of the

semester for credit-level coursework). The grant funding is based upon *funding*

categories that are tied to the PCS and CIP codes (ICCB, 2013b). Table 5 outlines the

six funding categories covered by the Base Operating Grant and sample PCS and CIP

codes for the selected courses in Table 4 that qualify for reimbursable hours.

Table 5. ICCB Funding Categories with Related PCS/CIP Codes for Selected Courses

Funding Category	PCS Codes	CIP Codes for Selected Courses
1. **Baccalaureate and General Academic**	Courses with PCS 1.1 and courses with PCS 1.2 and 1.6 NOT listed under Categories 2, 3, and 4	23.01 (English Language and Literature Transfer Curriculum)
2. **Business and Service Occupational and Vocational**	Occupational career courses with PCS 1.2 and CIP codes noted OR Vocational skills courses with PCS 1.6 and CIP codes noted	09.0401 (Broadcast Journalism) 22.0103 (Paralegal/Legal Assistant)
3. **Technical Occupational and Vocational**	Occupational career courses with PCS 1.2 and CIP codes noted OR Vocational skills courses with PCS 1.6 and CIP codes noted	46.0402 (Construction/ Cement Mason) 52.0407 (Information Processing Technician)
4. **Health Occupational and Vocational**	Occupational career courses with PCS 1.2 and CIP codes noted OR Vocational skills courses with PCS 1.6 and CIP codes noted	51.0602 (Dental Hygienist) 51.0801 (Medical Assistant)
5. **Remedial Education**	All courses with PCS 1.4	
6. **Adult Basic/Adult Secondary Education**	All courses with PCS 1.7, 1.8, and 1.9	

Note. Adapted from *Management Information Systems Manual,* by Illinois Community College Board (ICCB), 2009. Copyright 2009 by Illinois Community College Board.

Grant reimbursement rates based upon PCS and CIP codes. Courses that are

eligible for ICCB reimbursable credit hours under the Base Operating Grant are

calculated to provide the community college with its grant amount for a given fiscal year.

To do so, the ICCB multiplies reimbursable unrestricted credit hours by the calculated

credit hour rate in each of the six funding categories in Table 5 (IBHE, 2010). Table 6

reflects the calculation of the Base Operating Grant for Fiscal Year 2011.

Table 6. *Calculation of Base Operating Grant for Fiscal Year 2011*

	FY 09 Unit Cost Study's determination of the cost to produce one credit hour of instruction
Multiplied by	Estimated two-year inflation factor
Equals	FY11 Estimated weighted cost per credit hour
Less	Tuition, fees, and local tax contribution
Equals	FY11 Credit hour rate

Note. Adapted from "The Basics of State Funding for Higher Education in Illinois
[Report]," by Illinois Board of Higher Education, 2010, http://ibhe.state.il.us/SJR88/
Materials/100727/IHEFundingMechanism.pdf. Copyright 2010 by Illinois Board of
Higher Education.

The credit hour rate calculated in Table 6 above assumes that the Illinois General

Assembly's appropriation funds the credit allocation of the Base Operating Grant in its

entirety. When the appropriation is insufficient to provide full funding, the reimbursable

credit hour rate is adjusted downward. Table 7 provides the credit hour reimbursement

rate for the six funding categories for FY 2013 (ICCB, 2013c).

Table 7. *ICCB Credit Hour Grant Rates by Category for FY 2013*

	Funding Category						
	Bacca-laureate & General Academic	**Business & Service**	**Technical**	**Health**	**Remedial Education**	**ABE/ Secondary Education**	**Average**
FY 2011 Unit Cost	$254.60	$287.49	$277.88	$345.00	$220.43	$242.14	$262.18
FY 2013 Weighted Cost	$261.28	$295.03	$285.18	$354.05	$226.21	$248.50	$269.06
Less							
Tuition & Fees	$105.06	$105.06	$105.06	$105.06	$105.06		$87.55
Local Tax Revenue	$103.83	$103.83	$103.83	$103.83	$103.83	$103.83	$103.83
Total	$208.90	$208.90	$208.90	$208.90	$208.90	$103.83	$191.39
Credit Hour Rate	$52.38	$86.14	$76.28	$145.16	$17.32	$144.67	$77.68
State Adjustment	($31.12)	($51.18)	($45.32)	($86.24)	($10.29)	($85.95)	($46.15)
Effective Credit Hour Rate, FY 13	$21.26	$34.96	$30.96	$58.91	$7.03	$58.71	$31.52

Note. Adapted from "Illinois Community College Board Fiscal Year 2013 Operating Budget Appropriation and Supporting Technical Data [Report]," by Illinois Community College Board, 2013, http://www.iccb.org/pdf/fiscal_manual/FY13TECHAPDX.pdf. Copyright 2013 by Illinois Community College Board.

These credit hour rates, when applied to the selected courses in Table 5, illustrate the value of the credit hour to the institution's bottom line. In Table 8, a three credit hour course in each of the funding categories results in varying levels of ICCB reimbursement to the community college, with vocational and technical education reimbursed at a higher rate than baccalaureate and general academic coursework.

Table 8. *Reimbursement for a Three Credit Hour Course in Each Funding Category*

Funding Category	Credit Hour Grant Rate	Reimbursable Total
1. **Baccalaureate and General Academic**	$21.26	$ 63.78
2. **Business/Service Occupational and Vocational**	$34.96	$ 104.88
3. **Technical Occupational and Vocational**	$30.96	$ 92.88
4. **Health Occupational and Vocational**	$58.91	$ 176.73
5. **Remedial Education**	$7.03	$ 21.09
6. **Adult Basic/Adult Secondary Education**	$58.71	$ 176.13

Note. Adapted from *Management Information Systems Manual,* by Illinois Community College Board (ICCB), 2009. Copyright 2009 by Illinois Community College Board.

While community colleges universally seek credit hour reimbursement from the ICCB in *credit* coursework using the PCS and CIP-based funding categories, the development of *noncredit* coursework can also provide a comparable level of reimbursement. In cases where the noncredit workforce training partner is charged for the community college's time and resources at a contractually agreed upon hourly rate, the total reimbursement to the institution for the training can be even higher than that of credit-level instruction. Two examples from the researcher's institution illustrate this point.

Example 1: Noncredit computer training for business and industry. The institution's noncredit workforce training unit conducted a series of eight-hour computer training workshops for a large corporate client within the community college district. Each workshop was given a PCS code and subcode of 1.6 (Vocational Skills) and was assigned to Funding Category 3 (Technical Occupational and Vocational). The client was charged $150 per hour for instructional time, with a maximum of 20 students per workshop and textbook costs of $20 per copy per student. Participants were required to register for the workshop as they would have registered for a credit-level computer course, with a pass/fail grade recorded on the participants' transcripts. This registration provided the institution with the information required to claim the enrollment for reimbursement from the ICCB and captured participants' contact information for future marketing initiatives. Figure 8 illustrates the community college's actual expenditures and the enhanced revenue generated by claiming the noncredit training course with the ICCB for reimbursable credit hours.
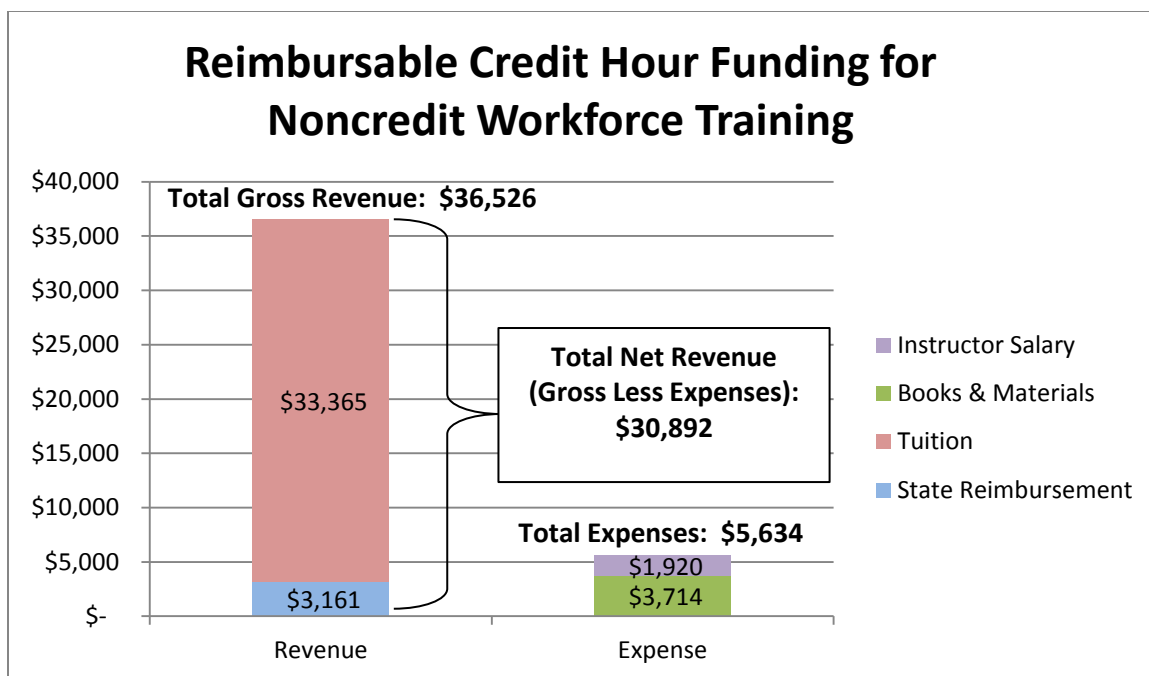
Figure 8. Reimbursable credit hour funding for noncredit workforce training. Excerpted from "Cost of Instruction Report, Continuing Education [Report]," by Kankakee Community College Office of Continuing Education and Career Services, 2013. Copyright 2013 by Kankakee Community College.

Figure 8 illustrates that the expenses related to the training for these participants totaled $3,714, excluding the instructor's salary, which is prescribed by the institution's standard $30 hourly rate. The purchase of instructional materials alone would have resulted in a financial loss to the institution had it relied solely on ICCB credit hour reimbursement. With a noncredit workforce training contract to deliver services to this client, however, the institution increased its total gross revenue by more than 1150%, to $36,526, and its total net revenue by more than 975%, to $30,892.

Example 2: Professional development for currently enrolled credit-level students. The institution's noncredit workforce training unit conducted a day-long professional development workshop for credit-level students in its paralegal program. There was no cost to attend the workshop; however, students were required to register for the noncredit course as they would have registered for its credit-level equivalent.

Completion of the workshop resulted in pass/fail grades on the students' noncredit

transcripts. The workshop was given a PCS code and subcode of 1.6 (Vocational Skills)

and assigned to Funding Category 3 (Technical Occupational and Vocational). All

workshop presenters donated their time to fulfill professional volunteer service or

minimum continuing legal education requirements for licensure or certification.

Figure 9 illustrates that even a low-expenditure professional development activity, which

seeks to bring students to campus in a continuing education context, can be self-

sustaining.
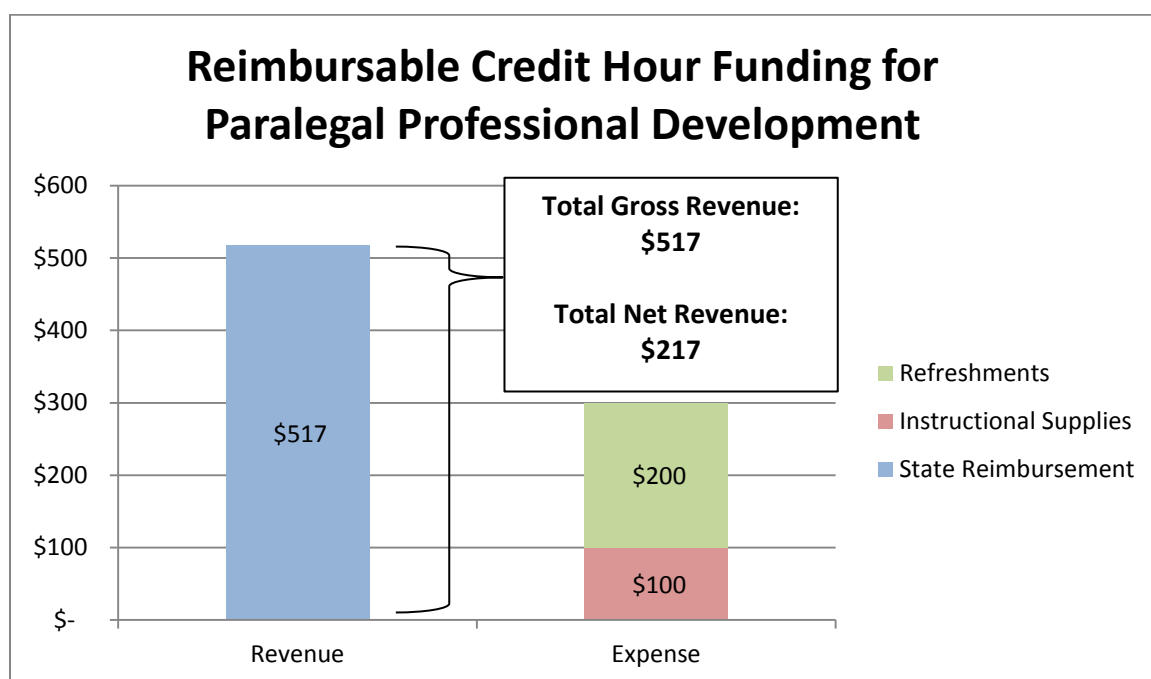
Figure 9. Reimbursable credit hour funding for professional development.
Excerpted from "Cost of Instruction Report, Continuing Education [Report]," by
Kankakee Community College Office of Continuing Education and Career Services,
2013. Copyright 2013 by Kankakee Community College.

While this example results in a minimal profit, the more important point is that

registering participants for professional development or corporate training can result in

those activities providing a *break even* point or a profit margin for the community

college. In addition, tracking this enrollment can also capture valuable marketing data

for future noncredit workforce training programs. Registering these participants may also prompt their interest in pursuing credit-level coursework leading to a degree or certificate and enhanced employment opportunities. These illustrations are but two examples of how Illinois community colleges can and should use their noncredit workforce training units as revenue-generating tools and as a means of transitioning students to credit-level coursework.

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

Lumpkin and Dess's Entrepreneurial Orientation Construct (1996)

Evolution of entrepreneurship. Broadly framed, *entrepreneurship* in business "spurs business expansion, technological progress, and wealth creation" (Lumpkin & Dess, 1996, p. 135). This spur has, consequently, often been defined as a necessary characteristic of a successfully performing business. The definition dates back to the work of Schumpeter (1934, 2002), whose theory of economic development required *innovation* to generate wealth by both the "disruption" of existing market structures and the introduction of new, competitive products and services (Lumpkin & Dess, 1996, p. 142).

The Austrian-born Schumpeter, who was a university professor of economics, fled Europe during the early years of Adolf Hitler's dictatorship and spent the remainder of his academic career at Harvard University (Liberty Fund, Inc., 2012). His career focused exclusively on economic theory, emphasizing that capitalism spawns entrepreneurship and that risk taking individuals "with a sharper intelligence and with a more agile imagination perceive countless new combinations" (Schumpeter, 2002, p. 413). Entrepreneurship boldly spurs *countless new combinations* of ideas and concepts

and offers new products and services that, in turn, spur economic growth and development.

By the 1980s, the definition of entrepreneurship had been further refined with Miller's (1983) work. Miller, then a professor with McGill University and Ecole des Hautes Etudes Commerciales in Montreal, Canada, posited that earlier definitions of entrepreneurship focused on individual behaviors and activities. Instead, Miller's focus shifted from individual characteristics to *organizational* characteristics to measure a firm's level of entrepreneurship. Specifically, Miller suggested that entrepreneurship involved proactive, innovative, and risk taking behaviors to build and sustain a business's presence. The idea that entrepreneurial organizations "engage in product market innovations, undertake somewhat risky ventures, and [are] *first* to come up with 'proactive' innovations, beating competitors to the punch" (Miller, 1983, p. 771) formed the basis for his research.

Miller's (1983) quantitative study of entrepreneurialism focused on 52 organizations cutting across a wide variety of businesses and industries in the Montreal region with sales from $2 million to over $1 billion annually. These organizations posted mean annual sales of $237 million and had an average of 2270 employees, and each organizational respondent was a divisional vice president or higher in ranking. The study proffered a typology of firms, including (a) *simple* firms, where power is centralized at the organizational peak; (b) *planning* firms, where formal procedures control organizational operation; and (c) *organic* firms, where power is based upon experience and communication is open (Miller, 1983). The study sought to determine the characteristics of entrepreneurship in each of these three typologies. The results reflected

three findings, each of which is unique to an organizational typology. The first finding

was that entrepreneurship in *simple* firms is determined by the characteristics of the

organization leader. The second finding was that entrepreneurship in *planning* firms is

determined by marketing strategy. The third finding was that entrepreneurship in *organic*

firms is determined by the organizational structure. Miller (1983) concluded that to be

entrepreneurial, an organization is required to consider its operating typology in order to

determine the ways in which proactiveness, innovation, and risk taking can be employed

to *beat competitors to the punch.*

By the late 1980s and early 1990s, Covin and Slevin (1989) had built upon the

work of Miller (1983) to study the performance of entrepreneurial organizations

possessing both hostile and cooperative work environments. Covin and Slevin sought to

ascribe a measurement to entrepreneurship using a scale that ranked Miller's (1983)

characteristics of proactiveness, innovation, and risk taking. Covin, a professor with the

Georgia Institute of Management, and Slevin, a professor with the University of

Pittsburgh, collected data on the ways in which firms demonstrated entrepreneurship in

hostile environments (such as high levels of external competition for business) or benign

environments (where little serious competition and ample marketing opportunities exist).

Covin and Slevin's (1989) study found that small firms with a "high strategic posture," or

propensity for proactiveness, innovation, and risk taking, performed best in hostile

environments; in contrast, small firms with a "low strategic posture" performed best in

more benign environments (p. 81).

Covin and Slevin's (1989) work, with its related emphasis on proactiveness,

innovation, and risk taking, provides the framework for the next iteration in

entrepreneurship development: the construct of *entrepreneurial orientation.* G. Thomas

Lumpkin, the Chris J. Witting Chair in Entrepreneurship at Syracuse University, and

Gregory G. Dess, the Andrew R. Cecil Endowed Chair at the University of Texas-Dallas,

co-authored a 1996 study examining the construct of *entrepreneurial orientation* (EO)

and linking it to business performance. Figure 10 summarizes the successive generations

of major concepts and theories leading from entrepreneurship to the evolution of

Lumpkin and Dess's (1996) Entrepreneurial Orientation Construct.
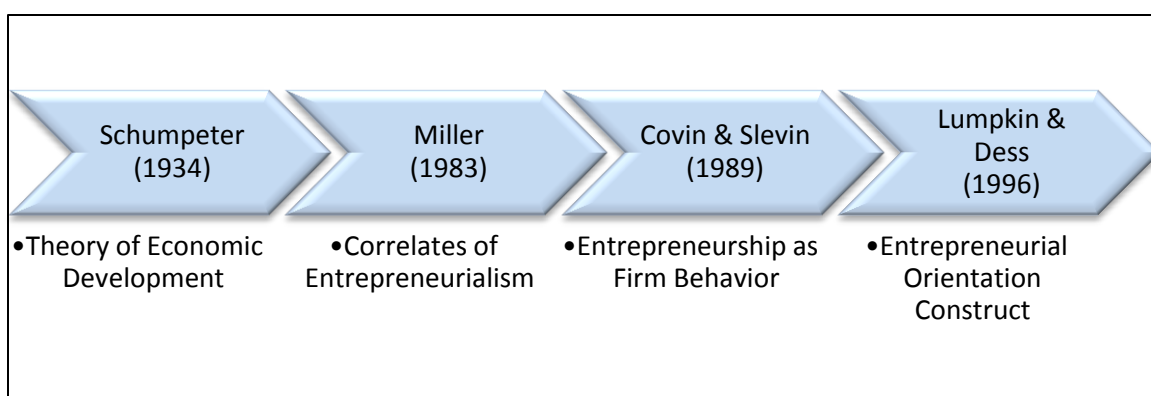
Figure 10. Evolution of major entrepreneurship theories leading to Lumpkin and Dess's
(1996) Entrepreneurial Orientation Construct.
Adapted from "Clarifying the Entrepreneurial Orientation Construct and Linking It to
Performance," by G. T. Lumpkin and G. G. Dess, 1996, *Academy of Management
Review, 21*(1), 135-172.

Entrepreneurship versus Entrepreneurial Orientation. Lumpkin and Dess

(1996) suggest that, despite this nearly 75-year attempt to define *entrepreneurship*, the

literature instead frequently offers combinations of "individual, organizational, or

environmental factors" influencing a business's entrepreneurial success or failure (p.

135). They posit that while entrepreneurship may be defined as "new entry,"

entrepreneurship is not synonymous with *entrepreneurial orientation* (EO), and their

study sought to draw distinctions between the two (Lumpkin & Dess, 1996, p. 136).

While they define *entrepreneurship* as new entry, they define *entrepreneurial orientation*

as the methods by which new entry is undertaken. They define EO is a "corollary concept" that refers to the "processes, practices, and decision-making activities [of a business] that lead to new entry [the introduction of a new product or service into the market]" (Lumpkin & Dess, 1996, p. 136). Figure 11 illustrates the relationship between entrepreneurship and entrepreneurial orientation.
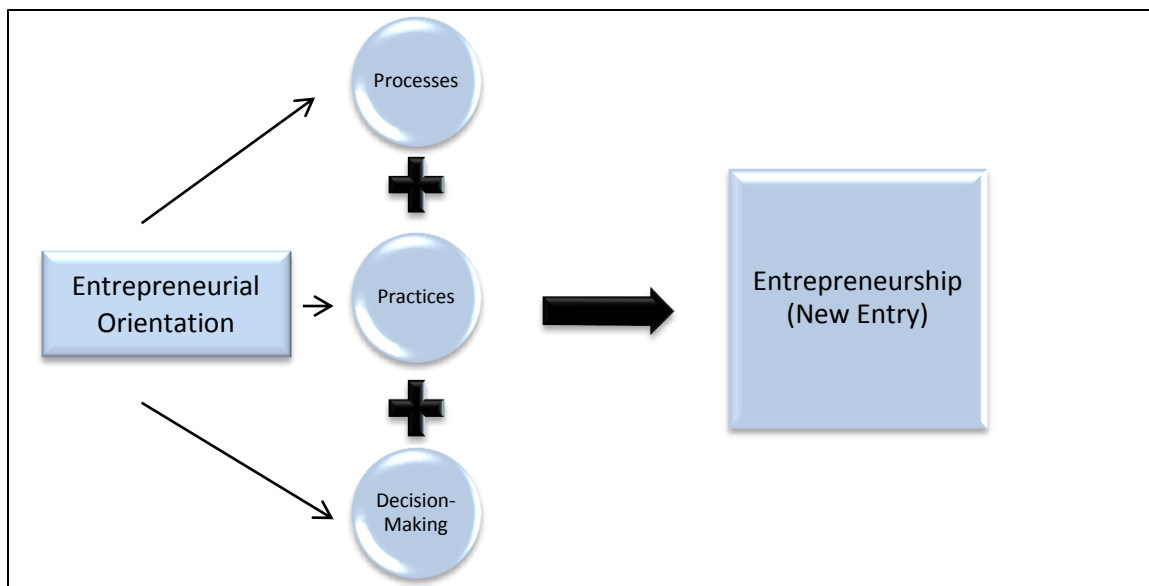
Figure 11. Relationship between entrepreneurship and entrepreneurial orientation. Adapted from "Clarifying the Entrepreneurial Orientation Construct and Linking It to Performance," by G. T. Lumpkin and G. G. Dess, 1996, *Academy of Management Review, 21*(1), 135-172.

Five dimensions of Entrepreneurial Orientation. Lumpkin and Dess's (1996) work builds upon the work of Covin and Slevin (1989), which cited *innovativeness, risk taking*, and *proactiveness* as key dimensions of entrepreneurial orientation. To that, the Entrepreneurial Orientation Construct offers two additional dimensions: *competitive aggressiveness* and *autonomy.*

Innovativeness. Schumpeter (1934, 2002) first introduced *innovativeness* as a critical characteristic of entrepreneurship. Theorizing that the introduction of new products and services spurred the growth of new businesses and channeled growth away

from existing businesses, Schumpeter posited that this cycle of innovativeness would enhance economic growth. Lumpkin and Dess (1996) define *innovativeness* as "a firm's tendency to engage in and support new ideas, novelty, experimentation, and creative processes that may result in new products, services, or technological processes" (p. 142). They note that innovativeness can be scaled across a "continuum" from the simple (the introduction of a new product) to the complex (making a major long-term investment in new technologies) (Lumpkin & Dess, 1996, p. 143).

   Risk taking. Lumpkin and Dess (1996) note that *entrepreneurs* are individuals who generally are willing to assume some personal risk as a tradeoff for the freedom to work independently or for financial or other benefits. The definition of risk taking builds upon the work of Baird and Thomas (1985), who theorized that strategic risk can consist of three behaviors: (a) a venture into the unknown; (b) a commitment of significant assets; and/or (c) a heavy borrowing of and leveraging against assets to ensure the strategy's success. Lumpkin and Dess (1996) apply Baird and Thomas's (1985) findings to the EO Construct and posit that entrepreneurially oriented organizations frequently engage in risk taking behavior, such as venturing into the unknown or committing and leveraging assets, in order to gain successful new entry in the business market.

   The challenge facing strategic managers, according to Lumpkin and Dess (1996), is how to measure the business's level of willingness to take risk. Again citing Miller's (1983) three-pronged approach to entrepreneurship (proactiveness, innovation, and risk taking), Lumpkin and Dess (1996) suggest that managers be asked about "the firm's proclivity to engage in risky projects and managers' preferences for bold versus cautious acts to achieve firm objectives" (p. 146).

Proactiveness. Proactiveness, according to Lumpkin and Dess (1996), is critical to an entrepreneurial orientation because "it suggests a forward-looking perspective that is accompanied by innovative or new-venturing activity" leading to new entry in the marketplace (p. 146). Early entrepreneurship theories suggest that both initiative and anticipation or foresight of market needs will directly impact both an organization's entrepreneurial orientation and its new entry. While other theorists have posited that entrepreneurship must involve proactiveness in introducing a new idea or concept (Miller, 1983), Lumpkin and Dess (1996) do not believe that *being first* is equivalent to being entrepreneurially oriented. They instead subscribe to Venkatraman's (1989) theory, which suggests that entrepreneurially oriented organizations present three specific dimensions of proactiveness: (a) seeking new entry outside of the present product line; (b) introducing new products ahead of the competition; and (c) eliminating old or outdated products. The end result, according to Lumpkin and Dess (1996), is that a firm is considered entrepreneurially oriented because it has the vision and the foresight to anticipate customer needs and market opportunities—not because it was the first firm to introduce the product or service.

Competitive aggressiveness. While *innovativeness, risk taking,* and *proactiveness* are all critical components of Miller's (1983) definition of entrepreneurship, Lumpkin and Dess (1996) submit that *competitive aggressiveness* is distinguishable from proactiveness and must also be considered a dimension of entrepreneurial orientation (EO). While *proactiveness* refers to how an organization anticipates and relates to customer needs and market opportunities, *competitive aggressiveness* refers to how a firm anticipates and relates to competitors. Lumpkin and Dess (1996) suggest that

proactiveness refers to how a firm *meets* demand; *competitive aggressiveness* refers to how a firm *competes* for demand. They posit that an entrepreneurially oriented organization will not only proactively pursue existing opportunities, but also aggressively respond to competition.

To be competitively aggressive, organizations must have "a propensity to directly and intensely challenge its competitors to achieve entry or improve position, that is, to outperform industry rivals in the marketplace" (Lumpkin & Dess, 1996, p. 148). The goal of competitive aggressiveness, then, is to respond to the customer's needs in such a way as to gain a competitive advantage over similarly situated firms. Examples of competitive aggressiveness include outperforming the competition; setting exceedingly high target market goals; spending aggressively; engaging in new entry to a wider market; or speeding up a product development cycle (Lumpkin & Dess, 1996). By engaging in one or more of these entrepreneurially oriented behaviors, businesses aggressively challenge competitors to achieve their own new entry or to improve the competitors' own positions in the industry.

Autonomy. *Autonomy* is Lumpkin and Dess's (1996) fifth and final dimension of an entrepreneurially oriented organization. *Autonomy* is defined as "the freedom granted to individuals and teams who can exercise their creativity *and champion* promising ideas that [are] needed for entrepreneurship to occur" [emphasis added] (Lumpkin & Dess, 1996, p. 140). Fostering autonomy in the workplace means giving individuals the ability to offer both an idea and a plan for its implementation. While it is possible that the organization may not possess the capital or other resources necessary to implement the idea, those strategic resources do not impact an individual's ability to *champion* that idea

in the first place. They posit that restrictions do not "extinguish the autonomous entrepreneurial processes that lead to new entry" (Lumpkin & Dess, 1996, p. 140).

Autonomy often involves a two-stage process: a *project definition* and a *project impetus* (Lumpkin & Dess, 1996). A *project definition* is the plan for implementing the initiative, which is then carried out by members of the organization who have been given the autonomy to do so. A *project impetus* involves the role of a *champion*, or an individual who sustains and supports the autonomy of those organizational members and who further promotes the members' entrepreneurial activity (Lumpkin & Dess, 1996). The goal of a champion-based entrepreneurial impetus is to protect the organizational members from restrictions that might suspend or terminate the project definition. Champions are frequently given "the most entrepreneurial roles by scavenging for resources, going outside the usual lines of authority, and promoting risk taking on behalf of new ideas and promising breakthroughs" (Lumpkin & Dess, 1996, p. 142).

Components of entrepreneurial orientation. Entrepreneurial orientation (EO) ties processes, practices, and decision-making to new entry; further, EO is defined by the dimensions of innovativeness, risk taking, proactiveness, competitive aggressiveness, and autonomy. However, Lumpkin and Dess (1996) also posit that EO's conceptual framework is further informed by *contingent variables*, such as environmental and organizational factors, which may work with EO to impact organizational performance. Environmental factors are one type of contingent variable. According to Lumpkin and Dess (1996), external influences that can affect EO's impact on performance include (a) dynamism; (b) munificence; (c) market complexity; and (d) industry characteristics (p. 152). Organizational factors are the second type of contingent variable. Examples of

organizational factors that can affect EO's impact on performance include: (a)

organizational size and structure; (b) organizational strategy and strategy-making

processes; (c) organizational resources; (d) organizational culture; and (e) characteristics

of the organization's top managers (Lumpkin & Dess, 1996, p. 152).

      While a firm may possess an entrepreneurial orientation, environmental and/or

organizational factors may serve as contingent variables impacting the organization's

performance and which must be measured to determine the degree of impact.

Performance can be assessed by any number of metrics, including sales growth, increase

in market share, increase in profit margin, overall performance relative to the

competition, and/or stakeholder satisfaction with the organization (Lumpkin & Dess,

1996). Figure 12 illustrates the relationship between EO and environmental and

organizational factors to impact performance.
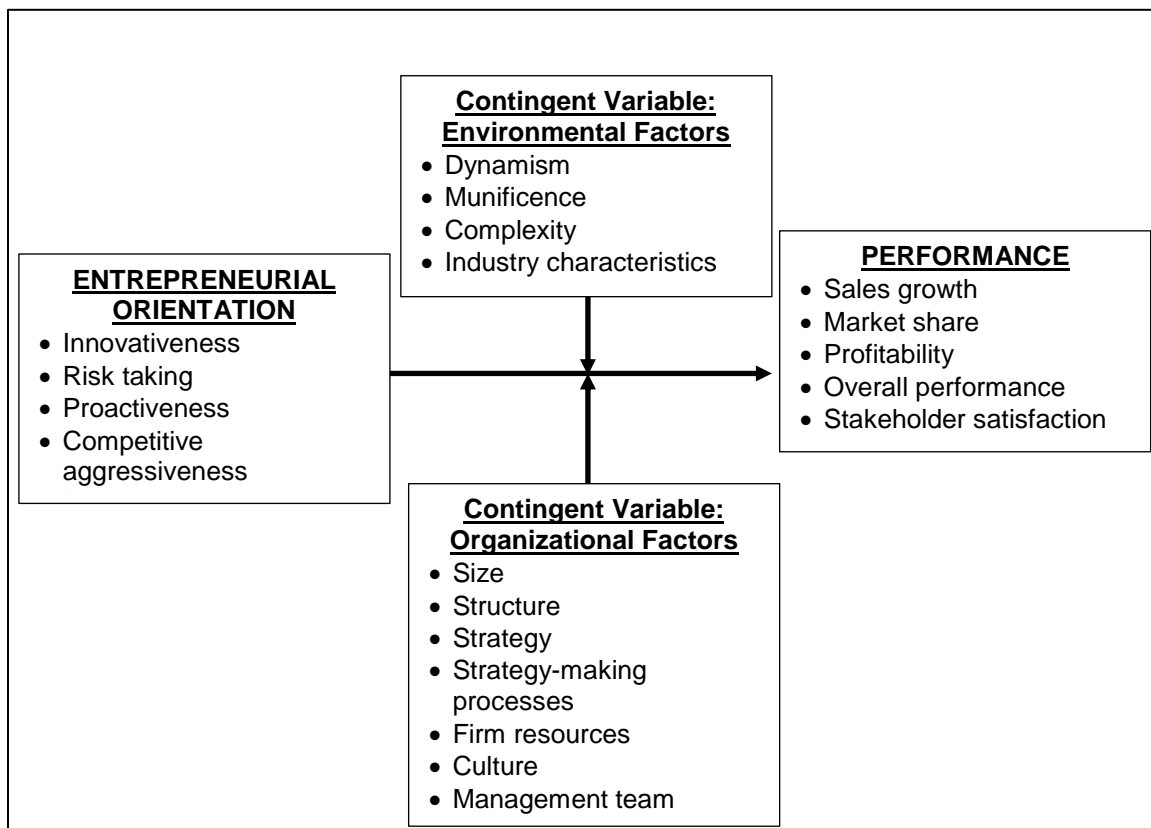
Figure 12. Conceptual framework of entrepreneurial orientation.
Adapted from "Clarifying the Entrepreneurial Orientation Construct and Linking It to
Performance," by G. T. Lumpkin and G. G. Dess, 1996, *Academy of Management
Review, 21*(1), 135-172. Copyright 1996 by Academy of Management.

   Contingent variable: Environmental factors. Lumpkin and Dess (1996) define

environmental factors as external variables that can influence the performance of firms

demonstrating an entrepreneurial orientation. The first of these factors is *dynamism,* or

the environment's force or vitality, which can impact sales growth or profitability. A

second environmental factor is *munificence,* or the business environment's profitability or

growth rate (Lumpkin & Dess, 1996). A lack of munificence can not only affect

profitability, but overall performance. A third environmental factor is *complexity* of the

environment, which may make it difficult for the organization to act entrepreneurially

and may eventually affect sales, profitability, and overall performance. A final

environmental factor comes from the *industry or field's characteristics*. If the industry as

a whole is one that is unreceptive to new and innovative ideas, an entrepreneurially oriented organization may have difficulty achieving new entry, and performance may suffer.

Contingent variable: Organizational factors. In addition to external or environmental factors impacting entrepreneurial orientation and performance, internal or organizational factors may also affect a firm's performance. The first two of these organizational factors involve *size* and *structure*. If an organization's size and structure or hierarchy dictate the organization's approach to entrepreneurialism, then performance may be adversely impacted because of its inability to achieve new entry. The third and fourth factors involve both *strategy* and *strategy-making processes*. If an organization's strategy and its process for designing and deploying the strategy limit or diminish its ability to be entrepreneurially oriented, performance outcomes may be equally limited or diminished. The fifth organizational factor involves *firm resources*. If the organization has limited resources, individuals within the organization may not be stopped from being entrepreneurial or functioning as champions, as noted by Lumpkin and Dess (1996); however, those limited resources may adversely impact the ability to achieve new entry, which, in turn, can impede performance. A sixth organizational factor involves *culture*. Again, Lumpkin and Dess's (1996) advocating the use of an internal champion is meant to circumvent this possible impediment to firm performance caused by the organizational culture; however, if the culture does not permit autonomy and the use of a champion to advocate the entrepreneurial orientation, performance can be adversely affected. A final organizational factor involves the *characteristics of the top management team*. Lumpkin and Dess (1996) strongly believe that when team members who do not advocate for any

or all dimensions of entrepreneurial orientation—innovativeness, risk taking, proactiveness, competitive aggressiveness, and autonomy—the ability to engage in behaviors and organizational strategies that lead to new entry are severely compromised, and performance will suffer.

Lumpkin and Dess's (1996) Entrepreneurial Orientation (EO) Construct, while designed for business and organization management, has both useful and instructive application to the types of noncredit workforce training partnerships in which community colleges engage. In an era of shrinking budgets and increasing taxpayer accountability, community colleges must focus on more than gaining *new entry*, as originally suggested by early theories of economic development and entrepreneurship. Instead, community colleges seeking to develop and refine the methods by which new entry is undertaken must become *entrepreneurially oriented*. When community colleges' *processes, practices, and decision-making activities* lead to new entry, these institutions are demonstrating their efforts to move beyond characteristics of entrepreneurship toward an entrepreneurial orientation. The dimensions of innovativeness, risk taking, proactiveness, competitive aggressiveness, and autonomy can all be employed in the noncredit workforce training environment to generate the *new entry* to which Lumpkin and Dess (1996) refer.

Amey, Eddy, and Ozaki's Partnership Development Model (2007)

Marilyn J. Amey, professor and chair of the Department of Educational Administration at Michigan State University, is the author of several seminal works addressing the importance of partnerships and collaboration between higher education and business and industry. Her 2007 study, coauthored with Pamela L. Eddy of Central

Michigan University and graduate assistant C. Casey Ozaki, offers a uniquely community college-oriented Partnership Development Model which is employed as part of the conceptual framework for this study. This model employs the characteristics of entrepreneurial orientation consistent with Lumpkin and Dess's (1996) Entrepreneurial Orientation construct. It also employs the use of evaluation strategies to measure a partnership's effectiveness consistent with Kirkpatrick and Kirkpatrick's (1993) Four Levels of Training Evaluation. Because of its synergy with two other models comprising the conceptual framework for this study, the Partnership Development Model is relevant to this study.

Community college as broker. The modern-day community college is increasingly involved in collaborative efforts with both the public and private sectors. Clear benefits to both the community college and the sectors exist; however, only anecdotal evidence exists on the methods by which community colleges sustain these collaborations, and scant research exists on how these collaborations are built. For this reason, Amey et al. (2007) sought to discover how and in what ways effective partnerships between community colleges and businesses are both built and sustained. Their research resulted in the two-stage Partnership Development Model, which emphasizes the role of a *champion* and the importance of regular, consistent feedback to a partnership's success.

Amey (2010) suggests that partnerships between education and industry can offer many benefits, including "resource sharing, creation of joint educational programs, technology enhancements, and workforce preparation" (p. 13). Several reasons, motivated by both compliance and legislation, exist for implementing partnerships. The

most notable of these are legislative in nature. For example, the Workforce Investment Act of 1998 (20 U.S.C. § 9201 et seq. (West 2012)) requires that any institution federally funded for career education must partner with a local one-stop workforce training center. In addition, the Carl D. Perkins Career and Technical Education Improvement Act of 2006 (20 U.S.C. § 2301 et seq. (West 2012)) provides for curricular connections to career pathways. These statutes offer powerful motivation for higher education to engage in partnerships with business and industry. Interestingly, the research found that community colleges are playing an increasing "broker role" with a variety of educational, organizational, and business entities (Amey, 2010, p. 15; Amey, Eddy, & Ozaki, 2007, p. 6). Understanding the significance the community college *broker role* plays in the development and sustenance of these partnerships informs this research.

Amey et al.'s (2007) work also speaks to the *entrepreneurial* nature of community college partnerships with business and industry, offering a link between schools, private industry, and government agencies. Noting that community colleges are often the "glue for a partnership" (Amey et al., 2007, p. 6), the authors provide several themes that may be present when a community college enters into a partnership. These five themes include: (a) facilities sharing; (b) personal relationships, providing opportunities for collaboration; (c) the partnership's context; (d) the partnership's process; and (e) the goal of strengthening student learning. While all five themes need not be present to engage in a partnership, Amey et al.'s (2007) research found that one or more of these themes is present as a community college seeks to partner with a public or private sector organization.

Facilities sharing. The first theme in the development of community college partnerships involves a motivation to share facilities. This concept originated when community colleges were housed in high schools and considered continuations of the K-12 system. Community colleges, like most taxpayer-supported endeavors, acknowledge that every expenditure is subject to scrutiny and accountability. With the current economy's shrunken revenues and increased operational costs, facilities sharing can often provide the impetus for a community college-business partnership.

Personal relationships. The second theme in the development of community college partnerships involves what Amey et al. (2007) have coined "personal relationships," which occur when individuals from each institution determine that a partnership will advance common interests and goals (p. 6). Amey et al. (2007) cite the instance of a community college entering into a developmental education partnership with its feeder public schools, noting that such collaboration "implies interdependency and joint ownership of decisions" (Amey et al., 2007, p. 7). The goal is to develop and sustain a partnership that serves the parties' common interests and mutual goals.

Partnership context. The third theme in the development of community college partnerships involves the *context* of the partnership. *Context* refers to "internal and external organizational factors, sociopolitical climate, human resource concerns, and timing" of the partnership (Amey et al., 2007, p. 7). For example, the decision to partner may be prompted by budgeting shortfalls or state funding cuts (internal and external organizational factors). It may be prompted by a change in governmental or institutional leadership (the sociopolitical or cultural climates). It may be prompted by the departure of key personnel whose absence impacts the community college's operations (human

resource concerns and timing). By examining the partnership's context, each partner will have a better understanding of the other's motivations for establishing the relationship.

Partnership process. A fourth theme in the development of a community college partnership involves process or logistical issues. Amey et al. (2007) note that these process issues involve concerns such as "who instigates the partnership, how members understand and interpret the relationships within the partnership, how the partnership changes over time, and how problems are resolved" (p. 7). This particular theme introduces the concept of the *champion*, who is responsible for initiating the partnership and has power instrumental to its success, "notably reputation, resources, political influence, and expertise" (Amey et al., 2007, p. 7). This champion (who can be from the community college, the business or industry, the community at large, or even a training participant) is seen as holding a key level of position and power in the model and is additionally responsible for sustaining and maintaining the partnership. In this context, the champion role is similar to the role of *champion* suggested by Lumpkin and Dess (1996).

Goal of strengthening student learning. The final theme that may be present in partnership development involves enhancing student learning and, by extension, student success. Both employers and community colleges benefit from partnerships that result in a better educated, more skilled workforce. Amey et al. (2007) note that most community college partnerships today are geared toward one or more of three areas: (a) high school achievement; (b) college degree completion; and/or (c) workforce preparation. When community colleges engage in partnerships to foster one or more of these goals, they often do so by blending academic and experiential learning, such as work/study

initiatives, hands-on laboratory activities, internships, or clinical experiences in order to strengthen students' competence.

   Partnership Development Model. With one or more of these five themes providing the impetus for a collaboration between a community college and its business and industry partners, the Partnership Development Model consists of a two-stage development process. The first stage involves the actual development of the partnership itself. The second stage of the process involves the sustenance and maintenance of the partnership and may begin at any point after the onset of the first stage. The model provides for overlying themes of a partnership *champion* to build and maintain the partnership and an ongoing feedback loop to make adjustments or modifications to the partnership. Figure 13 illustrates the Partnership Development Model.
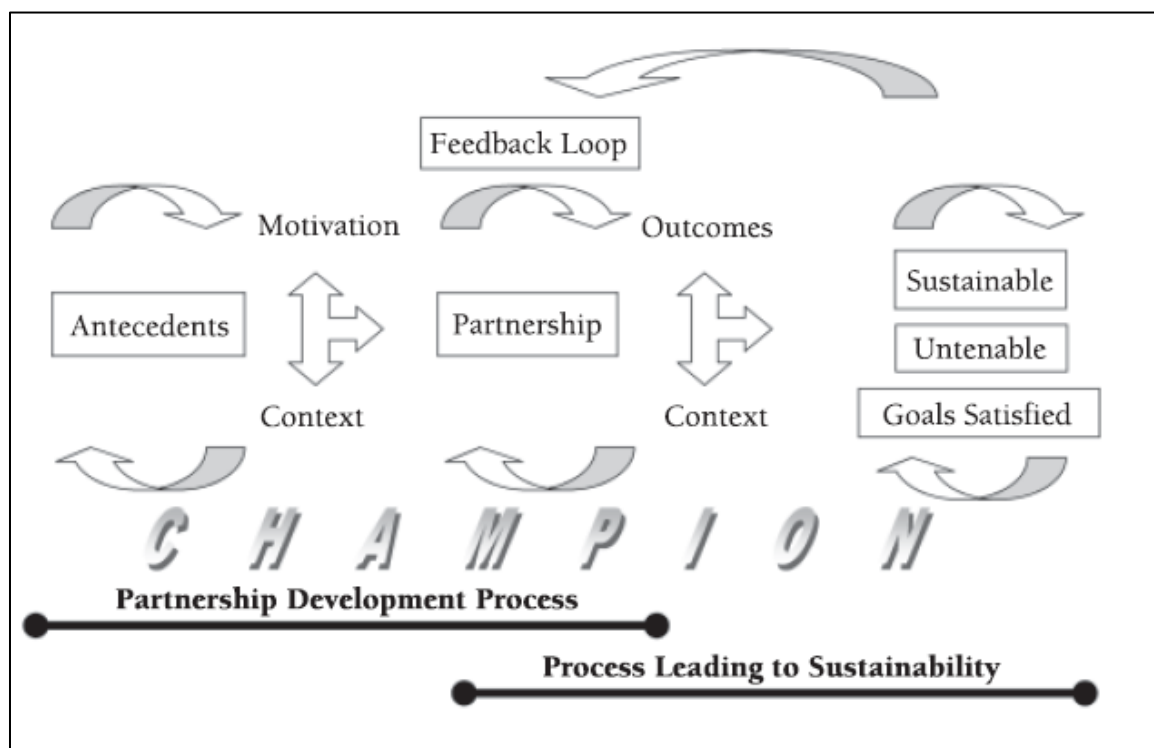
Figure 13. Amey, Eddy, and Ozaki's (2007) Partnership Development Model.
Adapted from "Demands for Partnership and Collaboration in Higher Education: A Model," by M. J. Amey, P. L. Eddy, and C. C. Ozaki, 2007, *New Directions for Community Colleges, 139*, p. 10. Copyright 2007 by Wiley Interscience.

Stage 1: Partnership development process. In the first phase of the model,

which focuses on partnership development, Amey et al. (2007) posit that *antecedents,*

motivation, context, and *the partnership itself* must be considered. *Antecedents* refer to

any precursors to the partnership, or "the context and issues facing individual partners . . .

[as] an incentive for the partnership" (Amey et al., 2007, pp. 9-10). These contextual

issues may be externally driven—for example, by funding concerns, legislative

considerations, or compliance requirements. The contextual issues may also be internally

driven—for example, by restrictions on human resources or facilities. Noting that these

relationships can run on a "continuum," or scale, from the formal to the informal, Amey

et al. note that the most successful collaborations occur when each side understands the

precursors or antecedents the other side needs in order to engage in a partnership (2007,

p. 10).

Stage 1 of the partnership development process also involves both *motivation*, or

the rationale that prompts each side to engage in the partnership, and *context*, or the

reasons for the partnership. Amey et al. (2007) suggest that a strong relationship exists

between motivation and context and their collective impact on partnership development.

Partners may have differing motivations for engaging in the partnership, and partners

may also bring differing levels of power to the partnership. The individual social capital

brought to the partnership (Coleman, 1988) and the "trustworthiness" associated with that

social capital also affect the level of power brought to the partnership (Amey et al., 2007,

p. 10). In addition, the closeness of the relationship between the partners, also known as

the *density* of the relationship (Granovetter, 1983), can affect levels of power, as can

controlling the organization's infrastructure and processes (Morgan, 1998). Amey et al.

(2007) conclude that as long as the partnership mutually benefits both partners, an individual partner's motivation is not harmful to the partnership. It is when the partnership benefits inure to one partner over the other that motivation can change; in other words, the model's success is premised upon "how the institution and its members frame the partnership and how this changes as the partnership continues" (Amey et al., 2007, p. 11).

Closely related to motivation in Stage 1 is *context,* or the environmental influences that prompt the development of the partnership. Noting that context provides both the rationale for developing and the impetus for sustaining the partnership, Amey et al. (2007) offer multiple contexts for partnership development. Contexts, which may include "state mandates, declining institutional enrollment or revenue, opportunities to share costs, grant funding initiatives, community needs, limited instructional capacity in certain subject matter, and unused facilities," can work in concert with the partners' motivations to forge the partnership (Amey et al., 2007, p. 10).

The final dimension of Stage 1 involves the *partnership itself.* Amey et al. (2007) acknowledge that partnerships fluctuate and shift over time as new partners join the partnership and other partners leave, as a partnership's context changes, or as the role of the partnership champion changes. Within this dimension, the partners must not only acknowledge each other's strengths, but also recognize that a successful partnership framework will continually adjust and readjust to meet the collective needs of the partners.

Stage 2: Sustainability and maintenance. The second phase of the Partnership Development Model addresses the processes that lead to long-term sustainability and

maintenance of the partnership. These processes link outcomes of the partnership to the

context of the partners to determine whether the partnership is *sustainable, untenable, or

complete* (Amey et al., 2007). If the partnership is *sustainable*, it has achieved the

requisite outcomes identified when establishing the partnership's context, and the

partnership may well continue. If the partnership is *untenable*, the outcome is considered

a "negative-unnatural finish" (Amey et al., 2007, p. 11). An example of an untenable

partnership would be one where the partnership fails altogether; to a lesser degree,

another untenable partnership might result when one of the partners leaves the

partnership. If the partnership is *complete*, the outcome is considered a "positive-natural

finish" (Amey et al., 2007, p. 11). A completed partnership would be one where the

outcomes meet the partnership's stated goals. The partnership may, in this context, be

terminated, but it is terminated because the aims of the partnership have been met.

  Overlying themes: Feedback and champion. The model provides for feedback

throughout the partnership. Amey et al. (2007) note that during the partnership

development process, feedback helps partners "make sense of intended and actual

outcomes" (p. 11). Similarly, feedback is a necessary criterion of the sustainability and

maintenance process; it informs decision-making, allows for adjustments, and supports

the sustainability, tenability, or completion of the partnership.

  The role of *partnership champion* is threaded throughout the Partnership

Development Model and is a critical component to the model's success. Noting that the

champion may be an individual or a group, the champion's goal is to advocate for the

partnership's development and sustainability (Amey et al., 2007). The model's definition

of *champion* is unique to the literature because this entity needs the support of the

institution's leader; however, the champion does not need to be in a position of actual power within the institution. The champion has almost a charismatic quality, or "the personal, cultural, and social capital" to contribute to the partnership's success (Amey et al., 2007, pp. 11-12).

The partnership champion should ideally possess effective leadership characteristics that enhance the building and sustenance of partnerships. One such characteristic is effective communication skills, which are needed to establish the partnership's context—context that is tied to motivation as the partnership is being built, and context that is tied to outcomes as the partnership's sustainability is being assessed. Communication can involve demonstrating the value of partnerships to the community, such as agreement-signing and ribbon-cutting ceremonies, or public access to the unveiling of new partnerships that will benefit the community served by the institution (Amey, 2010). Effective communication also involves consistent delivery of the message and concerted efforts to maintain contact with the partners so as to sustain and maintain the partnership.

Another characteristic of a champion involves a keen sense of the organizational structure and how that structure can be enhanced through a partnership. According to Amey (2010), this involves not only a macro-level understanding of the organization's goals and objectives, but a micro-level understanding of the institution at the *unit level* in order to have a better sense of how those components would best be served by a partnership.

A final characteristic of a champion is the ability to facilitate strong relationships between the partners and to be able to distinguish between "short-term, situation-specific

collaborations and those intended to be long term" (Amey, 2010, p. 19). Noting that these champions have a critical impact on the development and sustenance of these relationships, Amey (2010) also offers that the leadership will evolve from centralized, champion-oriented approach to a more distributed form of leadership where the champion serves as a partnership facilitator. The goal of such evolution is to avoid allegiance to one person (the champion) and to emphasize the partnership's viability instead.

Community colleges can and should utilize partnerships with business and industry, not only for the revenue generation such collaboration can provide, but for achieving the colleges' mission of being responsive to the communities they serve. The entrepreneurial nature of such partnerships, including resource sharing, serving common interests, and building connections to career pathways for training participants, offers clear benefits to both the community college and the business partner. These partnerships are most successful when each partner's motivation for the partnership is carefully considered and put into context. The partnership's desired outcomes must similarly be put into context and be continually evaluated to determine whether the outcomes have been satisfied or are sustainable or untenable. To assess those outcomes effectively, feedback must be consistent and regular, and a partnership champion must possess the capital to both create and sustain the relationship. Amey et al.'s (2007) Partnership Development Model provides a viable method by which an entrepreneurial community college can build and maintain an effective relationship with a noncredit workforce training partner.

Kirkpatrick and Kirkpatrick's Four Levels of Training Evaluation (1993)

Donald Kirkpatrick, professor emeritus at the University of Wisconsin and an early proponent of workforce and corporate training, is considered the father of business and industry training evaluation. As a faculty member at the University of Wisconsin, his *Four Levels of Training Evaluation* were an outgrowth of his dissertation research on evaluating the effectiveness of business and industry training programs. Today, the *Four Levels of Training Evaluation* are considered the gold standard both for measuring the effectiveness of training and for planning future training curricula. Because the purpose of this study includes research and analysis of data related to the ways in which noncredit workforce training is evaluated, the Four Levels of Training Evaluation are necessary components of the study's conceptual framework.

The development of training and evaluation. Donald Kirkpatrick's work in training evaluation originated in the 1950s, when he was teaching supervisory development courses for the University of Wisconsin Management Institute and working towards a doctoral degree. His dissertation research initially focused on evaluating two levels of training effectiveness in business and industry. The first evaluation measurement, known as *Level 1*, measured the reaction of the supervisors in attendance to the training. The second evaluation measurement, known as *Level 2*, involved pre- and post-testing to determine how and in what ways skills were built and knowledge was increased. Over the next five years, Kirkpatrick conducted additional research in evaluation of business and industry training programs and developed two additional levels of evaluation measurement. A *Level 3* evaluation was developed to measure

changes in training participants' behavior, and a *Level 4* evaluation was developed to

measure changes in results, such as workplace productivity, profit, or quality control.

This four-level model of evaluation was published nationally in a 1959 series of

articles for the *Journal of the American Society of Training Directors,* the premier

professional development society for workforce trainers. The model became commonly

known as the *Kirkpatrick Four Levels* or the *Kirkpatrick Model.* Today, the Kirkpatrick

Four Levels of Training Evaluation—*Reaction, Learning, Behavior, and Results*—are

taught worldwide through Kirkpatrick Partners, a training partnership between Donald

Kirkpatrick, his son, James D. Kirkpatrick, and James' wife, Wendy. Kirkpatrick

Partners offers a comprehensive series of trainer certification programs, webinars, and

evaluation instruments based upon the Kirkpatrick Four Levels of Training Evaluation.

The intent of the model, according to Donald and James Kirkpatrick (Kirkpatrick

& Kirkpatrick, 2006), was to clarify an overly narrow definition of *training evaluation*.

The ultimate goal of training evaluation, according to the model, is to document how and

in what ways Level 4 *results* have been achieved. Yet many trainers limit their

evaluation solely to participants' Level 1 *reactions*. According to Kirkpatrick and

Kirkpatrick (2006), when trainers only evaluate Level 1 *reaction* and do not evaluate

Level 2 *learning* or Level 3 *behavioral* changes, the employer cannot evaluate whether

any Level 4 *results* occurred because of successful training. For this reason, the

Kirkpatrick model sought to clarify this often incomplete understanding of *evaluation:*

> Some training and development professionals believe that *evaluation* means
> measuring changes in *behavior* that occur as a result of training. . . . Others
> maintain that the only real evaluation lies in determining what final *results*
> occurred because of training. . . . Still others think only in terms of the *comment*
> sheets that participants complete. . . . Others are concerned with the *learning* that
> takes place in the classroom, as measured by increased knowledge, improved

skills, and changes in attitude. And they are all right—and yet wrong, in that they fail to recognize that *all four approaches* are parts of what we mean by evaluating [emphasis added] (Kirkpatrick & Kirkpatrick, 2006, p. xv).

In order to enhance the frequently narrow perception of workforce training, Donald and James Kirkpatrick (2006) further expanded on its definition to include *development*, which involves offering coursework and programs "designed to increase knowledge, improve skills, and change attitudes, whether for present job improvement or for development in the future" (p. xvi). They opine that quality, effective training evaluation serves three key functions: (a) gathering critical information to inform future training needs; (b) determining whether future training should be continued or suspended; and (c) justifying the training budget and documenting training's impact on the organization's goals and objectives.

The first function of training evaluation is to gather critical information to inform future training needs. For example, the employer benefits from knowing whether the trainer's delivery style was an appropriate fit for the training audience, and the employee benefits from providing concrete suggestions for improving future training. The goal from each stakeholder's perspective is to improve the quality of the training for future participants. Examples of critical information gathering to inform future training may include determining whether:

- The subject matter complements the participants' training needs;

- The training facilities, logistics (times, days, meals, breaks), and job aids (handouts and supplemental materials) are suitable;

- The program coordination (program registration, payment, special accommodations) is satisfactory; and

- The program's overall delivery can be improved (Kirkpatrick & Kirkpatrick, 2006).

The second function of training evaluation is to determine whether training should be continued or suspended (Kirkpatrick & Kirkpatrick, 2006). Evaluation may reflect that the training should be maintained in its present format, be slightly altered, or be discontinued. For example, organizations with high employee turnover or with high rates of seasonal or temporary help may require continuing, ongoing training to maintain productivity. Conversely, training in certain computer applications may need to be supplanted with upgraded applications training, or training on older applications may need to be eliminated. Effective training evaluation can inform those decisions and provide guidance grounded in data on the organization's future training plans.

The third function of training evaluation is to justify the training budget and to document the training's demonstrable contribution to the organization's goals and objectives. According to Kirkpatrick and Kirkpatrick (2006), tight organizational budgets in a difficult economy often result in the elimination of areas perceived as excessively expensive or optional, all with the goal of demonstrating a budget savings. Training is frequently one of those expensive or optional functions targeted for elimination by organization managers (Kirkpatrick & Kirkpatrick, 2006).

Because organization managers must often be persuaded that training is, in fact, neither excessively expensive nor optional, effective evaluation can make the case for a continuation of training programs. Donald and James Kirkpatrick label these organization managers the ultimate "corporate jury" (Kirkpatrick Partners, 2009, para. 6), or a managerial group to whom trainers must defend the training function. Effective training evaluation, the authors posit, is the best way in which to defend the training budget to a corporate jury of managers seeking to cut costs. When the training function

can be documented as effectively producing positive reaction, documenting learning,
effecting behavioral changes, or generating results impacting the bottom line, then the
trainer's corporate jury is much more inclined to support training's contribution to the
organization.

The four levels of training evaluation. The Kirkpatrick Four Levels of Training
Evaluation offer a model to demonstrate the effectiveness of training to an organization's
bottom line by persuading the corporate jury toward training's value. Each of the four
levels offers a set of guidelines for ensuring consistent and effective evaluation of
training. The model provides a "framework to actually drive [organizational] culture
change . . . [giving] trainers the ability to demonstrate value to a 'corporate jury' through
a compelling Chain of Evidence[SM]" (Kirkpatrick Partners, 2009, para. 6). The Chain of
Evidence[SM], which shows the interrelationship between the levels and the completion of
higher evaluation levels predicated upon the successful completion of lower evaluation
levels, is shown in Figure 14.
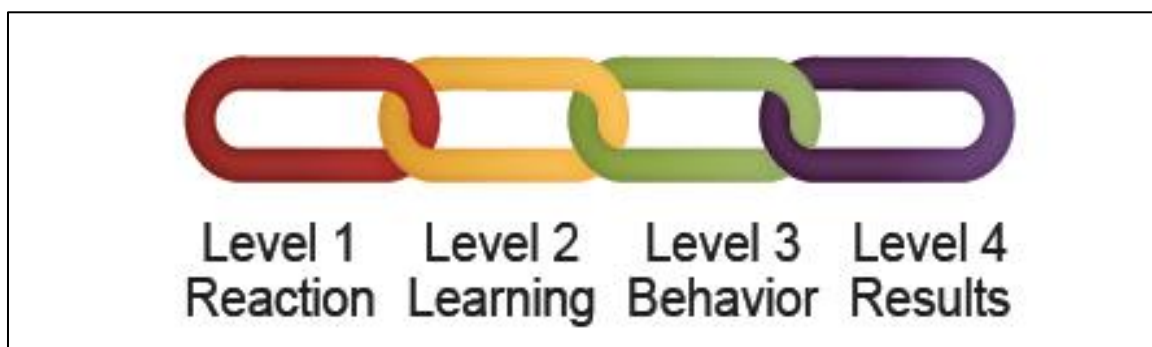
Figure 14. Kirkpatrick's (2009) Chain of Evidence[SM].
Adapted from "There is More to Kirkpatrick Than Training Evaluation," by J.
Kirkpatrick, 2009, retrieved from http://www.kirkpatrickpartners.com/Portals/0/
Storage/There%20is%20More%2010%2026%2009%20revised%20_1_.pdf. Copyright
2009 by Kirkpatrick Partners.

Level 1 evaluation: Reaction. The first level of the model measures how
training participants *react* to a training experience. Noting that reaction is essentially a

"measure of customer satisfaction" (Kirkpatrick & Kirkpatrick, 2006, p. 27), participants

must react favorably to training in order to conclude that the training has been even

minimally effective. They acknowledge that many training managers consider Level 1

evaluation to be a *smile sheet* or a cursory stamp of approval for the training program.

However, the authors also posit that measurement of reaction is critical for several

reasons. First, reaction provides feedback on how to improve future training sessions. In

addition, reaction assures participants that the trainer is there to offer support and

assistance; therefore, participant reaction can inform the trainer whether the support and

assistance is having the needed impact. Another benefit to reaction is that it offers

quantitative feedback to organizational managers who may be responsible for training

budgets or future training needs. A final benefit to reaction is that this quantitative

feedback can be used to establish benchmarks or quality standards for future training

programs. Therefore, while reaction may be perceived as rubber stamping the training

function, it offers an inherently valuable purpose: "Positive reaction [Level 1] may not

ensure learning [Level 2], but negative reaction [Level 1] almost certainly reduces the

possibility of its occurring" (Kirkpatrick & Kirkpatrick, 2006, p. 22).

Guidelines for evaluating reaction. To begin the process of evaluating reaction,

Kirkpatrick and Kirkpatrick offer eight guidelines. These guidelines include: (a)

determining what evaluation should measure; (b) designing a form to quantify reactions;

(c) encouraging the use of written comments and suggestions; (d) encouraging a 100%

immediate response; (e) encouraging honest responses; (f) developing consistent

numbering standards for quantitative feedback; (g) measuring the reaction level against

the standard of acceptable performance; and (h) determining to whom and under what conditions the reactions should be communicated.

The first guideline involves determining what the evaluation should measure, or what the trainer wants to discover from the evaluation process. Noting that reaction to both the subject matter and the trainer is necessary, the evaluation should measure these two components separately. Examples of items for which reaction should be solicited include physical facilities, scheduling of the sessions, quality and quantity of meals, appropriateness of training content and job aids, and the significance of the program components to the training participants (Kirkpatrick & Kirkpatrick, 2006).

A second guideline to evaluating reaction involves designing a form that will quantify, or ascribe sequential numbering to, training participants' reactions. Kirkpatrick and Kirkpatrick (2006) submit that the greatest amount of reaction will be elicited from a form that "provides the maximum amount of information and requires the minimum amount of time" (p. 28). For this reason, they suggest a form using a scale of Excellent/Very Good/Good/Fair/Poor or a numbered Likert scale (Likert, 1932). It is also suggested that the form be pilot tested with many audiences to see if the Likert scale is clear and whether the evaluation documents the intended reaction to the training.

A third guideline to evaluating reaction encourages the use of written comments and suggestions to provide qualitative responses beyond the participants' quantitative reactions. This approach can be implemented during a post-training distribution of evaluation forms; however, to encourage full participation, many trainers request that participants complete the forms before the trainer gives final announcements and concludes the training.

A fourth guideline to evaluating reaction is that a 100 percent immediate response is strongly encouraged. Noting that most participants sent home with an evaluation decline to even participate in its completion, Kirkpatrick and Kirkpatrick (2006) also found that take-home evaluations may not representatively sample the entire group. This renders an incomplete picture of the group's reaction to the training; therefore, on-site completion of the evaluation forms yields the most useful data.

A fifth guideline to evaluating reaction encourages honest responses from the training participants, which, Kirkpatrick and Kirkpatrick (2006) opine, will not happen when trainers "like to know who said what" (p. 35). When trainers require participants to sign forms, offer e-mail contact information, or identify a department name, participants are disinclined to offer honest responses for fear of workplace repercussions or retaliation. Kirkpatrick and Kirkpatrick recommend making a signature optional—and only necessary should the training organization wish to provide a testimonial from that participant for a training brochure or other publication.

A sixth guideline to evaluating reaction involves the development of consistent numbering standards for the quantitative feedback on the training. Implementing a Likert-based scale can then be used to establish a benchmark, or "standard of acceptable performance" that can drive future training schedules and budgets (Kirkpatrick & Kirkpatrick, 2006, p. 38). They also suggest that the data collected over time may offer separate *acceptable performance* measurements for the instructor, the facilities, and the curriculum, all of which can be used to inform future training decisions.

A seventh guideline to evaluating reaction is to measure the reaction level against the standard of acceptable performance to determine the next steps in the training plan. If

the measurement yields a discrepancy or an unacceptable performance measurement, appropriate next steps may include changing the trainers, the content, or the facilities; making adjustments or taking corrective action; living with the unacceptable performance measurement; or modifying the standard of acceptable performance (Kirkpatrick & Kirkpatrick, 2006).

The eighth and final guideline to evaluating reaction is to determine to whom and under what conditions the reactions should be communicated. Reactions may be shared with training staff, but those staff must have a legitimate need to see the results (for instance, managers with responsibility for staffing, training, and performance management). In addition, the level of reporting detail must be considered. Kirkpatrick and Kirkpatrick (2006) recommend that the results may be aggregated or summarized and shared with an advisory committee of organization managers. Each of these recommended guidelines is meant to provide transparency to the training function and to make the case for the training department's usefulness to the organization. The guidelines are also meant to provide a framework for a complete Level 1 *reaction* evaluation, which is the first link in the evidentiary chain offered to the corporate jury and is a precursor to a Level 2 *learning* evaluation.

Level 2 evaluation: Learning. Once a Level 1 *reaction* evaluation has been completed, the trainer may then move to the second level of the model. This level measures three key areas: (a) the degree to which the participants have acquired the requisite skills; (b) the degree to which the participants have acquired and applied new knowledge; or (c) the degree to which participants' attitudes have changed based upon their participation in the training program. Kirkpatrick and Kirkpatrick (2006) note

improvement in any one of these three metrics connotes that learning has occurred. For example, if training participants can demonstrate skills they could not demonstrate prior to the training, such as computer competency, then learning has occurred. Similarly, if training participants can demonstrate application of knowledge, such as correctly following a standard operating procedure, then learning has occurred. Finally, if training participants can demonstrate motivation to take on additional responsibility as a result of training, then attitudes have changed, and learning has occurred. Therefore, to effectively measure whether learning has occurred under Level 2, Kirkpatrick and Kirkpatrick opine that four guidelines are necessary.

The first guideline to measuring learning is to use a control group whenever practicable. The purpose of such a group is to provide validation that learning actually occurred among the members of the experimental group. Kirkpatrick and Kirkpatrick (2006) note that it is not always practicable to employ a control group; an example is when all employees are required to attend training. In this situation, they suggest that a control group could receive the same training as the experimental group; however, the control group's training should be held at a later time, with a comparison of pre-test and post-test scores for each group as a measure of learning.

The second guideline to measuring learning is to use pre- and post-testing. The difference between the tests indicates the level of learning that has occurred. These tests can be given using standard paper and pencil tests, or they can be done via the Web. Both pre-and post-tests, however, must use the same instrument in order to consistently measure participant performance prior to—and as a result of—the training. Pre- and post-testing measures provide two key assessments of learning outcomes. First, the

testing determines the trainer's overall effectiveness in building skills, increasing knowledge, or changing attitudes. Second, the testing provides individual detail on where the training succeeded or failed. The data gathered from the pre- and post-testing processes can then be used not only to improve the trainer's own presentation and delivery skills, but also to guide the trainer toward improvement in the design of instructional content areas (Kirkpatrick & Kirkpatrick, 2006).

The third guideline to measuring learning involves a 100% response rate from the participants. Using the same methods employed to gauge Level 1 *reaction*, Kirkpatrick and Kirkpatrick (2006) suggest that learning evaluations be conducted at the conclusion of the training, while all participants are still in the training facility, to ensure that a complete sampling of responses is available.

The fourth and final guideline to measuring learning involves taking appropriate action to improve the training based upon the feedback received, which is also recommended when measuring Level 1 *reaction* to the training. The purpose of this measurement is not only to measure whether *training participants* have *learned* effectively; it is also to measure whether *trainers* have *delivered* the training effectively (Kirkpatrick & Kirkpatrick, 2006). The goal of taking appropriate action is to close the loop in this process of continually assessing and improving the quality of training provided. This framework is similar to that found in Level 1, with the goals of building the evidentiary chain for to a corporate jury and establishing a precursor to a Level 3 *behavior* evaluation.

Level 3 evaluation: Behavior. Once a Level 2 *learning* evaluation has been completed, the trainer moves to the third level of the model, which measures the degree

to which participants apply the knowledge, skills, or attitudes they acquired during training to their jobs. Noting that return on expectations (ROE) is contingent upon a strong Level 3 *behavioral* evaluation, the authors recommend asking the organizational managers one key question: "What do you want success to look like?" (Kirkpatrick Partners, 2011, "Kirkpatrick Foundational Principles," para. 2). From that identification of how success should look, training can be designed to generate favorable reaction, to maximize learning, and to foster behavioral change.

A common pitfall for trainers, according to Kirkpatrick and Kirkpatrick (2006), is that trainers often want to bypass the measurements of Level 1 *reaction* and Level 2 *learning*, opting instead to move directly to measuring Level 3 *behavioral* change. In this example, a trainer may begin by evaluating for Level 3 and find no behavioral change; in the absence of evaluating for Level 1 *reaction* and Level 2 *learning*, the training may be deemed unsuccessful. Yet measuring for Levels 1 and 2 may reflect that the conditions needed for Level 3 *behavioral* change were not present, and were, therefore, not measurable. Under these circumstances, the training can indeed be classified as successful when measuring for reaction and learning. For this reason, Kirkpatrick and Kirkpatrick note that the evaluation of participants' Level 3 *behavioral* change is predicated on the presence of four conditions:

- A desire to change.

- A knowledge of what the participant must do and how the participant must do it.

- An organizational climate (defined as a supervisor) who supports change.

- A reward offered to the participant for making the change (Kirkpatrick & Kirkpatrick, 2006, p. 23).

For example, a participant may want to change and know how to demonstrate the skill or task; however, if the participant works for a supervisor who discourages change, or if the participant is provided no incentive to change, it is more than likely that no change will occur. In this example, the fact that behavior did not change does not mean that the participant reacted negatively to the training, nor does it mean that learning did not occur. It only means that the organizational climate or culture, and possibly the supervisor, adversely affected the opportunity for behavioral change to occur. For this reason, evaluating Level 3 *behavioral* change can not only improve the participant's performance; it can also yield important data on the ways in which organization managers consciously or unconsciously influence behavioral change in the workplace.

Because supervisors can overtly, and even subtly, impact an employee's performance on the job, supervisor *climate* is a significant component of evaluating Level 3 *behavioral* change. Kirkpatrick and Kirkpatrick (2006) recognize this fact and suggest that five types of supervisor *climate* impact behavioral change. These types of climate within an organization include (a) preventing; (b) discouraging; (c) neutralizing; (d) encouraging; and (e) requiring (p. 23). A *preventing* climate is one in which the supervisor prohibits the participant from utilizing the skills and knowledge acquired during the training. A *discouraging* climate is one in which the supervisor indicates, either outwardly or subtly, that the behavioral change would not be encouraged. A *neutralizing* climate in one in which the supervisor ignores the participant's training and only concerns himself with whether the job is completed, whether the new skills and knowledge are utilized to complete the job or not. An *encouraging* climate is one in which the supervisor encourages participants to apply the skills and knowledge learned

on the job. A *requiring* climate is one in which the supervisor not only knows what the participant learned during the training, but ensures that the knowledge transfers back to the workplace.

In addition to the supervisor's impact on behavioral change, Kirkpatrick and Kirkpatrick (2006) also cite rewards for change as a motivator for training participants. These rewards can be *intrinsic*, such as the feeling of self-satisfaction and achievement. Rewards can also be *extrinsic*, such as recognition from supervisors or bonuses. Regardless of the intrinsic or extrinsic nature of the reward, it is a critical component in fostering the Level 3 *behavioral* change and provides a foundation for measuring Level 4 *results*.

Many of the guidelines used to conduct Level 1 and Level 2 evaluations are employed in Level 3 evaluation of behavior, including the use of control groups, the implementation of pre- and post-testing, and the feedback from 100% of training participants; however, four additional guidelines are necessary in a Level 3 evaluation to consider the process complete (Kirkpatrick & Kirkpatrick, 2006). These guidelines include: (a) timing; (b) surveying multiple stakeholders; (c) repeating the evaluation; and (d) comparing the cost of evaluation to the benefits the evaluation yields.

The first of these guidelines involves timing. Kirkpatrick and Kirkpatrick (2006) note that behavioral change takes time; therefore, evaluation may need to be delayed to give the training participant time to demonstrate this new behavior on the job. For example, if the purpose of the training is to modify a participant's leadership behavior in a risk management context, then the best way to evaluate behavioral change is to evaluate how and in what ways the behavior changed in an actual risk management-based

situation. Their general recommendation is to wait two to three months after the training has concluded to measure the behavioral change.

The second guideline involves surveying multiple stakeholders who would be impacted by the behavioral change. This triangulation of various data sources enhances the validity of the data and information collected. Kirkpatrick and Kirkpatrick (2006) posit that in determining the stakeholders, four questions should be asked:

- Who is best qualified to be surveyed?

- Who can most reliably respond to the survey?

- Who is most available to respond to the survey?

- Are there reasons why one or more survey respondents should not be used? (p. 55)

By asking who is best qualified to be surveyed, the training participant's subordinates and outside stakeholders (who have frequent contact with the training participants) are normally ideal sources of evaluation data. Conversely, Kirkpatrick and Kirkpatrick (2006) posit that the immediate supervisor may ironically be least equipped to be surveyed unless that supervisor's contact with the training participant is frequent and of high intensity. By asking who would be most reliably responsive, subordinates may, in fact, not be reliable if they are biased in favor of (or against) the training participant. For this reason, survey responses should be triangulated with the feedback of multiple individuals. By asking who is most available to respond, Kirkpatrick and Kirkpatrick (2006) opine that the answer is contingent upon those who would be willing to spend the requisite time completing a survey to measure behavioral change. By asking whether respondents should be excluded from or included in the survey, some training participants may not want their subordinates to participate in an evaluation process;

however, Kirkpatrick and Kirkpatrick (2006) note that in the absence of a compelling reason to exclude subordinates from the evaluation process, those employees' views should be included.

The third guideline involves repeating the evaluation at regular intervals (Kirkpatrick & Kirkpatrick, 2006). Because behavioral change is seldom instantaneous, an initial evaluation at two to three months after the conclusion of the training is recommended. They suggest the first follow-up evaluation approximately six months after the initial evaluation and a second follow-up evaluation another three to six months after the first follow-up evaluation. This guideline would provide three instances of Level 3 *behavioral* evaluation over the course of 12 to 15 months after the conclusion of training.

The fourth and final guideline involves a comparison between cost and benefits. To measure the impact of behavioral change on the organization's fiscal bottom line, Kirkpatrick and Kirkpatrick (2006) recommend "comparing the cost of evaluating change in behavior with the benefits that could result from the evaluation" (p. 58). The initial cost of evaluating behavioral change may be offset by the benefits to conducting the evaluation. Examples of such benefits include improved employee morale, increased productivity, decreased product loss, or reduced absenteeism. Because a complete and full measure of Level 3 *behavioral* change is a precursor to conducting a Level 4 evaluation—an evaluation of *results*, or targeted progress—Kirkpatrick and Kirkpatrick (2006) note that behavioral change is "a means to an end: the final results [are those] that can be achieved if change in behavior occurs. If no change in behavior occurs, then no improved results can occur" (p. 60). Their research found that since training yields

approximately 15% on-the-job application when participants return to the workplace (Kirkpatrick Partners, 2011, "Kirkpatrick Foundational Principles," section 3), a Level 3 evaluation of *behavior* is critical to reaching the Level 4 evaluation of *results*. Therefore, a complete Level 3 *behavior* evaluation serves not only as the foundation for a Level 4 evaluation, but as another link in the evidentiary chain offered to an organization's corporate jury.

Level 4 evaluation: Results. Once the trainer has completed an evaluation of behavioral change, the model moves to the highest level of evaluation: *results*, or the degree to which an organization's goals and objectives are met because of the training (Kirkpatrick & Kirkpatrick, 2006). Effective training begins with determining the return on expectations (ROE) and constructing training to build upon each of the four levels of evaluation; therefore, measuring whether results have been met is the most important component of the model. Examples of results-based evaluation might include increases in production, sales, or product quality; decreases in customer complaints, costs, loss, or spoilage; or reductions in loss, turnover, or product delivery time. The methods by which results are evaluated are the same guidelines proffered in implementing a Level 3 *behavioral* evaluation. However, Kirkpatrick and Kirkpatrick (2006) also acknowledge the difficulty in making a direct correlation or connection between training and its impact on the organization's bottom line.

An example of this difficulty is found in leadership training. While it might be argued that leadership training reduced the number of managerial departures from an organization, the real reason for the decline in departures may be because the organization has decided not to relocate its plant out of state. Another example is found

on the manufacturing floor. While training in standard operating procedures may initially appear to decrease the number of deviations from those procedures, the real reason may be because the procedures have been streamlined and are, consequently, easier to follow.

It is because results-based evaluation is the most difficult of the four levels to quantify that Kirkpatrick Partners (2009) recommend Level 4 *results* evaluation based upon the Chain of Evidence[SM]. They advocate that results-based training evaluation should be based using the legal vernacular of *preponderance of evidence*, meaning it is *more likely than not* that the training positively affected the results. Conducting results-based evaluation means documenting that the organizational goals or results were *more likely than not* impacted by the training. Because Level 4 *results* evaluation is difficult to tie directly to training, Kirkpatrick Partners (2009) recommend documenting fully the precursor levels of evaluating Level 1 *reaction*, Level 2 *learning*, and Level 3 *behavioral* change. Results-based evaluation then provides the last link in the evidentiary chain for a corporate jury that Level 4 training has had a positive impact on the organization.

Evaluating training's return on expectations (ROE). According to Kirkpatrick Partners (2011), effective training does not involve evaluating the return on investment; instead, it involves evaluating the *return on expectations,* or *ROE* ("Kirkpatrick Foundational Principles," section 2). Trainers must clearly understand the training outcomes sought by organization managers; content can then be designed and developed to provide a positive ROE. Trainers begin the ROE process by asking organization managers about the results the training should achieve. The process of designing and developing training is then targeted to accomplish ROE. The best training curricula focus on ROE as "a more holistic measurement of *all* of the benefits realized from a program or

initiative, qualitative and quantitative" [emphasis added] (Kirkpatrick Partners, 2011, "Kirkpatrick Foundational Principles," footnote 2).

Interestingly, while trainers must eventually execute training evaluation with a chain of evidence that begins with Level 1 and moves through Level 4, they must first plan how they will demonstrate ROE. This planning process involves a *reverse engineering* of these four levels. Evaluating for effective ROE involves first determining the desired *results*, or the optimal Level 4, and then planning for the training's desired *behavioral* changes (Level 3), *learning* outcomes (Level 2), and participant *reactions* (Level 1). Figure 15 contrasts the *reverse engineering* of planning for training with Kirkpatrick's Four Levels of evaluating training.

Plan for Training

Determine **Results** to Achieve (Level 4)
Determine **Behavior** to Change (Level 3)
Determine **Learning** to Occur (Level 2)
Determine Preferred **Reaction** (Level 1)

Evalulate Training

Evaluate **Reaction** (Level 1)
Evaluate **Learning** (Level 2)
Evaluate **Behavioral** Changes (Level 3)
Evaluate **Results** (Level 4)
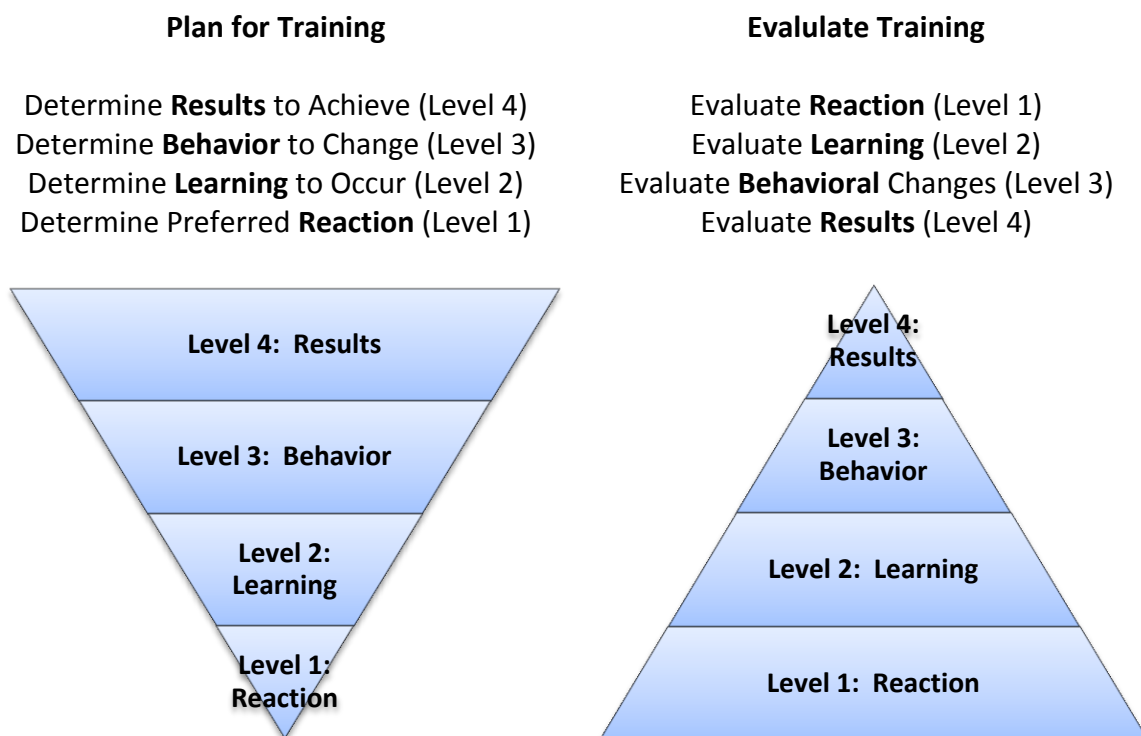
Figure 15. Reverse engineering and its application to Kirkpatrick and Kirkpatrick's (1993) Four Levels of Training Evaluation

The ROE planning process begins with a close examination of the organization's mission and desired long-term outcomes, or the Level 4 *results* the training should accomplish. Kirkpatrick and Kirkpatrick (2006) recommend that trainers employ a variety of training needs assessment methods, including surveys, interviews, and advisory committees, to both triangulate the data collected and provide stakeholder input into the desired training results. Once the ideal training results have been determined and shared, the next step in the ROE planning process involves reviewing the data and information gathered. This will determine which Level 3 participant *behaviors* will require development or modification in order to achieve the Level 4 *results*. Noting that a strong ROE is based upon behavioral change in the workplace, Kirkpatrick Partners (2009) suggest that significant time and attention must be given to Level 3 *behavioral* evaluation in order to quantify the Level 4 *results* an organization seeks.

After the ideal Level 3 *behaviors* have been determined, the next step in the ROE planning process involves designing Level 2 *learning* that will generate the knowledge, skills, and actions required to change the Level 3 participant *behavior*. After the Level 2 *learning* activities have been designed and developed, the last step in the ROE planning process involves presenting the training to generate a favorable Level 1 *reaction* (Kirkpatrick & Kirkpatrick, 2006). The ultimate goal behind the question, "What do you want success to look like?"— followed by designing, delivering, and evaluating training activities to measure achievement of those results—only strengthens the chain of evidence offered to a corporate jury.

Summary

This chapter addressed the importance of partnerships, not only to business and industry, but to the fiscal health of the contemporary American community college. A

review of the literature provides ambiguous, sometimes conflicting definitions of partnerships as they apply to the community college. Further, the limited literature addressing partnerships between noncredit workforce training and its business and industry partners supports the need for a fuller examination of those training relationships.

The chapter offered an in-depth discussion of the American community college's history and unique contributions to postsecondary education, including the increasing importance of noncredit workforce training as an institutional function. The contributions of contract training, or workforce education coordinated with business and industry, to the economic boon of the 1980s and 1990s was discussed. Special emphasis was placed on the current role of noncredit workforce training here in Illinois, with both a focus in two areas: (a) grant funding for reimbursable credit hours; and (b) how grant funding's application to noncredit training can provide a valuable revenue stream for the community college.

The chapter also introduced the study's conceptual framework, which serves to situate the research and to provide the lens through which data analysis will be conducted. This study's conceptual framework will be informed by Lumpkin and Dess's (1996) Entrepreneurial Orientation Construct, the Partnership Development Model proffered by Amey, Eddy, and Ozaki (2007), and Kirkpatrick and Kirkpatrick's Four Levels of Training Evaluation (1993). The construct and models were chosen to lay a framework for community colleges and their noncredit workforce training partners who seek to build and maintain their own entrepreneurially oriented training partnerships. The construct and models were also chosen to provide a correlation or map to each data-

gathering question that will be asked of community colleges and their noncredit workforce training counterparts. The goal of this research is to refine and clarify the meaning of partnerships—particularly partnerships between noncredit workforce training units and their business and industry partners—to the modern-day American community college.

Chapter 3: Methodology

Introduction

The purpose of the methodology chapter is to provide a discussion of the logical, systematic structure for researching a topic or issue of importance. Such a discussion provides a cogent, transparent framework emphasizing the research design and presenting the research process to be undertaken. An understanding of the research paradigm and the design methodology will be instructive for community colleges seeking to develop noncredit workforce training partnerships with their business and industry counterparts. Those institutions will be able to replicate the study, apply the findings from this research to their own relationship-building processes, and recognize the procedures implemented to ensure this study's trustworthiness and rigor. This research is an exploratory, empirical study of an issue about which little is known.

This research uses a qualitative inquiry, specifically a case study, which is situated within the interpretive paradigm. The chapter will present a discussion of the qualitative approach and its selection as the most appropriate paradigm for this research. The case study methodology's suitability to this research and a discussion of the data collection methods and approaches to sampling will be discussed. The three approaches to sampling, including (a) purposeful sampling; (b) maximum variation to expand the sample studied; and (c) site and participant selection methods, will be addressed. A justification of the four data collection methods will be presented. These four methods include (a) surveys; (b) semi-structured, in-person interviews; (c) document review; and (d) field notes. The chapter also includes the approaches to be utilized to analyze the data and information collected. Ethical considerations, and the ethics safeguards implemented in the design and data collection processes, are detailed. Strategies to ensure

trustworthiness in the data collected, and the rigor and transparency of the study itself, are

incorporated. The study's limitations are acknowledged, and approaches to mitigating

those limitations are discussed. The role of the researcher as a data collection instrument

concludes the chapter.

This exploratory study focuses on an infrequently considered, yet increasingly

visible, component of the community college: its noncredit workforce training unit and

the training it provides to employers in the locale served by the institution. The purpose

of this study is to identify how and in what ways Illinois single-campus community

colleges develop and sustain those effective noncredit workforce training partnerships.

In order to provide focus and clarity to the study's purpose, the following

questions guide the design, site and participant selection criteria, data collection, and data

analysis methods:

1. How do noncredit workforce training units support the community college's
   mission?

2. What characteristics define effective community college noncredit workforce
   training partnerships?

3. How does the community college initiate outreach to develop noncredit
   workforce training partnerships?

4. What characteristics or elements contribute to sustaining noncredit workforce
   training partnerships?

Research Inquiry

While the purpose of this research is guided by four driving questions, it is also

necessary to select a mode of research inquiry—a paradigm or a lens—through which the

research is situated and the findings analyzed. For this reason, it is appropriate to discuss

(a) how quantitative research and qualitative research are fundamentally distinguished

and (b) how situating qualitative research in the interpretive paradigm best suits the purpose of this study.

Quantitative and Qualitative Paradigms

A *paradigm* is a perspective or view of an issue or topic that is based upon a group's beliefs, assumptions, and value systems (Johnson & Christensen, 2012a). Research studies are generally framed using one of three research paradigms: quantitative, qualitative, or mixed research, which blends characteristics of both quantitative and qualitative research. In order to understand more fully the rationale for the selection of the qualitative paradigm over its quantitative counterpart for this study, it is helpful to draw basic distinctions between the two.

Johnson and Christensen (2012a) distinguish between the quantitative and qualitative paradigms on several levels, the most notable of which are the approaches to (a) ontology; (b) focus; (c) observation; and (d) data collection and analysis. *Ontology*, or the nature of reality, is viewed in quantitative research as objective or agreed-upon knowledge; however, qualitative researchers allow for subjective, socially constructed knowledge that is built upon the individual's personal experiences. A quantitative study's *focus* is deductive in nature, where a "narrow-angle lens" is used to center on proving or disproving a hypothesis (Johnson & Christensen, 2012a, p. 34). Conversely, a qualitative study's *focus* is inductive in nature, with a "wide-angle and 'deep-angle' lens," where the goal is to examine the issue under study in broad terms (Johnson & Christensen, 2012a, p. 34).

Quantitative and qualitative studies also differ in their approaches to *observation*. While quantitative studies emphasize the observation of behaviors in controlled

environments and the manipulation of relevant variables to investigate cause and effect or to predict outcomes, qualitative studies emphasize the observation of participants in their natural settings, with no manipulation of variables, in order to obtain multiple viewpoints. Finally, quantitative and qualitative studies differ in their approaches to *data collection and analysis*. Quantitative studies seek to identify statistical relationships among the variables being examined. Qualitative studies, conversely, identify descriptive data to search for common patterns and themes, seeking variances in the data in order to gather the greatest number of perspectives (Johnson & Christensen, 2012a).

In this study, the research design itself seeks the individual, socially constructed personal experiences of the community college noncredit workforce training staff and their business and industry partners—the *ontology* to which Johnson and Christensen refer. Additionally, the wide- and deep-angled lens is evident in this research, with the goal of *focus* on the development and sustenance of effective noncredit workforce training partnerships. This study will also strive to *observe* the participants in non-manipulated, natural settings in order to gather the greatest number of perspectives. Finally, this study will employ *multiple data collection methods*; the goal is to gather a wide variety of data and information instructive in identifying the common patterns and themes present in effective community college-business and industry partnerships. The four-pronged examination of these characteristics supports the use of the qualitative paradigm in this research.

Where quantitative studies provide a narrowly defined lens through which a hypothesis is tested, other authors agree with Johnson and Christensen (2012a) that qualitative studies take a larger, wide-angled world view:

> Qualitative research begins with assumptions, a worldview, the possible use of a theoretical lens. . . . Qualitative researchers use an emerging qualitative approach to inquiry, the collection of data in a natural setting sensitive to the people and places under study, and data analysis that is inductive and establishes patterns or themes. . . . [It] includes the voices of the participants, the reflexivity of the researcher, and a complex description and interpretation of the problem, and it extends the literature or signals a call for action (Creswell, 2007, p. 37).

Creswell's (2007) characteristics of this wide-angled, qualitative view are also applicable to this study. This research begins with an assumption or a worldview that the community college, in times of decreased revenue sources and increased expectations of academic accountability, must find new and innovative ways to fund institutional initiatives or to offset budget shortfalls. Noncredit workforce training partnerships may play an increasingly important supporting role to the 21st century community college in those areas. This research also provides for the collection of data and information in the natural settings to which Creswell (2007) refers (the institutional setting and the business or industry setting) so that relevant variables are not manipulated and sensitivity to the participants under study is exhibited.

Additionally, Creswell's (2007) discussion of inductive data analysis, searching for patterns and themes to make new meaning of this phenomenon about which little is known, will be implemented in this study. In-person interviews of both noncredit workforce training administrators and their business and industry counterparts will provide the participant voice to which Creswell refers. The interviews will also speak to the researcher's reflexivity in asking appropriate clarifying questions to elicit emerging

patterns and themes present in the data. Finally, the goal of this research is to add both a much-needed perspective and evidence-based data and information to the literature on a topic that has received little attention: the relationship between community colleges and their business and industry partners as they develop and sustain noncredit workforce training partnerships. Creswell's defining characteristics of an effective qualitative inquiry are applicable to this research and, as a result, make such inquiry the most suitable paradigm for the study.

Perhaps one of the most significant distinctions between quantitative and qualitative paradigms is in its treatment of the unique nature of the problem or phenomenon under study. Stake (1995) posits that quantitative researchers tend to treat a unique finding as "'error,' outside the system of explained science" (p. 39). Conversely, he posits that qualitative research treats the unique characteristics of individual cases as critical to the reader's understanding of the research findings. In this study, for example, the data collection process may yield a unique and previously undiscovered characteristic of an effective partnership between a community college's noncredit workforce training unit and its business and industry counterpart. To treat that unique finding as error might result in dismissing an innovative practice benefiting readers who might implement it or adapt it to their own noncredit workforce training partnerships. The very possibility that the findings can yield unique characteristics underscores the importance of the qualitative paradigm to this study.

Similarly, Stake's (1995) four characteristics of qualitative inquiry inform this research. He posits that such inquiry is *holistic, empirical, interpretive,* and *empathic.* Qualitative inquiry is *holistic* in nature in that the researcher seeks to understand the

subject in-depth and from a larger, all-encompassing viewpoint. The *empirical* nature of

qualitative inquiry emphasizes a practical approach grounded in the participants' real-

world experiences. Qualitative inquiry's *interpretive* nature acknowledges the

participants' interpretations of their experiences and perspectives through their own

personal lenses as well as the researcher's own interpretations of the data and information

gathered. Finally, the *empathic* nature of qualitative inquiry provides the ability to

acknowledge and respond to emerging themes generated by the research; the researcher is

"in immediate touch with developing events and ongoing revelations, partly to redirect

observations and to pursue emerging issues" (Stake, 1995, pp. 41-42).

This study will model Stake's (1995) four characteristics of qualitative inquiry,

thereby demonstrating its suitability as the paradigm of choice for this research. First, the

holistic nature of qualitative inquiry will be present by studying *how and in what ways*

effective noncredit workforce training partnerships are developed and maintained. The

analysis of data collected by surveys, in-person interviews, document review, and field

notes illustrate the need to understand deeply the nature of these partnerships. Similarly,

this study will demonstrate the *empirical* nature of qualitative inquiry, where methods of

data collection employed will allow the researcher to gather data and information from

the participants in their natural settings with no manipulation of relevant variables. This

study will also demonstrate the *interpretive* nature of qualitative inquiry by

acknowledging the lenses through which the researcher, the community college

administrator, and the institution's noncredit workforce training partner articulate their

perspectives. Finally, the *empathic* nature of qualitative inquiry will be demonstrated

through the capture of all emerging patterns and themes present in the development and

maintenance of these partnerships, thus resulting in a deeper understanding of the

partnerships and those who participate in them. Table 9 summarizes the major

differences between both paradigms.

Table 9. *Summary of Differences Between Quantitative and Qualitative Paradigms*

Characteristic	Quantitative Paradigm	Qualitative Paradigm	Author
Ontology	Objective, agreed-upon knowledge	Socially constructed knowledge	Johnson and Christensen (2012a)
Focus	Deductive; narrow-angle lens	Inductive; wide- and deep-angle lens; holistic	Creswell (2007) Johnson and Christensen (2012a) Stake (1995)
Observational Approach	Controlled environment	Natural setting; empirical in nature	Creswell (2007) Johnson and Christensen (2012a) Stake (1995)
Data Collection	Statistical relationships among variables; unique findings are classified as "error"	Descriptive data yielding patterns and themes; unique findings are key to understanding research	Johnson and Christensen (2012a) Stake (1995)

The Interpretive Paradigm

Qualitative research is situated in the interpretive paradigm, where both the

participants and the researcher view the data and information gathered though their own

personal lenses (Creswell, 2007). The researcher also seeks to understand and interpret

the multiple perspectives garnered from the data collection process in order to make new

meaning from the data. Merriam (2009) expands upon this viewpoint, opining that

research situated in the interpretive paradigm provides both the researcher and the reader

with an "understanding [of] how people interpret their experiences, how they construct

their worlds, and what meaning they attribute to their experiences" (p. 5). When applied

to this study, the goals are for both the researcher and the reader to more fully understand

the patterns and characteristics inherent in effective noncredit workforce training

partnerships and further, to provide a framework for the development and sustenance of

such partnerships in community colleges where none currently exist. For these reasons,

qualitative research situated in the interpretive paradigm is the most appropriate

methodology for conducting this study.

Case Study Methodology

The case study provides one type of research methodology to explore a unique

issue, a phenomenon, or an area about which little is known. Stake (1995) emphasizes

that case studies focus on understanding human actions and not causal relationships:

> The qualitative case study researcher has tried to facilitate reader understanding, an understanding that important human actions are seldom simply caused and usually not caused in ways that can be discovered. . . . To the qualitative scholar, the understanding of human experience is a matter of chronologies more than of causes and effects (p. 39).

In addition to focusing on understanding human actions, Yin (2009) defines a

case study as an empirical mode of inquiry that investigates in-depth a phenomenon

where the boundaries between the phenomenon itself and its context are not readily

apparent. He further opines that case study inquiry (a) acknowledges multiple "variables

of interest"; (b) relies upon multiple evidentiary sources for triangulation of data; and (c)

benefits from a conceptual framework to guide both the data collection and analysis (p.

18).

The case study methodology also provides an avenue to explore the *variables of interest* to which Yin (2009) refers. Data and information obtained from multiple evidentiary sources, including surveys, in-person interviews, document review, and field notes will be triangulated in order to strengthen the trustworthiness and validity of the findings and the rigor of the study. Finally, the case study's use of the conceptual framework illustrates its usefulness to this research. With a conceptual framework defined as "the body of literature, the disciplinary orientation that you draw upon to situate your study" (Merriam, 2009, p. 68), this study uses one construct and two models through which the data and information collected will be analyzed.

The application of both Stake (1995) and Yin's (2009) constructs to this research supports the use of case study as the methodology of choice. While significant literature exists on the nature of credit-based workforce education, little is known about the unique nature of noncredit workforce training partnerships between the community college and its business and industry counterparts. Perhaps this is because the actions of building and sustaining those partnerships are not immediately apparent, as Stake suggests, and therefore, it is necessary to review the chronologies and the timeframes leading to the establishment and continuation of an effective noncredit workforce training partnership. Additionally, no significant data exists on how and in what ways these partnerships are viewed in the larger context of the community college. The boundaries of those partnerships are not only undefined, but the strategies for their continued success remain undocumented.

Of particular significance to a case study is the *bounding* of the case. Creswell (2007) explains the effect by describing *bounding* as a "setting or context" where

exploration of the issue is conducted with multiple sources of information and the final report provides a "case description and case-based themes" (p. 73). Similarly, Merriam (2009) defines *bounding* as a unit of analysis that defines the study, with the researcher consciously "fencing in" what will be studied (p. 40).

Merriam further posits that case studies are *particularistic, descriptive, and heuristic* (2009, p. 43). Case studies are particularistic because they involve research of a specific phenomenon or event, serving to bound effectively what will be studied. Additionally, case studies are descriptive, yielding rich, thick data that enhances an understanding of the phenomenon or explains the phenomenon in great detail. Finally, case studies are heuristic, with the descriptive data serving to enhance the reader's understanding of the phenomenon under study. Table 10 summarizes the significant characteristics of the case study and how those characteristics apply to this research.

Table 10. *Significant Characteristics of Case Studies and Applicability to Research*

Characteristic	Author	Applicability to Research
Understanding Human Action	Stake (1995)	Little is known about how noncredit workforce training partnerships are developed and sustained or how they contribute to the community college context
Empirical; Particularistic; Heuristic	Merriam (2009) Yin (2009)	Boundaries are not readily apparent between partnerships and the community college context; relationships are a phenomenon to be investigated in-depth
Evidentiary Sources/Data Triangulation	Creswell (2007) Merriam (2009) Yin (2009)	Sources include surveys, in-person interviews, document review, and field notes (both observational and reflective)

Table 10. *Significant Characteristics of Case Studies and Applicability to Research*

Characteristic	Author	Applicability to Research
Conceptual Framework	Merriam (2009) Yin (2009)	One construct and two models form the conceptual framework through which the data and information collected will be analyzed
Bounding Setting or Context	Creswell (2007) Merriam (2009)	Researcher consciously delimits or "fences in" what will be studied
Descriptive Findings	Merriam (2009)	Findings will yield rich, thick data that can be applied to other institutions and their business and industry partners

For this research, the case study will be bound by its purpose, the community college sites and geographic distributions of those sites, the colleges' companion business and industry partners, and the one construct and two models forming the conceptual framework for the study. This bounding establishes both the setting and context offered by Creswell (2007) and the *fencing in* suggested by Merriam (2009). The study will also meet the three unique case study characteristics offered by Merriam. Studying the specific phenomenon of noncredit workforce training partnerships, and collecting and analyzing relevant data and information related to those partnerships, will yield rich, thick descriptions of how effective relationships are built and sustained. The end result will be greater insight into this unique phenomenon and a deeper understanding of the roles the community colleges and their business and industry partners have in the life cycle of those partnerships.

Case Selection

With the case study identified as the most appropriate methodology for this research, the researcher's task is first to select the case, then to select the sampling within

the case (Merriam, 2009). This case study will employ a sequential multi-method

approach to data collection. This iterative approach will be employed because it allows

for the collection of data and information through a two-phase sequence. The data and

information collected during the first phase of the process will guide the data and

information collected during the second phase of the process. Yin (2009) refers to the

selection of a wide variety of data sources as "embedded units of analysis" within the

case (p. 173), which are then analyzed and lead to the study findings.

Purposeful Sampling

The most suitable method by which these embedded units can be gathered is

through purposeful sampling. Merriam (2009) opines that purposeful sampling "is based

on the assumption that the investigator wants to discover, understand, and gain insight

and therefore must select a sample from which the most can be learned" (p. 77). The

deliberate selection of the sample, according to Merriam, is directly tied to the purpose of

the study. The sampling should also guide the selection of participants who are most

knowledgeable about the issue or phenomenon under study. Purposeful sampling of

community colleges and their noncredit workforce training partners will provide a group

of knowledgeable participants who lend perspective to the issue under study. Their

participation can provide the new discovery, understanding, and insight proffered by

Merriam's approach to purposeful sampling of study participants.

Creswell (2007) opines that "sites are chosen because they can purposefully

inform an understanding of the problem and central phenomenon of the study" (p. 125).

The institutions comprising the Illinois community college system are not only unique in

physical location (urban, suburban, or rural), but also in the noncredit workforce training

unit's location within the organizational structure. Additionally, these institutions offer a wide variety of noncredit workforce training partnerships to their business and industry counterparts within their community college districts; consequently, they must be proactive in developing and maintaining those relationships.

Illinois' community college system consists of 48 colleges in 39 community college districts. Eleven of those 48 colleges are part of two community college systems (City Colleges of Chicago and Illinois Eastern Community Colleges). The remaining colleges are single-campus institutions. The administrative structures of the two community college systems differ from the administrative structures of the remaining 37 single-campus institutions. While other case studies may address the Illinois community college system in its entirety, this case study will focus on Illinois single-campus community colleges' noncredit workforce training units and the business and industry counterparts with which they partner.

Maximum variation, a complement to purposeful sampling, will be utilized during the case selection process. The purpose of maximum variation is to provide widely varying instances or perspectives of the phenomenon or issue under study (Creswell, 2007). The diversity of the community colleges' sizes, locales, demographics, and noncredit workforce training unit structures potentially offer a diversity of perspectives on their relationships with business and industry. Merriam (2009) concurs, noting that maximum variation makes a study's findings "potentially more useful if [they are] 'grounded' in widely varying instances of the phenomenon" (pp. 78-79). Likewise, the diversity of occupational areas among business and industry partners potentially offer findings that would be both relevant and instructive to similarly situated employers.

Maximum variation will best enhance the relevancy and applicability of this study's findings to a greater cross-section of community colleges and their workforce counterparts.

Site Selection Criteria

Maximum variation also prescribes that both Illinois single-campus community college noncredit workforce training units and related business and industry sites within the community college districts be included in the data collection process. For the purpose of this study, three to five of Illinois' single-campus community colleges and their respective business and industry partners will be invited to participate in the data collection process. The objective of including both institutions and employers in the data collection is to gather a wide variety of perspectives on how effective noncredit workforce training partnerships are developed and sustained. The sequential multi-method approach will provide for data collection from a variety of sites at multiple points in time and by multiple means, thereby enhancing the relevancy and applicability of this study to other institutions.

The initial phase of the data collection process will involve the distribution of a survey to each Illinois single-campus community college, regardless of size, geographic location, or demographics. This survey will contain both basic demographic information and relevant research questions. In addition, this survey will include a request for the appropriate community college administrator to participate in a personal interview, which is the second phase of the sequential multi-method data collection process. Only community colleges with business partners who are willing to participate in a similar survey and personal interview are eligible for this second phase of data collection.

Maximum variation will also be employed in the second phase of data collection. The three to five community colleges electing to participate in a personal interview will be classified using the Carnegie Size and Setting Classifications, which measure student enrollment as full-time equivalent (FTE). The Carnegie classifications are frequently employed because they provide a method to "represent and control for institutional differences, and also in the design of research studies to ensure adequate representation of sampled students, institutions, or faculty" (Carnegie Foundation, 2012b; Carnegie Foundation, 2012c, para. 1). Of the 14 single-campus community colleges with 5,000 FTE or greater, two of them (College of DuPage and Moraine Valley Community College) are classified as *Very Large*, which is defined as 10,000 FTE or greater (Carnegie Foundation, 2012b). The 12 large and two very large community colleges were combined into a size and setting of *Large or Very Large Two-year* for the purpose of this study. Table 11 summarizes the Carnegie Size and Setting Classifications for community colleges (Carnegie Foundation, 2012e).

Table 11. *Carnegie Size and Setting Classifications for Community Colleges*

Size and Setting	Definition	Number of Illinois Single-campus Community Colleges
Small Two-year	500-1,999 FTE	7
Medium Two-year	2,000-4,999 FTE	16
Large or Very Large Two-year	5,000 FTE or greater	14

Note. Adapted from "Size and Setting Classifications," by Carnegie Foundation for the Advancement of Teaching, 2012, http://classifications.carnegiefoundation.org/descriptions/size_setting.php. Copyright 2012 by Carnegie Foundation for the Advancement of Teaching.

In order to increase the diversity of the site sample pool, a second stage of maximum variation will be employed. Whenever possible, the institutions will be further classified using the Carnegie Basic Classifications, which include public or private; suburban-, urban-, or rural-serving; and single-campus or multi-campus (Carnegie Foundation, 2012a). Every attempt will be made to include one institution and its noncredit workforce training partner from each of these four basic classifications. Table 12 summarizes the Carnegie Basic Classifications (Carnegie Foundation, 2012a). Since all of Illinois' 37 single-campus community colleges are public, the Basic Classification definition of *public* has been excluded from this table.

Table 12. *Carnegie Basic Classifications for Community Colleges*

Basic Classification	Definition	Number of Illinois Single-campus Community Colleges
Associate's: Public Rural-serving Large	*Rural-serving institutions* are in Primary Metropolitan Statistical Areas (PMSAs) or Metropolitan Statistical Areas (MSAs) with populations of under 500,000 (according to the 2000 U.S. Census), or are not in a PMSA or MSA. *Large* size includes full-year unduplicated credit headcount of greater than 7,500, based upon IPEDS data for 2008-2009.	15
Associate's: Public Rural-serving Medium	*Rural-serving institutions* are in PMSAs or MSAs with populations of under 500,000, or are not in a PMSA or MSA. *Medium* size includes full-year unduplicated credit headcount between 2,500 and 7,500.	6

Table 12. *Carnegie Basic Classifications for Community Colleges*

Basic Classification	Definition	Number of Illinois Single-campus Community Colleges
Associate's: Public Suburban-serving Multicampus	*Suburban-serving* institutions are physically located within PMSAs or MSAs with populations exceeding 500,000 (according to the 2000 U.S. Census). *Multicampus size refers to (a)* more than one primary physical campus under the institution's exclusive control and governance, each of which provides all courses required to complete an associate's degree, or (b) a campus that is part of a district or system comprising multiple institutions, at any of which students can complete all requirements for an associate's degree, and that are organized under one governance structure or body.	4
Associate's: Public Suburban-serving Single Campus	*Suburban-serving* institutions are physically located within PMSAs or MSAs with populations exceeding 500,000. *Single-campus size refers to one primary physical campus under the institution's exclusive control and governance, at which the* institution provides all courses required to complete an associate's degree.	12

Note. Adapted from "Basic Classification Description," by Carnegie Foundation for the Advancement of Teaching, 2012, http://classifications.carnegiefoundation.org/ descriptions/basic.php. Copyright 2012 by Carnegie Foundation for the Advancement of Teaching.

While the Carnegie Size and Setting Classifications and the Carnegie Basic Classifications will be used to provide maximum variation in the community college site selection, additional criteria will be employed to select business and industry partners for this study. Those community college administrators agreeing to participate in personal interviews will be asked to provide the names and contact information of two business and industry partners who would consent to participate in their own survey and personal

interview. The sequential multi-method approach to data collection will also be employed when surveying these partners.

The survey will request business and industry partners from two different occupational areas in order to enhance the maximum variation required for this study. One of the two business and industry partners will receive a survey and a request for a personal interview. The business and industry partner survey will also contain both basic demographic information and relevant research questions. Great care will be taken to interview business and industry partners from a wide variety of occupational fields in order to provide the greatest number of perspectives from the data and information collected.

Participant Selection Criteria

A total of six to ten individuals will be invited to participate in the second phase of this study, which will involve an in-person interview. Three to five community college administrators, and one business and industry partner from each of the three to five community colleges selected, will comprise the interview participants. The first three to five community college administrators who (a) agree to a personal interview; (b) provide two business and industry partners agreeing to a personal interview; and (c) meet the institutional site selection criteria will be invited to participate.

Two specific participant selection criteria are applicable to the community colleges in order to meet the purposeful sampling requirements. First, the eligible community college administrators will be noncredit workforce training directors, deans, or vice presidents with responsibility and accountability for the daily operations of the noncredit workforce training unit. Secondly, these administrators will have held their

positions for a minimum of two years. Their tenures with the community college and experience with two years of budget cycles will give them substantial knowledge about the institution's approaches to developing and maintaining entrepreneurial partnerships. However, a community college administrator's eligibility to participate in the second phase of the data collection process is contingent upon a related workforce training partner agreeing to complete a survey and to participate in an in-person interview.

The three to five business and industry leaders must have a direct working relationship with the community college participants. These business and industry leaders will be directly responsible for implementing employee training and may include plant managers, human resource directors, or other mid- to upper-level officials or executives. A business and industry partner's eligibility to participate in the second phase of the data collection is contingent upon a community college administrator agreeing to complete a survey and to participate in an in-person interview. To meet the purposeful sampling requirements for this study, every attempt will be made to invite business and industry leaders across the occupational spectrum. The community college administrator will be asked to provide the names of two business and industry partners in order to provide a richer diversity of data and information; however, only one of those two partners will be invited to participate.

Contact Protocol

The purpose of a contact protocol is to ensure that all data and information is collected in a consistent and systematic matter, thereby assisting with the rigor and trustworthiness of the study and providing an audit trail of the contact process. Yin (2009) notes that protocols keep the researcher focused on the topic being studied and

provide a logically constructed, well-defined framework to mitigate any problems that arise during the data collection process. A sequential multi-method approach to data collection will be employed in this study, with an initial phase of surveying the community colleges and their respective noncredit workforce training partners and a second phase of in-person interviews of both parties. Therefore, two contact protocol phases will be used in this study to correspond to the sequential multi-method approach.

The first contact protocol phase involves locating the contact information for the noncredit workforce training administrators in each of Illinois' 37 single-campus community colleges invited to participate in this study. While this information may be available on each institution's web site, 29 of the 37 single-campus community colleges are members of the Illinois Council for Continuing Education and Training (ICCET), a professional organization consisting of community college noncredit workforce training units. ICCET is a recognized commission of the Illinois Council for Community College Administrators (ICCCA); in addition, a liaison from the Illinois Community College Board represents ICCET at the state level (ICCET, 2012a; ICCET, 2012b). Because of ICCET's ability to reach a significant number of participants in the first contact protocol phase, ICCET will be asked to send an e-mail to its 29 community college listserv members encouraging their participation in the study.

In addition, the Illinois Community College Training Resource and Information Network (weTRaIN) consists of 132 workforce training representatives at 38 Illinois community colleges and provides noncredit workforce training to 3,000 Illinois firms each year (weTRaIN, 2012a). These training representatives design, develop, deliver, and evaluate training curricula with a network of subject matter and content experts in

fields as diverse as quality and process improvement; leadership and professional development; manufacturing and technical skills training; personal computing; and occupational safety (weTRaIN, 2012b). While community college membership in weTRaIN overlaps with membership in ICCET, e-mail communication from both organizations' listservs will underscore to their members the importance of this study to the field of noncredit workforce training. For this reason, weTRaIN will be asked to send an e-mail to its 38 community college listserv members encouraging the participation of all single-campus community colleges in the study.

Within two to three days of ICCET's e-mail to its listserv members, an e-mail advising that a web-based survey is forthcoming will be sent by the researcher to each community college administrator having direct responsibility for noncredit workforce training. This e-mail will introduce the researcher, summarize the purpose of the study, outline the steps involved in completing the study, and provide contact information if the participant has questions about the survey. The web-based survey link will be sent two to three days after the researcher's e-mail is distributed along with instructions for completion of the survey. Administrators who have not completed the survey will receive a reminder telephone contact approximately seven days after the survey link is sent encouraging their participation. The survey will be closed two to three days after the reminder telephone contact has been made. Since the surveys contain an invitation to participate in the second phase of the data collection, surveys that are completed and returned will yield a potential participant pool of community college administrators willing to participate in an in-person interview.

The community college administrator surveys will be examined to confirm that they have provided contact information for noncredit workforce training partners in two distinctive occupational areas. While these administrators may be willing to participate in the second phase of the data collection process, they will be vetted using the established selection criteria employed in this study. The first community college from this potential participant pool meeting one of this study's three Carnegie Size and Setting criteria (Small Two-year, Medium Two-year, and Large or Very Large Two-year) and, whenever possible, the Carnegie Basic Classifications, will have its noncredit workforce training partners' contact information confirmed.

Once the noncredit workforce training partners' contact information has been confirmed for each participating community college, one of the partners will be contacted by telephone to explain the referral from the community college administrator, the purpose of the study, and the request to participate in a similar web-based survey and in-person interview. The telephone contacts will be made approximately seven days after the community college survey has closed. If the partner agrees to participate in both phases of the study, an e-mail will be sent thanking the partner for participating in the survey and including the survey web link. The survey will be sent to the partner with instructions for its completion within 24 hours of the telephone conversation. Noncredit workforce training partners who have not completed the survey will receive a reminder e-mail approximately seven days after the survey is sent encouraging their participation. The survey will be closed two to three days after the reminder e-mail has been sent. If the partner declines to participate, an e-mail will be sent thanking the partner for

considering the request for participation, and the second of the two partners will be contacted using the contact protocol.

The second contact protocol phase consists of in-person interviews of selected community college administrators and their respective noncredit workforce training partners. This phase will begin upon closing the noncredit workforce training partners' surveys in the first phase. Eligibility to participate in an in-person interview is contingent upon both the community college administrator and its noncredit workforce training partner agreeing to be interviewed using the participant selection criteria employed in this study. The community college administrators and their respective noncredit workforce training partners will be contacted to schedule an in-person interview within seven days after the noncredit workforce training partner survey has closed. It is anticipated that a total of six to ten individuals will be interviewed: three to five community college administrators and three to five noncredit workforce training partners. One week prior to the scheduled interview date and time, an e-mail confirming the meeting and including the interview questions will be sent to the participants. This will allow the participants adequate time to prepare for the in-person interview.

Table 13 summarizes the contact protocols, action steps, and completion timelines for the two data collection phases employed in this study.

Table 13. *Participant Contact Protocol for Two-Phase Data Collection Process*

Step	Action	Timeline
Phase One: Web-Based Survey		
Location of Contact Information	Locate contact information for noncredit workforce training administrators in Illinois' 37 single-campus community colleges	Within seven (7) days of Institutional Research Review Board (IRRB) approval
ICCET's E-Mail Contact	ICCET sends initial e-mail to its listserv member institutions encouraging participation in the study	
weTRaIN's E-Mail Contact	WeTRaIN sends initial e-mail to its listserv member participants encouraging participation in the study	
Researcher's Initial E-Mail Contact	Send initial e-mail to noncredit workforce training administrator at each of Illinois' 37 single-campus community colleges explaining the study and advising that survey is forthcoming	Two (2) to three (3) days after ICCET e-mail contact and two (2) to three (3) days prior to distribution of survey
E-Mail Community College Survey	Send e-mail containing link to SurveyMonkey web-based survey to each noncredit workforce training administrator	Two (2) to three (3) days after initial e-mail contact
Telephone Contact Reminder	Contact noncredit workforce training administrators who have not responded to SurveyMonkey web-based survey and encourage participation	Seven (7) days after distribution of survey
Close Community College Survey	Close community college survey	Two (2) to three (3) days after telephone contact reminder

Table 13. *Participant Contact Protocol for Two-Phase Data Collection Process*

Step	Action	Timeline
Phase One: Web-Based Survey		
Vetting of Community Colleges	Locate each community college participant meeting one of three Carnegie Size and Setting Criteria and, when possible, Carnegie Basic Classifications; confirm contact information for two noncredit workforce training partners	Upon closing community college survey
Initial Telephone Contact	Contact first noncredit workforce training partner to explain referral, study purpose, and request to participate	Seven (7) days after community college survey closed
Initial E-Mail Contact	A) Send thank you e-mail to first partner for participation and including link to SurveyMonkey web-based survey OR B) Send thank you e-mail to first partner and confirm that partner has declined to participate in survey and contact second partner	Twenty-four (24) hours after telephone conversation
E-Mail Reminder	Send e-mail to noncredit workforce training partners who have not yet responded to SurveyMonkey web-based survey and encourage participation	Seven (7) days after distribution of survey
Close Noncredit Workforce Training Partner Survey	Close noncredit workforce training partner survey	Two (2) to three (3) days after e-mail reminder

Table 13. *Participant Contact Protocol for Two-Phase Data Collection Process*

Step	Action	Timeline
Phase Two: Interviews		
Phone Call to Schedule Interview	Phone call to three (3) to five (5) community college administrators and their noncredit workforce training partners meeting second phase criteria to schedule in-person interviews	Seven (7) days after noncredit workforce training partner survey closed
E-Mail Confirmation of Interview Date and Time and Distribution of Interview Questions	Send e-mail confirming the in-person interview date and time and enclosing interview questions	Seven (7) days prior to scheduled interview date and time

Pilot Study

While a systematically constructed contact protocol is meant to mitigate any

difficulties encountered in the data collection, an initial test, or pilot study, of the data

collection procedures can provide additional useful feedback and adjustments before the

actual data collection process begins. The demographic survey may be piloted to confirm

that the questions are clearly constructed and accurately gather the information required

to address the study's driving questions. The in-person interview may be piloted to test

the quality of the digital recording devices, to provide feedback on the construction or

wording of interview questions, to confirm that an appropriate amount of time has been

allotted for the interview, or to hone the researcher's interviewing skills. For these

reasons, a pilot study will be employed for both phases of the sequential multi-method

data collection process to confirm that the protocol has been properly designed and will function as anticipated.

Careful thought was given to the role played by the community college employing the researcher and its eligibility for inclusion in this study. It was determined that the institution and one of its noncredit workforce training partners could serve as valuable resources for the pilot study and could offer useful feedback on the survey and the in-person interview; however, only the demographic data yielded by the survey results will be used in the data analysis process. The Assistant Dean for Continuing Education and Career Services at the researcher's institution has agreed to complete the survey. The noncredit workforce training partner survey will be distributed to a plant manager, whose relationship with the noncredit workforce training unit meets the site and participant selection criteria provided and who has also agreed to complete the survey.

Each step in the participant contact protocol will be replicated in this pilot study. For the pilot study's first phase, each participant will receive an e-mail invitation to complete the study, a link to the study, and an e-mail reminder to complete the study. Participants will be asked to document any problems or concerns with the construction of the survey or the wording of the questions. Only the demographic data yielded by the survey results will be used in the data analysis process.

Both the assistant dean and the plant manager will participate in in-person interviews utilizing the protocol outlined in the pilot study's second phase. Each participant will receive a telephone contact for an interview, an advance copy of the interview questions, and a confirmation of the interview as outlined in the contact protocol. Each interview will be digitally recorded; however, the contents of the

interviews will not be used in the final study, and the digital file will be erased after it has been confirmed that the audio recording equipment is functioning properly.

Data Collection Methods

Data collection refers to a systematic, structured process for gathering the data and information prescribed by the study's design and methodology. The goal of this systematic approach is to retrieve rich, thick, descriptive data that will answer the driving questions posed by the study. Creswell (2007) categorizes the broad concept of data collection by observations, interviews, documents, and audiovisual materials, although he notes that the categories may overlap and there may be ever-changing types of online data not easily fitting into one category. He notes that qualitative research offers a "compendium" of data collection approaches (Creswell, 2007, p. 130); for this study, the use of surveys, semi-structured in-person interviews, documents, and field notes will comprise the *compendium* of data collection approaches.

Surveys

Surveys of both community colleges and their noncredit workforce training partners will serve to gather general demographic data and to elicit additional relevant data informing the study's purpose. In the first phase of the sequential multi-method data collection process, each of Illinois' 37 single-campus community colleges will receive a survey distributed using SurveyMonkey, a web-based data collection tool (www.surveymonkey.com). A copy of the community college survey is included in Appendix A. Additionally, noncredit workforce training partners who have been recommended by the community college for participation and have agreed to participate will receive a similarly constructed survey using SurveyMonkey. A copy of the business and industry partner survey is included in Appendix B.

SurveyMonkey offers a wide variety of pre-built surveys and an extensive bank of question types, including one-choice, multiple choice, ranking, and Likert scale-based questions. SurveyMonkey also provides automated response and completion rate calculations and the ability to download responses in a variety of formats, including comma separated value (CSV) format for importing into spreadsheet software or portable digital format (PDF) for viewing in Adobe Acrobat Reader® (SurveyMonkey, 2011).

In addition to the general demographic data gathered, the surveys will also elicit data and information for analysis that is mapped to each element or *a priori* theme found in the one construct and two models comprising the conceptual framework. A Likert scale will be used to measure the participants' responses to the statements in this section of the survey. The Likert scale, first introduced in 1929 by Rensis Likert and Gardner Murphy to assess personal attitudes (Likert, 1932), assigns quantitative values to qualitative responses. This permits some basic statistical analysis of qualitative data collected. The scale generally allows the use of indicators to rank participants' responses to a series of statements using a scale of strongly agree (SA), agree (A), undecided (U), disagree (D), or strongly disagree (SD). Both the community college and the noncredit workforce training partner surveys will contain approximately twenty statements to which the participants must respond using a Likert scale. The completed surveys will be tabulated using the Likert scale to determine the number of responses to each statement and the mean score for each statement. This will serve as part of the data triangulation necessary to maintain the validity and rigor of the study.

Semi-structured In-Person Interviews

In-person interviews of both community college administrators and business and industry managers will serve as the primary method of data collection for this study. In order to achieve the maximum variation required for this study, community colleges and their noncredit workforce training partners will be selected based upon the Carnegie Size and Setting Classifications and, whenever possible, the Carnegie Basic classifications as detailed in the site selection criteria. Appointments for personal interviews will be scheduled once the institution and its noncredit workforce training partner have been identified and both have agreed to participate in this phase of the data collection process as noted in the contact protocol. Each community college and related noncredit workforce training partner will be interviewed about the community college's entrepreneurial orientation, approaches to partnership development and sustenance, and methods of evaluating training effectiveness. The interview questions, which are mapped to the driving questions that guide this study, are included in Appendix D.

Semi-structured in-person interviews provide researchers with the opportunity to establish a professional rapport with participants, to follow up on comments made in a survey, to view the participants' environments, or to observe the participants' nonverbal cues. It is likely that community college administrators have participated in such interviews during their careers in academia; however, it is far less likely that noncredit workforce training partners have contributed to such a study. Therefore, the researcher's preparation for the interview process must consist of more than writing questions to elicit participant responses. Every effort will be made to make the interview participants feel both comfortable with the process and welcome to ask for clarification. In addition, the

in-person interview provides an opportunity to probe into responses offered in the web-based survey; this may also elicit additional information or provide clarification on a point made in the survey. Finally, the in-person interviews will be digitally recorded so that the focus is on the participants' responses and nonverbal reactions, not on whether the researcher has correctly reduced the responses to writing.

Documents

Because a community college's relationship with its noncredit workforce training partner involves levels of assessment, curriculum development, training evaluation, and logistics, a review of documents will be both necessary and instructive. The goal of such review is to provide more extensive insight into the nature of these partnerships. Merriam (2009) notes that using a variety of collection methods helps to "uncover meaning, develop understanding, and discover insights relevant to the research problem" (p. 86). This document collection and review will include both hard copy and online documents provided by the community college and its noncredit workforce training partner.

Documents collected may include training contracts, minutes of meetings negotiating such contracts, or correspondence related to such contracts, all of which will provide valuable insight into the process of partnership development. In addition, statistics on the number of noncredit contract courses the community college offers, the annual revenue generated, and the fund to which that annual revenue is allocated will further clarify how the noncredit workforce training unit contributes to the fiscal sustainability of the institution. Organization charts, showing the location of the noncredit workforce training unit within the community college's hierarchy, will also

lend focus to how the unit is structured and how it may be perceived by institutional stakeholders and the community as a whole. A review of web site content on the noncredit workforce training unit's mission, clientele, and contract training offerings will provide a deeper understanding of the unit's responsiveness to the business and industry clientele they serve. Finally, community colleges are increasingly reliant on the use of social media, such as Facebook®, Twitter®, LinkedIn®, and YouTube™, in order to reach potential credit-generating students; this technology has applications for noncredit workforce training partnerships as well. A systematic review of this wide range of print and online documents will add to the triangulation of the data and provide a more comprehensive and detailed analysis of the research topic.

Field Notes

A fourth data source involves field notes, which can add another dimension to the data collection process. For this reason, both observational and reflective field notes will be kept for the duration of this study. Field notes can be categorized as observational or reflective in nature. *Observational* field notes offer descriptions of the setting, people, or activities comprising the interview or meeting. *Reflective* field notes document the observer's comments about, impressions of, or reactions to the personal interview or meeting (Merriam, 2009). Both types of field notes serve different purposes, yet each is necessary to capture the tenor of the interview and to provide a useful recall tool for the observer. While each in-person interview will be digitally recorded, it is critical for a researcher to demonstrate engagement with the participant with appropriate nonverbal cues and probing questions. At the conclusion of the in-person interview, both observational and reflective field notes will be taken in a location where thoughts and

observations can be collected without interruption. The process of documenting observations immediately upon the interview's conclusion is necessary to refresh recollections of the interview setting and the impressions of the interview throughout the data collection and analysis processes.

Data Analysis

Once the study's data collection process is complete, it must be analyzed through the use of *a priori* themes embedded in the conceptual framework of the study. When analyzing the data through such a framework, patterns and themes will emerge that respond to the study's central question: How and in what ways do noncredit workforce training units and their business and industry partners develop and maintain effective partnerships?

While a discussion of these *a priori* themes and the study's conceptual framework is both instructive and necessary, it is also critical to employ systematic categorizing and coding protocols throughout the data analysis process. To illustrate how these *a priori* themes will be analyzed through the conceptual framework, Table 14 outlines the driving questions guiding the study's purpose, the interview questions arising from the driving questions, and the construct or model providing the basis for the data analysis.

Table 14. *Data Analysis and Relationship of* a priori *Themes to Conceptual Framework*

Driving Question	Interview Question	Construct or Model Used for Data Analysis
How do noncredit workforce training units support the community college's mission?	How do noncredit workforce training units support the community college's mission?	Lumpkin and Dess (1996)
	If your institution has a champion who initiates and maintains noncredit workforce training partnerships, how and in what ways does that person initiate and maintain these partnerships?	Amey, Eddy, and Ozaki (2007)
What characteristics define effective community college noncredit workforce training partnerships?	Describe the characteristics of an effective noncredit workforce training partnership your community college has had with a local business or industry.	Lumpkin and Dess (1996)

Table 14. *Data Analysis and Relationship of* a priori *Themes to Conceptual Framework*

Driving Question	Interview Question	Construct or Model Used for Data Analysis
How does the community college initiate community outreach to develop noncredit workforce training partnerships?	(For the community college) What prompts a local business or industry to pursue a noncredit workforce training partnership with your college?	Amey, Eddy, and Ozaki (2007)
	(For the noncredit workforce training partner) What prompts a community college to pursue a noncredit workforce training partnership with your local business or industry?	Amey, Eddy, and Ozaki (2007)
	Describe the process you followed to reach out to a noncredit workforce training partner.	Amey, Eddy, and Ozaki (2007)
	How and in what ways does staying current with industry trends help to initiate outreach with a noncredit workforce training partner?	Lumpkin and Dess (1996)
	Have you found that there are external or internal impediments to initiating a noncredit workforce training partnership?	Lumpkin and Dess (1996)

Table 14. *Data Analysis and Relationship of* a priori *Themes to Conceptual Framework*

Driving Question	Interview Question	Construct or Model Used for Data Analysis
What characteristics or elements contribute to successfully maintaining noncredit workforce training partnerships?	Describe the steps you follow to assess the effectiveness of a noncredit workforce training partnership.	Kirkpatrick and Kirkpatrick (1993)
	Explain the processes or mechanisms you utilize to maintain a successful relationship with a noncredit workforce training partner.	Amey, Eddy, and Ozaki (2007)

In order to maintain the study's trustworthiness and to provide a framework for analyzing this complex data, Creswell's (2007) Framework for Data Analysis, the Data Analysis Spiral, will be utilized. This spiral, shown in Figure 16, illustrates that data analysis is conducted in a cyclical or spiral, rather than a linear, process. This data analysis framework consists of four distinctive, yet integrated, steps: (a) managing the data; (b) reading and memoing; (c) describing, classifying, and interpreting; and (d) representing and visualizing the data.
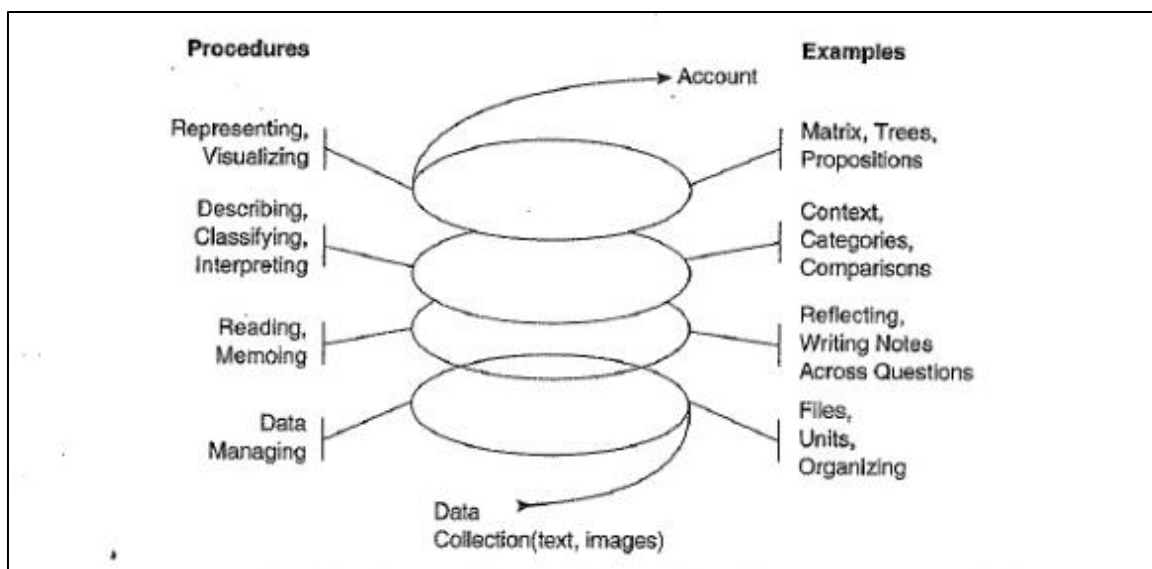
Figure 16. Creswell's (2007) Data Analysis Spiral.
Adapted from *Qualitative inquiry and research design: Choosing among five approaches*
(2nd ed.), by J.W. Creswell. Copyright 2007 by Sage Publications.

Managing the Data

Effective data management is critical to subsequent data retrieval and analysis.

Such management can be accomplished by organizing the data in paper (manual) format

or in digital (computer-based) format. Equally important to the management process is

ensuring that the data has been properly cleaned to guarantee consistency in name

spellings or date and currency formats. In addition, data management involves

confirming that all relevant data has been collected in order to respond to the research

questions that guide the study. The organization and cleaning of all the relevant data

collected are critical management steps that will permit more thorough and complete data

analysis.

Data and information from Illinois' 37 single-campus community colleges will be

organized by manual and/or digital methods. This will be accomplished by organizing

the material into files and/or units for easier retrieval. All information related to training

contracts may be grouped into one unit; information related to revenues generated by the

noncredit workforce training unit may be grouped into another unit. Information

gathered from web-based surveys may be grouped into a unit tracking demographic data.

Interview transcripts will provide another unit of information for analysis.

Reading and Memoing

To develop a deeper understanding of the data, the analytical process involves

reading and rereading the data and memoing both observations and impressions. This

iterative process refreshes recollections of the data and its contents. For this study,

memos will be noted in the margins of transcripts and documents. The audio recordings

of the interviews will be reviewed, and field notes will be taken and reviewed. This

reading and memoing is performed continuously throughout the research process and

accomplishes the goals of documenting observations and providing opportunities for

reflection—all of which serve to deepen the understanding of the data and information

gathered.

Describing, Classifying, and Interpreting

In order to synthesize and develop new meaning from this data, it is necessary to

describe the data, classify the data into predefined themes, and interpret the data. Data

description will involve explaining in detail what has been observed through memoing

observations and impressions. Data classification will involve categorizing the

information by topic, theme, or subject for more thorough data analysis. Data

interpretation will involve building possible explanations for the patterns and themes that

emerge from the information. This will initially involve many working categories of

information that may be narrowed and consolidated into five to six workable categories

providing the focus of this study (Creswell, 2007). The goals of this step are to

contextualize this data using the study's *a priori themes* generated by the study's

conceptual framework; to capture additional, unanticipated emerging themes and

patterns; and to draw comparisons between institutions' data. This step also provides for

the narrowing of usable data to that which is relevant to the study.

Representing and Visualizing

Representation and visualization of data refers to the presentation of data in a

usable form, both to better envisage the findings and to offer "metaphors to analyze the

data" (Creswell, 2007, p. 154). Visual representations assist the researcher during the

data analysis phase by revealing relationships among the data and information gathered;

this enhances the researcher's ability to both understand and interpret the findings.

Findings that are presented in a graphical or pictorial format also provide the reader with

a useful visual representation that complements and enhances a narrative. A variety of

approaches, such as matrices, decision trees, or step-by-step models, may be used to

represent the findings.

It is anticipated that a high volume of data and information will be gathered from

the various data collection methods employed in this study. With the explosion of social

media and other forms of web-based communication utilized by community colleges and

their noncredit workforce training partners, the sheer volume of online content collected

in this study could be daunting. Great care must be taken throughout the study to ensure

that all emerging themes and patterns are recognized and captured. For these reasons, a

digital, rather than a manual, approach to data analysis will be utilized for this study. All

data and information collected will be loaded into NVivo10®, a qualitative data analysis

application produced by QSR International (www.qsrinternational.com). This software

will assist in developing systematic categorizing and coding protocols that are part of

Creswell's (2007) Data Analysis Spiral. NVivo10® offers data management capacity for

all digital media, including documents, transcripts, and field notes. Additionally,

memoing of observations and impressions can be completed in NVivo10® so that these

reflective notations can be queried and searched at a later date. NVivo10® also provides

for establishing codes and themes (referred to as *nodes*) that can be used to search against

digital media. Finally, NVivo10® offers robust reporting capabilities, allowing the

export of reports and charts to other software applications for additional analysis. Table

15 summarizes the features of NVivo10® and their application to the appropriate phases

of Creswell's (2007) Data Analysis Spiral.

Table 15. *NVivo10® Features and Application to Creswell's (2007) Data Analysis Spiral*

Feature	Application to Phase of Data Analysis Spiral
Create *nodes*, or categories, to store themes or patterns	Data Managing Phase
	Describing, Classifying, and Interpreting Phase
Import Microsoft Word® or Adobe Acrobat® documents, audio or video files, and Microsoft Excel® spreadsheets and group by node	Data Managing Phase
	Describing, Classifying, and Interpreting Phase
Import web pages and social media data and group by node	Data Managing Phase
	Describing, Classifying, and Interpreting Phase
Group sources of data by node that share common characteristics, such as training contracts	Data Managing Phase
	Describing, Classifying, and Interpreting Phase

Table 15. *NVivo10® Features and Application to Creswell's (2007) Data Analysis Spiral*

Feature	Application to Phase of Data Analysis Spiral
Create memos and annotations to capture observations and link them to materials, including time-stamping observations	Reading and Memoing Phase
	Describing, Classifying, and Interpreting Phase
Create a transcript for an audio or video file and link it to a pattern or theme	Data Managing Phase
	Reading and Memoing Phase
	Describing, Classifying, and Interpreting Phase
Organize respondents' answers by institution or by nodes	Reading and Memoing Phase
	Describing, Classifying, and Interpreting Phase
Query data to track frequency of phrases used	Describing, Classifying, and Interpreting Phase
	Representing and Visualizing Phase
Generate reports, models, and charts based upon nodes	Representing and Visualizing Phase

Note. Adapted from "*NVivo10® feature list,*" by QSR International, 2012, http://download.qsrinternational.com/Resource/NVivo10/NVivo10-feature-list.pdf. Copyright 2012 by QSR International.

Ethical Considerations

Any credible research endeavor must always strive to protect the rights of its

participants, engage in ethical data collection and analysis, and maintain confidentiality.

Creswell (2007) notes that ethical considerations in research should include "seeking

consent, avoiding the conundrum of deception, maintaining confidentiality, and

protecting the anonymity of individuals" (p. 44). In today's world of instant access to

anyone, anywhere, researchers must be especially mindful of privacy and confidentiality. Noting technology's pervasive influence on all forms of human interaction, Merriam (2009) comments on the "highly public nature of some of the electronic environments in which people exchange ideas" as one reason researchers may fail to consider participants' privacy rights (p. 161). Merriam offers four ethical considerations researchers must consider as they guarantee participant rights and confidentiality, all of which are employed in this study: (a) obtaining informed consent; (b) ensuring participant anonymity and security of data and information gathered; (c) determining public versus private information and ensuring confidentiality of such information; and (d) developing member checking procedures allowing participants a forum to comment and to confirm they have not been harmed during the course of the study.

Informed consent is a crucial tenet of all research. In this study, each community college administrator and noncredit workforce training partner participating in the web-based survey or the in-person interview will need to read and sign a consent form prior to participation. The purposes of informed consent are to ensure awareness of the participants' rights and responsibilities and to offer the participants the opportunity to decline participation if they so choose. Additionally, informed consent communicates both the researcher's role in the study and obligations to the study participants. Prior to the in-person interview, two copies of the consent form will be signed: one for the participant and one for the researcher's documentation. Participants will have the opportunity to decline or withdraw their participation at any time prior to the completion of the study.

A second ethical tenet proffered by Merriam (2009) involves participant anonymity and security of data and information gathered. In this study, participant anonymity will be maintained by using pseudonyms in any publication of the study findings. Ensuring participant anonymity may also encourage those being interviewed to be more candid and forthcoming with their viewpoints and perspectives. Additionally, the transcriptionist contracted to transcribe all recorded interviews will be bound by a confidentiality agreement, thereby ensuring security of information gathered during the interview process.

Merriam's (2009) third ethical tenet—determining public versus private information and ensuring confidentiality—will be addressed by the methods of data storage employed in this study. All documentation, including, but not limited to, surveys, institutional documents, field notes, audio files, and interview transcripts, will be securely stored for five to seven years and will then be destroyed. All digital documents and media will be transferred to CD-ROM for storage with paper documents. Digital documents and media will be maintained in protected data storage to provide both redundancy and integrity. As previously indicated, the transcriptionist contracted to transcribe all recorded interviews will be bound by a confidentiality agreement.

Merriam's (2009) final ethical tenet involves the use of debriefing procedures to confirm that the information gathered is accurate. This process, known as member checking, provides each participant in an in-person interview the opportunity to review a transcript in order to make factual corrections or correct misinformation. The utilization of member checking ensures the credibility of the data collected from the in-person interviews, thus advancing the study's trustworthiness.

The ethical considerations implemented in this study strive to avoid the *conundrum* to which Creswell (2007) refers. Qualitative researchers are professionally, ethically, and morally obligated to secure informed consent, to be candid and forthright about the study's purpose, to maintain confidentiality of participants' contributions, and to preserve participants' anonymity. The very integrity of this study is based upon the protection of its participants' rights to participate freely and without risk of harm to the individual or the institution.

Trustworthiness, Validity, and Rigor

Any scholarly work must demonstrate a high degree of trustworthiness or validity and rigor in order to be considered a credible endeavor. The need for defining the protocols utilized in the research, explaining the selection criteria employed, and implementing a rigorous and transparent data collection process strengthens the overall study. Many researchers have offered a variety of approaches to build and maintain trustworthiness or validity and rigor in qualitative studies. The seminal work in this field, authored by Lincoln and Guba (1985), posits that trustworthiness or validity and rigor in quantitative studies are assessed by (a) the *truth* of the findings, or their internal validity; (b) the *applicability* of the findings to other situations, or their external validity; (c) the *consistency* of the findings, or their reliability; and (d) the *neutrality* of the findings, or their objectivity.

While quantitative research offers these criteria for the assessment of trustworthiness or validity and rigor, Lincoln and Guba (1985) opine that qualitative research offers comparable, synonymous criteria specific to the naturalistic paradigm. These criteria include *credibility,* to measure the truth of the findings; *transferability,* to measure the applicability of the findings to practice; *dependability,* to measure the

consistency of the findings; and *confirmability*, to measure the neutrality of the findings.

While the nomenclature describing these criteria differs across the quantitative and

qualitative paradigms, their uniform purpose is to provide a tool for the evaluation of a

study's trustworthiness and rigor. A comparison of the nomenclature used to measure

trustworthiness or validity and rigor in the quantitative and qualitative paradigms is

shown in Table 16.

Table 16. *Measures of Trustworthiness or Validity and Rigor in Quantitative vs.*
Qualitative Paradigms

Measure	Quantitative Paradigm	Qualitative Paradigm
Truth of Findings	Internal Validity	Credibility
Applicability of Findings to Practice	External Validity	Transferability
Consistency of Findings	Reliability	Dependability
Neutrality of Findings	Objectivity	Confirmability

Note. Adapted from <u>Naturalistic Inquiry</u>, by Y. S. Lincoln and E. G. Guba, 1985, p. 290.
Copyright 1985 by SAGE Publications, Inc.

Stake (1995) and Yin (2009) also discuss in detail the importance of

trustworthiness or validity measures to case study research. Their definitions of these

measures are synonymous with those of Lincoln and Guba (1985) and offer

complementary approaches to ensuring rigor in the study. Table 17 offers a summary of

trustworthiness or validity measures employed in this study, comparing and contrasting

the approaches of Lincoln and Guba (1985), Stake (1995), and Yin (2009).

Table 17. *Summary of Trustworthiness or Validity and Rigor Measures Employed in This Study*

Measure	Lincoln and Guba (1985)	Stake (1995)	Yin (2009)
Credibility	Prolonged engagement Persistent observation Data triangulation Member checking	Data triangulation Explanation for triangulation Member checking	Pattern matching Explanation for patterns Address competing explanations
Transferability	Applicability of findings to other institutions Generate rich, thick data description	Produce generalizations Permit readers to view raw data and formulate own interpretations Emphasize *validity* as what could or could not have been seen	Generalize set of findings to broader theory
Dependability	Study is documented so that it can be repeated Generate audit processes and audit trails	Develop contact protocol Acquire permission to access data Look for consistency within certain conditions Provide information about the researcher and input sources	Document ability to conduct the same case again, not to replicate one case's findings in another study Develop case study protocol Create case study database so readers can review evidence, not just the report

Table 17. *Summary of Trustworthiness or Validity and Rigor Measures Employed in This Study*

Measure	Lincoln and Guba (1985)	Stake (1995)	Yin (2009)
Confirmability	Generate audit processes and audit trails	Develop contact protocol Provide information about the researcher and sources of data and information Generate observational and reflective field notes	Encourage convergent lines of inquiry Develop multiple evidentiary sources and chains of evidence Member checking Generate observational and reflective field notes

The purpose of this study is to identify how and in what ways Illinois single-campus community colleges develop and maintain effective noncredit workforce training partnerships. Mechanisms must be implemented to maintain trustworthiness or validity and rigor in any study, ideally working with the models or approaches summarized in Table 17. Therefore, it is critical to the validity and rigor of this study that the ways in which the study exhibits credibility, transferability, dependability, and confirmability as posited by Lincoln and Guba (1985), Stake (1995), and Yin (2009) are documented.

Credibility

Credibility refers to the internal validity of the findings and how *congruent* the findings are with reality (Merriam, 2009; Yin, 2009). In particular, Yin (2009) suggests that the goals of internal validity are to build explanations for the phenomenon and to address competing explanations for the phenomenon. In addressing internal validity, Lincoln and Guba (1985) discuss at length the methods by which credibility of the

findings can be enhanced. The first method involves a "prolonged engagement" with the

environment to better learn and understand it, checking for possible distortions or

misinformation, in order to build trust between the researcher and the study participants

(p. 301). In this study, multiple contacts with the participants, including in-person

interviews and contact related to completion of the survey and scheduling of the

interviews themselves, will provide the *prolonged engagement* to which Lincoln and

Guba (1985) refer.

Another method of establishing credibility involves triangulation of the data,

involving the use of multiple data and information sources and methods of data collection

to enhance credibility (Lincoln & Guba, 1985; Stake, 1995; Yin, 2009). In this study,

multiple data sources will be triangulated to enhance credibility and maintain rigor.

These data sources will include: (a) surveys completed by community college

administrators and their noncredit workforce training partners; (b) in-person interviews;

(c) documents related to the development and maintenance of noncredit workforce

training partnerships; and (d) observational and reflective field notes.

A final method to enhance credibility involves the use of member checks, where

interpretations and conclusions can be tested with the study participants (Lincoln &

Guba, 1985; Stake, 1995; Yin, 2009). Member checks give study participants a forum to

correct any factual errors that may have been made or to clarify information in the

interview transcript. In this study, each community college member and noncredit

workforce training partner participating in an in-person interview will have the

opportunity to review the interview transcripts and make factual corrections prior to the

onset of the data analysis phase. The use of NVivo10® data analysis software will also

facilitate the data triangulation and member checking processes with its report generation features.

Transferability

Transferability in a study refers to the extent to which this study's findings can be applied to another situation—or can provide external validity (Merriam, 2009; Yin, 2009). The study's readers are responsible for transferring the study's findings to their own contexts; therefore, the study must offer rich, thick descriptions of the data and information gathered so readers can formulate their own interpretations (Lincoln & Guba, 1985; Stake, 1995). Yin (2009) concurs, noting that validity is enhanced when a set of findings can be generalized to other similar settings or contexts. In this study, the use of purposeful sampling enhances the likelihood of transferability to new situations because it provides for the widest possible range of participants and viewpoints. Purposeful sampling is accomplished in this study through the use of maximum variation among the participants. In addition, documenting each step in the data collection process and utilizing audit trails will permit transferability of the steps to other institutions seeking to conduct similar research. Finally, each institution's corresponding business and industry partner was selected based upon its representation of a distinctive occupational area. The varying and informative descriptions of the data and information these participants provide can be instructive and useful to other institutions seeking to forge and sustain similar noncredit workforce training partnerships.

Dependability

Dependability in a study refers to the consistency of the study's results with the data the researcher has collected and the "stability" of responses with multiple coders of

data (Creswell, 2007, p. 210; Merriam, 2009). Lincoln and Guba (1985), however, posit that dependability is established when credibility is demonstrated; credibility, by definition, establishes dependability. Lincoln and Guba (1985) offer multiple means by which dependability can be established, including overlapping methods of data triangulation and the use of an audit trail. When the data obtained across multiple data sources have been triangulated during the analysis process, the research is credible and, by their definition, dependable. Yin (2009) expands upon this thinking, submitting that dependability is synonymous with reliability. A reliable study uses case study protocol and a database in order to query for themes and patterns among the data and information gathered. The goal of reliability, Yin (2009) submits, is not to replicate the results with another case study, but to the ability to conduct the case study using the same steps and protocols. Stake (1995) offers similar approaches to establishing dependability, including developing a contact protocol, acquiring permission to access data, looking for consistency in patterns and themes, and providing information about both the researcher and the sources of data and information gathered.

In this study, dependability is established through the use of contact protocols for both the community college administrators and their noncredit workforce training partners. Additionally, audit processes and audit trails will explain all decisions made and the results of those decisions so that others may conduct their own research using the steps employed in this study. This study also will access data from the study participants in order to discover commonalities within and differences between the institutions' partnerships with their noncredit workforce training counterparts. Finally, dependability will be established by documenting the researcher's credentials and qualifications to

conduct this study in the section entitled *Researcher as the Instrument* and further, by analyzing the sources of data and information gathered to answer the study's driving questions.

Confirmability

Confirmability in a study means that each step in a study is explained clearly, documented consistently, and tracked carefully. Methods of confirmability include viewing the raw data, the documentation related to instrument development, the products of data analysis or synthesis, or anything related to "intention and disposition," in order to demonstrate the study's construct validity (Creswell, 2007; Lincoln & Guba, 1985, pp. 318-319). Stake (1995) similarly notes that confirmability is best established when a transparent process for data gathering and for the researcher's reasons for conducting the research are both evident. Yin (2009), concurring that confirmability is indeed a process of construct validity, suggests that multiple evidentiary sources be used to triangulate the data and further, that the stakeholders in the case study review the draft report to check for factual errors or potential misinformation.

This study will establish confirmability by generating extensive audit processes and audit trails, both manual and digital, through the use of observational and reflective field notes. In addition, the use of NVivo10® software will provide a tool to triangulate the data collected from multiple sources and will permit member checking of the in-person interview transcripts. Finally, the use of contact protocols will serve to confirm the credibility of the findings and maintain both trustworthiness and rigor in the study.

Limitations

While every effort may be made during the course of a study to gather the greatest number of viewpoints and perspectives from a variety of sources and further, to

triangulate the data, no study can be completely free of bias or limitation. In qualitative research, researcher bias—for example, using a particular methodology solely to advocate a particular position or point of view—can result in questioned credibility for both the researcher and the study findings. Likewise, a limitation that is neither acknowledged nor mitigated can be perceived as a design flaw that calls the study's findings into question. A demonstrable effort must be made to acknowledge all possible study biases and limitations and further, to document all attempts to mitigate the impact of those biases and limitations on the study's outcomes. Two limitations exist in this study: (a) a lack of available data from the participants; and/or (b) a reluctance on the part of the participants to participate fully and candidly in this study. In order to provide transparency to the process and to maintain the trustworthiness and validity proffered by Lincoln and Guba (1985), Stake (1995), and Yin (2009), a discussion of these possible limitations and the attempts to mitigate their impact is necessary.

Lack of Participant Data

The first limitation is the possible lack of data from the participants. While Illinois' 37 single-campus community colleges will be contacted to participate in the study's web-based survey, these institutions may not have noncredit workforce training units and, therefore, may not be able to provide the requested data. Another possibility is that some community colleges may connote *noncredit workforce training* with *adult education* and attempt to offer data and information unrelated to the focus of this study.

Multiple efforts will be made to mitigate this lack of participant data. First, concerted attempts will be made to locate the appropriate noncredit workforce training administrator and ensure that the web-based survey is answered by the individual most

knowledgeable about the institution's partnerships with business and industry. Each

community college's web site will be checked to locate the correct name of the noncredit

workforce training unit and the administrator responsible for that unit's operation. This

contact information will be verified with ICCET and weTRaIN to ensure that the surveys

are sent to the proper participants. In addition, follow-up e-mails will be sent to all

survey participants to encourage participation and to increase the number of survey

responses. Each community college's response rate will also be tracked in

SurveyMonkey, and institutions that do not utilize a noncredit workforce training unit

will be noted as such in the survey results. Finally, in order to ensure that the data

collected is not related to adult education, the introductory page of the web-based survey

will explicitly discuss the study's focus and will emphasize that the data collected

involves noncredit workforce training partnerships.

Reluctance to Participate

The second limitation is the reluctance of community colleges and/or their

noncredit workforce training partners to provide all the information requested for this

study. This reluctance or unwillingness to participate fully and candidly may stem from

an incomplete understanding of the study's significance, time restrictions, lack of interest,

concern about being perceived in an unflattering light, or a combination of factors. For

example, the response to the web-based survey may be low, or the participants may try to

respond in ways that present their institutions in a favorable light as opposed to offering

clear and accurate responses. Finally, the participants may not respond to selected survey

items, thereby rendering an incomplete picture of the institution (Johnson & Christensen,

2012b).

Multiple efforts will be made to mitigate this second limitation. First, the contact protocol provides for e-mail communication, phone contact, and personal interviews to build rapport, to establish a comfort level between the researcher and the participants, and to resolve questions or concerns. In addition, the initial e-mail sent by ICCET and weTRaIN to its listserv members specifically references the importance of clear, accurate responses in order to offer a comprehensive study of the entrepreneurial relationships between community colleges and their noncredit workforce training partners. The initial e-mail sent by the researcher will also reiterate the importance of the study and the processes for ensuring anonymity among the study participants. Additionally, the first page of the web-based survey provides a full explanation of the study's significance to the community college field and the importance of each participant's contributions to the study's completion. The contact protocol also provides for the selection of a second noncredit workforce training partner in the event the primary partner fails to participate after agreeing to do so. Finally, a pilot study will be conducted with one community college administrator and one noncredit workforce training partner from the researcher's institution to offer suggestions and feedback on making the interview process more comfortable for the participants. Table 18 summarizes each limitation and the efforts that will be made to mitigate each limitation.

Table 18. *Study Limitations and Mitigating Efforts*

Limitation	Mitigating Effort
Lack of available participant data; perception that noncredit workforce education is synonymous with adult education	Locate appropriate noncredit workforce training administrator
	Verify administrator contact information via community college web site and ICCET and weTRaIN membership listings Track response rates in SurveyMonkey and note community colleges that do not have a noncredit workforce training unit
	E-mail reminders to complete survey
	Emphasize focus on noncredit workforce training partnerships on introductory survey page
Reluctance to participate fully and candidly	Contact protocol with multiple efforts to build rapport and resolve questions or concerns
	ICCET and weTRaIN introductory e-mails reference importance of participant responses to the outcome of the study
	Researcher's introductory e-mail reiterates importance of the study
	First page of web-based survey to outline the importance of participant responses to the outcome of the study
	Protocol for selection of a second noncredit workforce training partner in the event the first partner declines participation
	Pilot study to offer suggestions on how to build and establish rapport with study participants

Researcher as Instrument

The life experiences a researcher brings to a study help to shape every aspect of the research itself: the choice of methodology, the design of the study, and the methods of data collection and analysis. One of the hallmarks of qualitative research is that the researcher plays a key role as an instrument for data collection and analysis (Creswell, 2007; Merriam, 2009). This qualitative research is a case study situated in the interpretive paradigm. The interpretivist researcher must utilize data collection tools, but must also acknowledge that the researcher's background and experiences make the researcher a "human instrument" (Merriam, 2009, p. 15). For this reason, a brief overview of this researcher's background and experiences informs her role as an instrument in this study.

The researcher graduated *magna cum laude* from Illinois Wesleyan University in 1984 with a Bachelor of Arts degree in social science, a certificate of fluency in foreign language, and an Illinois secondary teaching certificate. She earned a Master of Education degree in adult and corporate instructional management from Loyola University of Chicago in 1993. During her academic career at Loyola, she utilized her undergraduate work in secondary education and her graduate work in training and development to serve as a graduate assistant in the university's teacher education and corporate training programs.

The researcher's professional certifications and credentials include completion of a post-baccalaureate paralegal certificate, with honors, from Roosevelt University and 29 Microsoft Office® Specialist certifications from Microsoft Corporation. She is one of 35 Microsoft Office Master Instructors in the State of Illinois (Certiport Corporation, 2012).

The researcher began her professional career serving the Illinois judiciary, serving three years as the first deputy clerk and satellite office supervisor for the Chicago office of the Illinois Supreme Court Clerk. She spent another three years as a computer training director for a Top Ten Chicago-based law firm and five years as a computer applications trainer for the American Medical Association. Her community college tenure includes 22 years of teaching experience at three different institutions, serving as an adjunct faculty member concurrently with her full-time employment in the Chicago legal community. From 1991 through 1998, she served in community college adjunct faculty positions teaching paralegal coursework and Microsoft Office® applications.

In 1998, the researcher was hired as a full-time faculty member at Kankakee Community College and was promoted to her current position as professor and program coordinator in 2001. This position involves a split faculty load in both noncredit workforce training and in credit-level instruction. Her noncredit workforce training responsibilities involve designing, developing, delivering, and evaluating the effectiveness of training curricula for business and industry partners in the community college district. She is also responsible for corporate training and testing on Microsoft Office® applications and maintains the campus Microsoft Office® Authorized Testing Center. Her credit-level instructional responsibilities include teaching paralegal and business communications coursework and serving as program coordinator for the institution's American Bar Association-approved paralegal program.

The researcher has written for national publications on incorporating noncredit technical certifications into credit-level curricula and on effective recruiting and retaining practices in the community college. In 2011, she was selected by her institution as their

nominee for the Illinois Community College Trustees Association's Full-Time Faculty

Member of the Year award.

The common thread that has run through this researcher's career in corporate

training and development is the nature of noncredit workforce training partnerships,

making her the human instrument for data collection and analysis to which Merriam

refers. Her role in community college noncredit workforce training is more than one of

revenue generation for the institution. Her motivation is to ensure that relationships

between her institution and its noncredit workforce training partners are fully

entrepreneurial—relationships that are carefully built and sustained for the benefit of both

parties. It is this series of life experiences that shapes the researcher's interest in this

topic and, consequently, the design of the study itself.

Summary

This chapter provided a discussion of the methodology, or the logical, systematic

structure for researching a topic or issue of importance. The distinctions between the

quantitative and qualitative paradigms were addressed, along with an explanation of why

a qualitative study situated in the interpretive paradigm was the most appropriate method

of inquiry for this research.

This qualitative inquiry will employ case study methodology so that community

colleges and their noncredit workforce training partners may apply the findings from this

research to their own partnership development and sustenance processes. The chapter

also discussed data collection methods and the three approaches to sampling, including

(a) purposeful sampling; (b) maximum variation to expand the sample studied; and (c)

site and participant selection methods. The chapter also offered an in-depth discussion of

the four data collection methods to be employed in this study: (a) surveys; (b) semi-

structured, in-person interviews; (c) document review; and (d) field notes. A discussion of the data analysis techniques utilized in this study was included in this chapter. Ethical considerations, and the ethics safeguards implemented in the design and data collection processes, were detailed. The chapter also discussed the various strategies implemented to ensure trustworthiness in the data collected, as well as the rigor and transparency of the study itself. Three possible limitations to the study were acknowledged, and approaches to mitigating those limitations were offered. The chapter concluded with a discussion of the researcher's role as a data collection instrument.

Chapter 4: Data Collection and Analysis Strategies

Introduction

The purpose of data collection in a qualitative research study is to gather

information about participants' viewpoints, perspectives, and insights. Indeed, Creswell

(2007) suggests that the process of qualitative data collection should seek "*extensive*

detail [emphasis added] about each site or individual studied," with the intent being "not

to generalize the information . . . but to *elucidate the particular, the specific*" [emphasis

added] (p. 126). Miles and Huberman (1994) concur with the idea that data collection

involves the compilation of extensive detail and suggest that data collection, which

should occur concurrently with data analysis, should ideally involve three flows of

researcher activity: data reduction, data display, and conclusion drawing or verification.

Qualitative data collection and analysis in this study involved synthesizing the

extensive detail to which Creswell (2007) refers, blended with the overlapping activity of

reducing the detail into a usable format from which to draw conclusions or to verify

findings as posited by Miles and Huberman (1994). This chapter will discuss the four

elements of data collection employed in this study and will begin the process of data

reduction through a review of documents and related information. These elements

include (a) the contact protocol, including site and participant selection; (b) the

demographics of participating community colleges and their noncredit workforce training

partners; (c) the summary of the survey data collected; and (d) the strategies employed in

conducting data analysis. These four elements serve to triangulate multiple data sources,

add strength to the study's findings, and enhance the overall rigor of the study, the

purpose of which was to determine how and in what ways Illinois single-campus

community colleges develop and sustain effective noncredit workforce training partnerships.

Contact Protocol

Broadly framed, the purpose of a contact protocol is to document the credibility, dependability, and confirmability of the study's findings as proffered by Lincoln and Guba (1985), Stake (1995), and Yin (2009). In this study, a sequential multi-method approach to data collection was employed, with an initial phase of surveying the community colleges and their respective noncredit workforce training partners and a second phase of in-person interviews of both parties. Therefore, two contact protocol phases were used in this study to correspond to the sequential multi-method approach.

Site Selection

The potential site selection pool focused on Illinois' 37 single-campus community colleges. Illinois' two community college systems—City Colleges of Chicago and Illinois Eastern Community Colleges—comprise 11 of the state's 48 community colleges and were excluded from this study, reducing the number of institutions surveyed to 37. Additionally, while the researcher's community college was surveyed for the purposes of the pilot study, the data gathered from that institution were excluded from the final results, thereby further reducing the number of potential sites to 36.

A web-based survey designed to capture demographic data from these 36 single-campus institutions was distributed using SurveyMonkey. In order for the site to be further considered for the second phase of the data collection process, four key criteria were employed:

- The institution had to agree to participate in semi-structured, in-person interviews and to provide the names and contact information for two noncredit workforce training partners agreeing to participate in a similar survey and interview.

- The Carnegie Size and Setting Classifications were used to enhance the maximum variation required by this study. For the purpose of this study, the Size and Setting Classifications of *Very Large* and *Large* were combined into a *Very Large or Large* classification to preserve the anonymity of the two Illinois *Very Large* institutions that might eventually participate in the study.

- The Carnegie Basic Classifications were used whenever possible in order to enhance the purposeful sampling required by this study.

- The geographic distribution of institutions was considered whenever possible in order to enhance the maximum variation required by this study.

The data collection process was completed between October 2012 and May 2013.

Table 19 illustrates the timeline for collecting data from these sites pursuant to the contact protocol.

Table 19. *Timeline for Data Collection from Illinois' 36 Single-Campus Community Colleges*

Date	Action
October 2012	Introductory e-mails sent by Illinois Council for Continuing Education and Training (ICCET) and Illinois Community College Training and Resource Information Network (weTRaIN) to their listserv members encouraging participation in the web-based survey
	Initial introductory e-mail sent to community colleges explaining that the study was forthcoming
	Follow-up e-mail sent to community colleges with survey link

Table 19. *Timeline for Data Collection from Illinois' 36 Single-Campus Community Colleges*

Date	Action
November 2012	Telephone call placed to non-responding community colleges to encourage participation in web-based survey
	Closed community college survey
	Vetted first community college participant partners meeting Carnegie Size and Setting Criteria and Carnegie Basic Classifications
	Confirmed contact information for two noncredit workforce training partners provided by vetted community college participants
December 2012	Contacted first noncredit workforce training partner from each vetted community college to explain referral, study purpose, and request to participate
	Conducted seven of ten semi-structured, in-person personal interviews (four community colleges; three noncredit workforce training partners)
January 2013	Continued to secure participation of a community college meeting Carnegie Size and Setting Classification of *Small* and its two noncredit workforce training partners
	Continued to secure participation of a noncredit workforce training partner provided by a community college meeting Carnegie Size and Setting Classification of *Medium*
February 2013	Continued to secure participation of a community college meeting Carnegie Size and Setting Classification of *Small* and its two noncredit workforce training partners
	Secured participation from a noncredit workforce training partner provided by a community college meeting Carnegie Size and Setting Classification of *Medium* and provided partner with web-based survey link

Table 19. *Timeline for Data Collection from Illinois' 36 Single-Campus Community Colleges*

Date	Action
March 2013	Located and interviewed a community college meeting Carnegie Size and Setting Classification of *Small* and a related noncredit workforce training partner, completing nine of ten total interviews
	Completed transcription of all in-person interviews to date and routed to interview participants for member checking
	Received refusal to participate from first noncredit workforce training partner provided by a community college with a Carnegie Size and Setting Classification of *Medium*; this business had originally agreed in February 2013 to participate
	Attempted contact with second noncredit workforce training partner provided by this same community college
April 2013	Second noncredit workforce training partner provided by the community college with a Carnegie Size and Setting Classification of *Medium* agreed to participate; provided web-based survey link and attempted to schedule interview
	Completed transcription of all in-person interviews to date and routed to interview participants for member checking
May 2013	Completed interview with second noncredit workforce training partner provided by the community college with a Carnegie Size and Setting Classification of *Medium*, bringing total interviews completed to ten
	Completed transcription of all in-person interviews and routed to interview participants for member checking

Of the 36 single-campus community colleges invited to participate in the web-based survey, 29 responded, for a total participation rate of 80.5%. Of those 29 respondents, 21 of them (72.4%) disclosed their institution names. Table 20 illustrates the breakdown of the participating named community colleges by Carnegie Size and

Setting Classification and by Carnegie Basic Classification (Carnegie Foundation, 2012a;

Carnegie Foundation, 2012d; Carnegie Foundation, 2012e).

Table 20. *Breakdown of Participating Named Community Colleges by Carnegie Size and Setting and Carnegie Basic Classifications*

Designation	Number of Participants
Carnegie Size and Setting: Very Large or Large (5,000 FTE or greater; n=7)	
Carnegie Basic: Public Suburban-Serving Multicampus	3
Carnegie Basic: Public Suburban-Serving Single Campus	4
Carnegie Size and Setting: Medium (2,000-4,999 FTE; n=10)	
Carnegie Basic: Public Rural-Serving Large Campus	6
Carnegie Basic: Public Rural-Serving Medium Campus	1
Carnegie Basic: Public Suburban-Serving Single Campus	3
Carnegie Size and Setting: Small (500-1,999 FTE; n=4)	
Carnegie Basic: Public Rural-Serving Medium Campus	4
Total Responses	**21**

Note. A total of 29 single-campus community colleges responded to this survey. Eight responding community colleges did not disclose their institutional names; because their identities were necessary in order to determine their Carnegie classifications, those community colleges are not included in this table.

While the research design process of purposefully sampling three to five

community colleges from the 21 web-based survey participants initially seemed

straightforward and achievable, considerable difficulty ensued in locating an institution

with a Carnegie Size and Setting Classification of *Small*. As the web-based survey data

was tracked during October and November 2012, it soon became clear that a participant

college with a *Small* classification had not yet responded with a willingness to participate

in the in-person interview. In fact, three of the four *Small* institutions declined to

participate altogether, and the remaining institution chose not to answer the question.

One of the four institutions meeting this *Small* criterion was subsequently contacted

because of its location in the southern part of the state, where that geographic region

would enhance the maximum variation required by this study. A telephone call was

placed to the administrator completing the web-based survey which explained the need

for a school with a *Small* classification in the southern part of the state. During this

conversation, the institution agreed to participate in an in-person interview. During the

following week, the administrator, citing academic obligations, reversed the decision to

participate. A telephone call was then placed to the only other institution meeting the

Small classification in the southern portion of the state. This institution had similarly

initially declined to participate in the in-person interview. A similar explanation of the

need for a *Small* institution within the southern part of the state was offered, and the

institution agreed to participate in the survey. Four additional contacts to this site were

made between January and March 2013 before successfully securing the in-person

interview.

Similar complications occurred in securing one noncredit workforce training

partner to participate in both the web-based survey and the in-person interview. In order

for a community college to participate in the in-person interview, the institution was

required to provide the names and contact information for two business and industry

partners agreeing to participate in a similar web-based survey and in-person interview.

One of the participating community colleges secured the participation of two business

and industry partners pursuant to the survey guidelines and disclosed the partners' contact information in the survey. Following the site selection protocol, the first of the two partners was contacted and agreed to participate in the web-based survey; however, the partner expressed reluctance to answer the first survey question, which required acknowledgement of informed consent in order to continue. The partner was provided with a print copy of the survey in order to alleviate concerns about the questions. Shortly after the survey was provided to the partner, the partner declined to participate further in the process. At that point, the second noncredit workforce training partner was contacted pursuant to the site selection protocol. In this second instance, the partner was contacted multiple times to secure completion of the web-based survey and to schedule the in-person interview. After three weeks of unsuccessfully trying to reach the noncredit workforce training partner, the community college intervened and requested that the partner honor its original agreement to complete the interview so that the partnership's strengths could be showcased in this study, albeit anonymously. The noncredit workforce training partner agreed to participate, and the last of the required interviews was completed with this partner in May 2013.

Five community colleges, all meeting the site selection criteria, were chosen for the second phase of the sequential multi-method data collection. Table 21 provides the pseudonyms applied to the community colleges, their Carnegie Size and Setting and their Carnegie Basic Classifications, their geographic regions, and their noncredit workforce training unit names (Carnegie Foundation, 2012a; Carnegie Foundation, 2012d; Carnegie Foundation, 2012e).

Table 21. *Pseudonyms, Carnegie Classifications, Geographic Regions, and Noncredit Workforce Training Unit Names of Participating Community Colleges*

Pseudonym	Carnegie Size and Setting Classification	Carnegie Basic Classification Setting	Geographic Region of Illinois	Noncredit Workforce Training Unit Name
Evergreen Community College	Medium Two-year	Public Suburban-Serving Single Campus	North	Corporate Education and Training
Gerard Community College	Small Two-year	Public Rural-Serving Medium Campus	South	Workforce Training
Hamilton Community College	Very Large or Large Two-year	Public Suburban-Serving Single Campus	North	Continuing Education
Pierce Community College	Medium Two-year	Public Rural-Serving Large Campus	Central	Community Education
Richard Community College	Medium Two-year	Public Rural-Serving Large Campus	Central	Corporate & Community Education

The site selection protocol also required that each participating community college provide a noncredit workforce training partner willing to participate in a similar web-based survey and in-person interview. Again, maximum variation in the product or service areas offered by these businesses and industries was sought. Table 22 provides the pseudonyms applied to the noncredit workforce training partner, the community college with which the business partnered, and the nature of the business or industry.

Table 22. *Pseudonyms, Partnering Community College, and Nature of Business or Industry of Participating Noncredit Workforce Training Providers*

Pseudonym	Partnering Community College	Nature of Business or Industry
Greening Partners	**Evergreen Community College**	Dislocated worker training in industrial, manufacturing, healthcare, and green careers
Kappa Construction	**Gerard Community College**	Metal fabrication and distribution
Miller Manufacturing	**Pierce Community College**	Transportation technologies
Otis Mechanical	**Richard Community College**	Industrial, maintenance, and warehouse logistics and technologies
Quickspeed Transportation	**Hamilton Community College**	Mass transit; transport services for the disabled

Participant Selection

The process of selecting and contacting participants involved purposefully sampling and implementing maximum variation strategies, thereby retrieving a robust pool of community colleges and noncredit workforce training partners. Of the community colleges that expressed interest in the interview process, the participant selection criteria specified that directors, deans, or vice presidents who had responsibility for a noncredit workforce training unit's function and had been in their positions for at least two years were eligible. The business and industry participant selection criteria specified that the individuals should be plant managers, human resource directors, or others who were directly responsible for implementing employee training and who also had a working relationship with the community college.

The participant selection protocol was implemented, albeit with considerable difficulty; three obstacles were encountered and addressed during this initial process. The first obstacle encountered involved the community college participants' lack of understanding of the term *single-campus community college.* Although the introductory e-mail and the web-based survey explained the study's focus on Illinois' 37 community colleges that were not part of a community college system, such as City Colleges of Chicago or Illinois Eastern Community Colleges, several participants questioned their eligibility to participate. These participants, all of whom were mid- to upper-level administrators with longstanding careers in the Illinois community college system, believed they did not meet the definition of *single-campus community college* because their institutions offered classes off-site at high schools or extension centers. This perception existed despite the fact that the Illinois Community College Board clearly delineates systems from single campuses on its website (ICCB, 2013d). This obstacle was successfully addressed by advising that the administrators had been invited to participate because they were one of Illinois' 37 single-campus community colleges and, therefore, fit both the study's site and participant selection criteria.

A second obstacle was encountered when participants indicated they did not have the financial or contract data required to answer all of the questions on the web-based survey. These questions were located at the midpoint of the survey. Since responses were required in order to complete the survey, some participants were unable to answer the remaining questions. Although the pilot study yielded a recommendation to add a notice on the introductory page advising that contract and financial data would be required to complete the survey, many participants began the survey without this data on

hand. To address this obstacle, the survey questions were reconfigured within SurveyMonkey as optional questions, and the participants were asked to enter a value of *1* so they could complete the survey. The incomplete responses were then cleaned from the data collected and were further tracked as incomplete responses in the field notes.

A third obstacle was encountered with one community college participant who agreed to participate in the study, but who arrived at the interview accompanied by a support staff training coordinator. This training coordinator had both job seniority and heavy daily contact with noncredit workforce training partners, but did not meet the other participant selection criteria required by the study. The administrator agreeing to the in-person interview had met all of the participant selection criteria, but had only been employed by the community college for less than six months at the time of the interview. After a lengthy discussion with both of these individuals, it was determined that the training coordinator could fill in any gaps on the administrator's knowledge of budget cycles. Both parties participated in the interview, and this deviation was similarly recorded as such in the field notes and the data analysis.

Site and Participant Demographics

In order to demonstrate that the five institutions participating in both phases of this study were purposefully sampled and provided maximum variation among Illinois' 36 single-campus community colleges meeting the study's criteria for inclusion, a discussion of the institutions' basic site and participant demographics is instructive. In addition, a review of the five noncredit workforce training partners' site and participant demographics reflects similar methods of purposeful sampling with maximum variation. The adherence to this study's methodology provides a framework and a context for the

participants' responses and, consequently, an enhanced understanding of their perspectives and their experiences.

Community College Site and Participant Demographics

A total of 37 single-campus community college administrators and their noncredit workforce training partners were initially eligible for participation in this study. Since the researcher's community college was surveyed for the purposes of the pilot study, the data gathered from that institution were excluded from the final results, thereby further reducing the number of potential sites to 36. Of those 36 community college administrators invited to complete the web-based survey, 29 participated, for a total participation rate of 80.5%. Of those 29 administrators, 21 of them (72.4%) fully completed the survey and disclosed their institution names, thereby rendering those 21 individuals potentially eligible for participation in the in-person interview process. From those 21 potentially eligible administrators, the first five meeting the site and participant selection criteria were interviewed along with their noncredit workforce training partners. Figure 17 illustrates how the initial population of 37 Illinois single-campus community colleges was narrowed to the 21 institutions whose administrators completed the survey in its entirety. This figure also illustrates how the five administrators subsequently participating in the in-person interview were culled from this group of 21 institutions. The purpose of this illustration is to show how the responses provided by the 21 administrators who completed the web-based survey mirror the responses provided by the five administrators who participated in both the survey and the interview processes, thereby providing the maximum variation prescribed by the study's methodology.

Process of Collecting Survey Data and Selecting Interview Participants
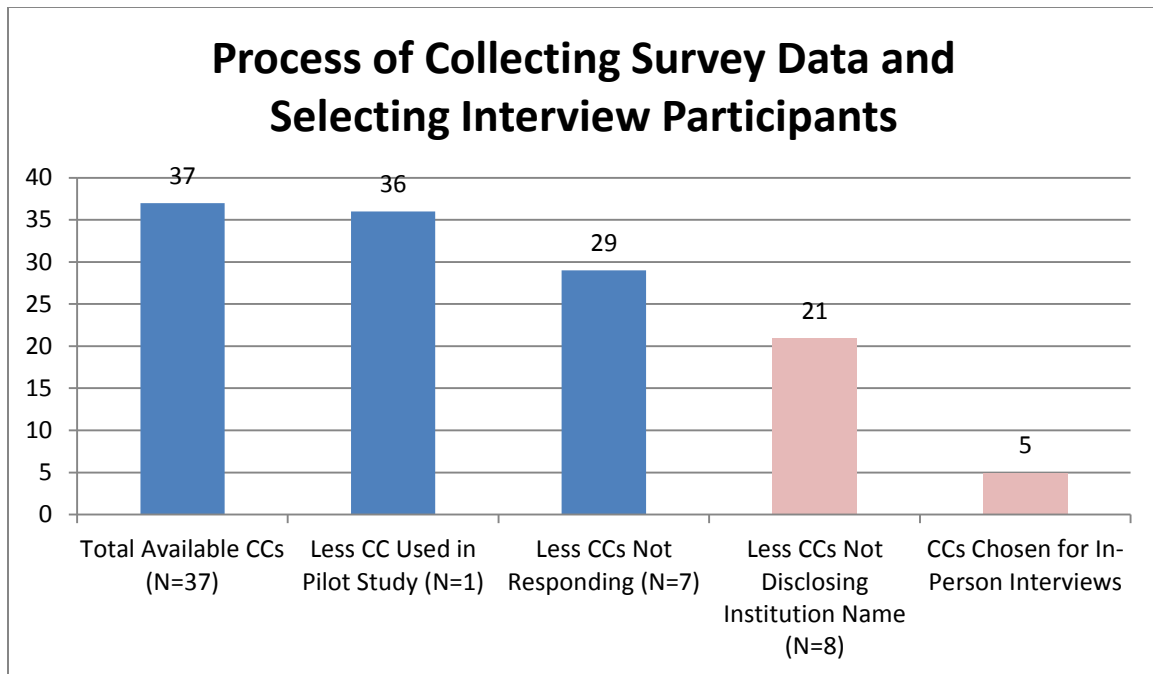
Figure 17. Process of selecting sites from Illinois' 37 single-campus community colleges.
Note. A total of 21 community college noncredit workforce training administrators participated in the web-based survey; from that population of 21, five administrators were selected for the in-person interview process.

Community college administrators: Gender, age, ethnicity, and education.

The web-based survey sought to capture basic demographic information about the 21 community college administrators completing the survey in its entirety. The 21 participants provided survey data about age, ethnicity, and education that are strikingly similar to the data provided by the subset of five participants who subsequently completed the in-person interviews. The only noticeable demographic difference between the 21 administrators completing the survey and the five administrators who subsequently were interviewed was in gender. The data reflects that of the 21 administrators surveyed, females outnumber males by nearly two to one. Of the five administrators subsequently participating in an in-person interview, the gender division was essentially even. Table 23 provides information regarding the gender, age, ethnicity,

and education of the population of the 21 administrators completing the web-based

survey and the subset of five administrators who subsequently participated in the in-

person interviews.

Table 23. *Gender, Age, Ethnicity, and Education of All Community College Web-Based Survey Participants Versus Five In-Person Interview Participants*

Community College Participants Completing Web-Based Survey (n=21)		Community College Participants Completing Both Web-Based Survey and In-person Interview (n=5)	
Gender		**Gender**	
Male	8	Male	3
Female	13	Female	2
Average Age		**Average Age**	
Under 40 years	4	Under 40 years	2
40-44 years	2	40-44 years	0
45-49 years	7	45-49 years	2
50-54 years	5	50-54 years	0
55-59 years	2	55-59 years	0
60-64 years	1	60-64 years	1
65 years or older	0	65 years or older	0
Ethnicity		**Ethnicity**	
Asian or Pacific Islander	0	Asian or Pacific Islander	0
American Indian	0	American Indian	0
Black, non-Hispanic	0	Black, non-Hispanic	0
Hispanic	1	Hispanic	0
White, non-Hispanic	20	White, non-Hispanic	5
Education		**Education**	
Doctorate	2	Doctorate	1
Master's Degree	14	Master's Degree	4
J.D. or Professional Degree	0	J.D. or Professional Degree	0
Other	5	Other	0
Total Responses	**21**	**Total Responses**	**5**

Community college administrators: Job titles and work experience. Of the

21 community college administrators participating in the web-based survey, five were

selected for in-person interviews. These individuals and their institutions were chosen

based upon the maximum variation in size, setting, and geography of the single-campus

community colleges. The survey data reflects that all participants held titles of dean or

director and had slightly less than three years of experience at their respective

institutions. Table 24 illustrates the job titles and years of work experience in that job

position for each community college participant.

Table 24. *Participant Job Titles and Years of Work Experience in Current Position at Community College*

Community College	Job Title	Years in Current Position at the College
Evergreen Community College	Dean of Corporate and Continuing Professional Education	2 years
Gerard Community College	Dean of Careers and Technology	2 years
Hamilton Community College	Dean of Continuing Education and Business Outreach	6 years
Pierce Community College	Dean of Continuing Education	3 years
Richard Community College	Director of Corporate and Community Education	Less than 6 months; 15 years with another community college

Community college administrators: Training contracts and revenue

generated. The community college web-based survey captured information relative to

the numbers of noncredit workforce training contracts completed over the last three fiscal

years and the amount of revenue generated by those contracts. The 21 community

college administrators completing the web-based survey reported an annual average of

nearly 950 training contracts and revenue of $2.91 million generated by their noncredit

workforce training units. Similar results were reported by three of the five administrators

subsequently participating in the in-person interviews. These three administrators

reported an annual average of 575 training contracts with revenue of $1.1 million. Two

of the five administrators subsequently participating in the in-person interviews did not

supply this income information. One was unable to locate the contract and revenue data

requested; the other declined to provide the contract and revenue data. Even with only

three of the five administrators who were interviewed fully responding to this question,

the data yielded reflects that a noncredit workforce training unit can be an impressive

revenue generation source for the community college. Figure 18 illustrates the contracts

completed and the revenue generated for the population of the 21 administrators

completing the web-based survey and the subset of five administrators participating in

both the survey and the in-person interviews.
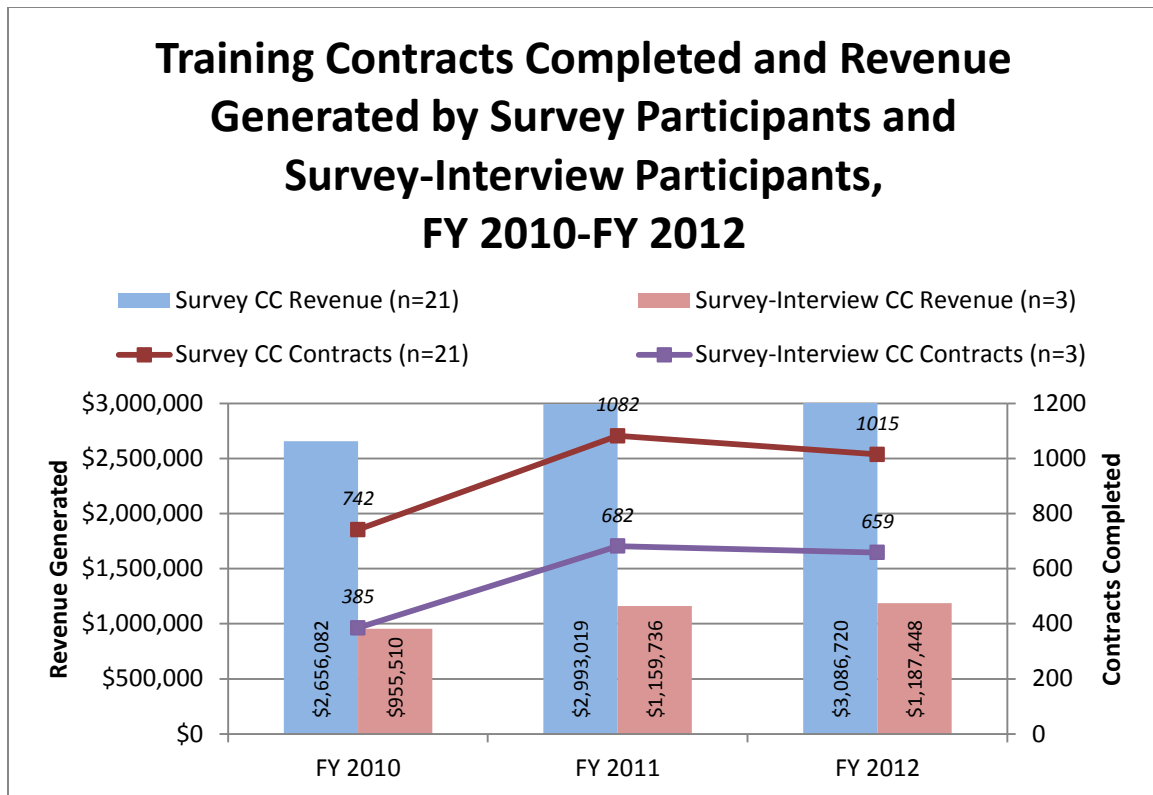
Figure 18. Number of training contracts completed and revenue generated for FY 2010, FY 2011, and FY 2012 for 21 community college administrators completing survey versus five administrators completing both survey and in-person interview.
Note. Two of five administrators who were subsequently interviewed did not provide data on contracts completed and revenue generated.

Community college administrators: Return of revenue to general operating funds or to training unit. The survey also sought to determine whether the revenue generated from these noncredit workforce training contracts was returned to the community colleges' general operating or educational funds or to the noncredit workforce training units' operating funds. Noncredit workforce training units returning their revenues to the colleges' general operating or educational funds are not considered self-sustaining; by internal policy or procedure, they are expected to be contributors to the institutions' bottom lines. The noncredit workforce training units returning their revenues to their own departmental operating funds are considered freestanding and essentially self-sustaining. Figure 19 provides information from the 21 community

college administrators responding to the web-based survey and the subset of five administrators participating in both the survey and the in-person interviews related to the return of revenue generated. The overwhelming majority of the 21 community colleges returned the revenue to the general operating or educational funds; however, this figure also indicates that a higher proportion of the five community colleges under study returned their training contract revenues to the noncredit workforce training unit's operating funds. One-third (seven) of the participants did not or could not answer the question.
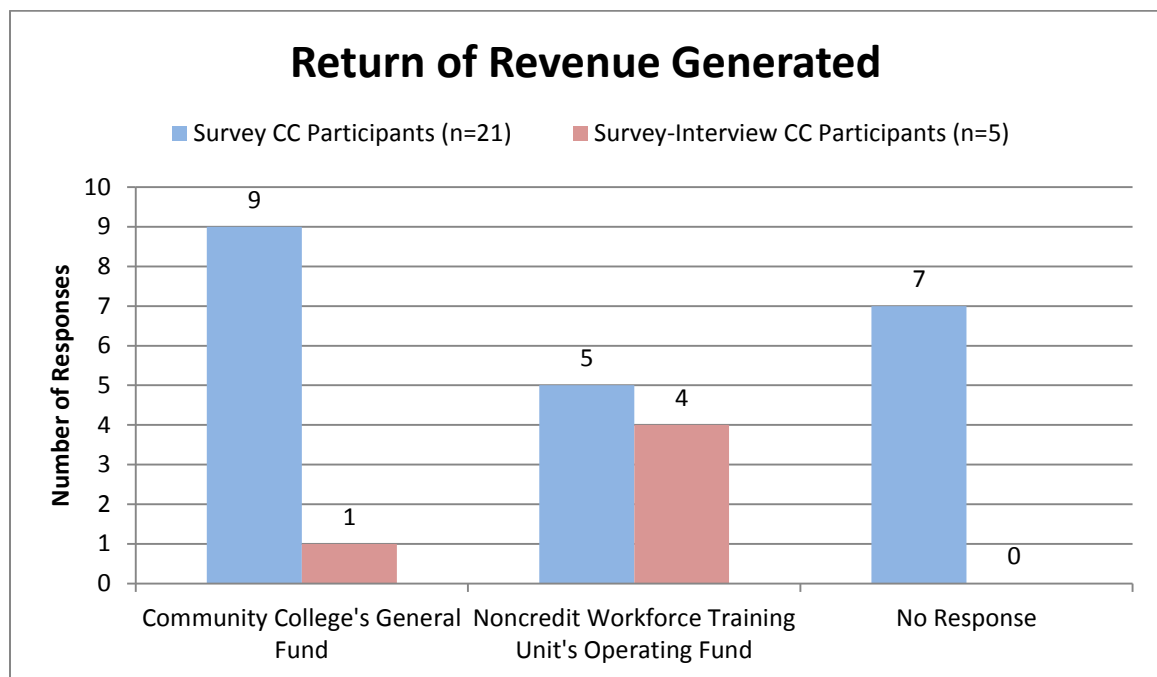
Figure 19. Revenues generated for a community college's general fund versus a noncredit workforce training unit's operating for 21 community college administrators completing survey versus five administrators completing both survey and in-person interview.

Community college administrators: Transfer of noncredit workforce training coursework to credit-bearing coursework. A final key piece of demographic data was elicited by asking the community college administrators whether their units' coursework could be transferred into credit-bearing coursework. The concept of

"retroactive credit" (Van Noy et al., 2008, p. 27) has gained increasing attention in recent

years, employing strategies such as work product portfolios, prior learning assessments,

technical certification examinations, or competency testing. Organizations such as the

Center for Adult and Experiential Learning (CAEL) have placed retroactive credit or

prior learning assessment (PLA) by nationally established standards and guidelines at the

forefront of their activities, stressing that

> PLA is the process by which many colleges evaluate for academic credit the
> **college-level knowledge and skills** an individual has gained outside of the
> classroom, including from employment (e.g., on-the-job training). . . . Many
> students with work experience . . . have technical and work-related competencies
> that have been acquired in the workplace. Colleges that recognize that prior
> learning and offer ways to evaluate it for college credit can help those students
> progress more quickly towards a postsecondary degree or credential, saving the
> student (and in many cases, the employer) both time and tuition dollars. . . .
> These methods [of assessing prior learning], when carried out according to
> nationally-established standards, can establish whether the student has college-
> level skills and competencies that are worthy of college credit [emphasis in
> original] (Brigham & Klein-Collins, 2010, p. 1).

Although nearly one-quarter, or five, of the 21 administrators participating in the

web-based survey opted not to respond to this question, nearly half of the 16

administrators who did respond indicated their community colleges do not permit the

transfer of noncredit coursework to credits leading to a degree or certificate. Three of the

11 administrators who answered this question in the negative expanded upon their

answers in the open-ended response section. The reasons for not permitting retroactive

credit appear to be linked to how the faculty member is paid for a noncredit versus a

credit teaching assignment, not whether the institution has a mechanism for the

assessment of prior student learning. The three administrators' explanations are as

follows:

- I pay the adjunct rate and have to make sure they are within the number of hours they can work. We have unionized full time and adjunct facuclty [sic].

- If a workforce trainer also teaches credit courses, they are doing so on a part time (adjunct basis) for the credit side of our institution.

- Some of our workforce training instructors also teach as adjuncts here or elsewhere. Most do not, but a few do. We occasionally work with a few full-time faculty to teach workforce training courses. We would like to do more of this.

Five of the 21 community college administrators affirmed that their coursework can indeed be transferred into credit-bearing coursework for a degree or certificate. Four of these five administrators expanded upon their answers in the open-ended response section. They detailed a variety of processes for providing retroactive credit or assessment or prior learning as a noncredit bridge to credit-level coursework. The four administrators' explanations are as follows:

- Only if the corresponding credit department allows proficiency. The only program this occured [sic] in was our noncredit firefighter training program where passing the state fire marshal's exam was accepted as proficiency of that course's marterial [sic] and degree credit was granted.

- The main process is to contact the Dean of that content area. They along with full time faculty assess.

- It depends on the subject matter. If it is IT [information technology] they can take industry certification exams. If they pass they are awarded credit.

- Fulltime faculty evaluate the coursework completed relative to comparable course syllabus requirements.

Figure 20 illustrates the responses of the 21 community college administrators completing the web-based survey and the subset of five administrators completing both the survey and the in-person interviews regarding the retroactive awarding of credit or the mechanisms for assessing prior student learning.
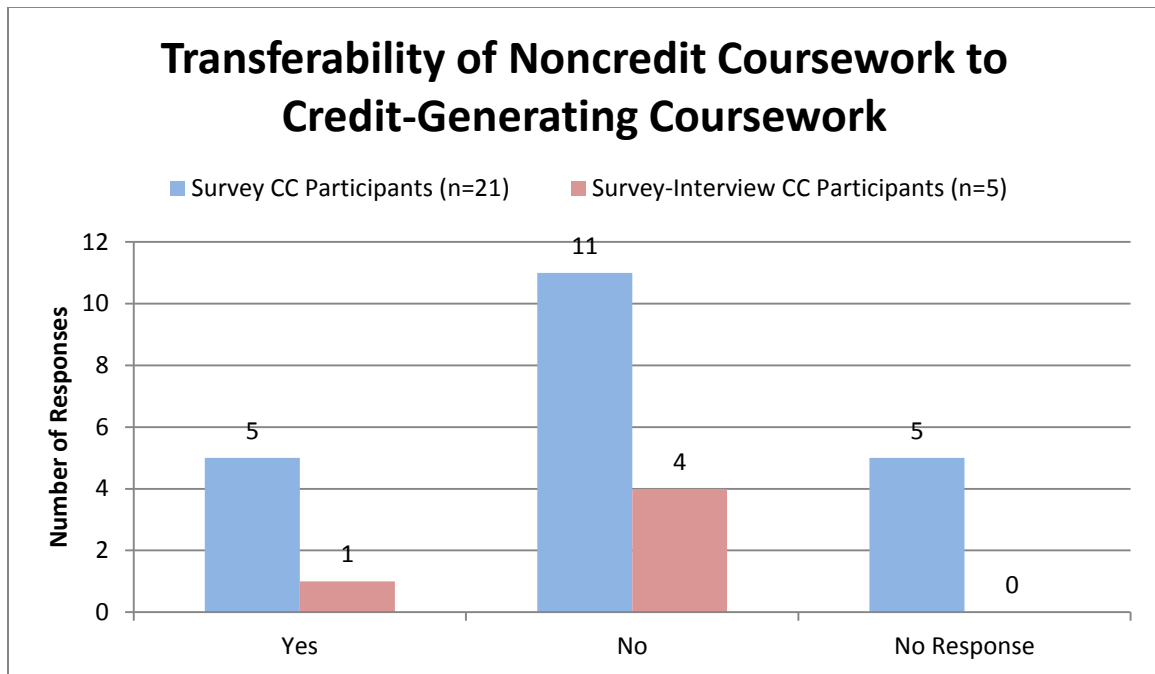
Figure 20. Transferability of noncredit coursework to credit-generating coursework fund for 21 community college administrators completing survey versus five administrators completing both survey and in-person interview.

Noncredit Workforce Training Partner Site and Participant Demographics

In addition to the five community colleges participating in both the web-based survey and the in-person interview process, five noncredit workforce training partners were selected across five varying organizational or industrial areas. The purpose of this selection was to enhance the scope, breadth, and depth of the perspectives and insights gained. Among the five participating noncredit workforce training partners who completed both the web-based survey and the in-person interviews, additional basic demographic information was captured about both the businesses and its administrators or managers.

Noncredit workforce training partners: Gender, age, ethnicity, and education. The survey sought to capture basic demographic information about the administrators or managers employed by the five noncredit workforce training partners.

The data reflects that the overwhelming majority of the administrators or managers were female and white, with at least a master's degree in their occupation or specialty. Slight diversity exists in age among the participants, with ages ranging from just under 40 years of age to 60 to 64 years of age. Table 25 provides information regarding the gender, age, ethnicity, and education of the five administrators or managers employed by noncredit workforce training partners.

Table 25. *Gender, Age, Ethnicity, and Education of Noncredit Workforce Training Partner Study Participants*

Gender	
Male	1
Female	4
Average Age	
Under 40 years	2
40-44 years	0
45-49 years	0
50-54 years	2
55-59 years	0
60-64 years	1
65 years or older	0
Ethnicity	
Asian or Pacific Islander	0
American Indian	0
Black, non-Hispanic	0
Hispanic	0
White, non-Hispanic	5
Education	
Doctorate	0
Master's Degree	4
J.D. or Professional Degree	0
Other	1
Total Responses	**5**

Noncredit workforce training partners: Job titles and work experience. The

five noncredit workforce training partners were selected across five varying

organizational or industrial areas to enhance the diversity of the responses. In addition,

the participants were required to have held their managerial or administrative positions

for a minimum of two years. This would provide them with familiarity with at least one

budget cycle and fundamental knowledge of their noncredit workforce relationships with

the community college. The data reported reflects diversity in managerial levels and

yielded a wide range of perspectives and insights. The five participants are either

employed in training management and delivery or are the highest-ranking executives

(Executive Director or President) within their organizations, with an average tenure of 4.1

years in their positions. Table 26 illustrates the job titles and years of work experience

for each noncredit workforce training participant.

Table 26. *Job Titles and Years of Work Experience for Noncredit Workforce Training Participants*

Organization	Job Title	Years in Current Position with Organization
Greening Partners	Executive Director	3 years
Kappa Construction	President	7 years
Miller Manufacturing	Coordinator of Training	5 years
Otis Mechanical	Training and Development Specialist	2.5 years
Quickspeed Transportation	Department Manager, Project Management Office	3 years

Noncredit workforce training partners: Training contracts completed and cost of training. In addition, the web-based survey captured information about the numbers of noncredit workforce training contracts completed over the last three fiscal years by the noncredit workforce training partners and the total cost of such training to the organizations. The figures include dollars spent on training from all sources, not just from community college noncredit workforce training units; the purpose of this question was to determine the level of financial support businesses and industries lend to the training function. Data reported over the past three fiscal years indicates an annual average of 13 training contracts completed at a cost of $140,000 to the business or industry. The data reflects that while the business and industry partners surveyed spent less on training in FY 2012 than in the two preceding fiscal years, the number of training contracts completed rose significantly during FY 2012. Figure 21 illustrates the business and industry partners' completed training contracts and the cost of such contracts.
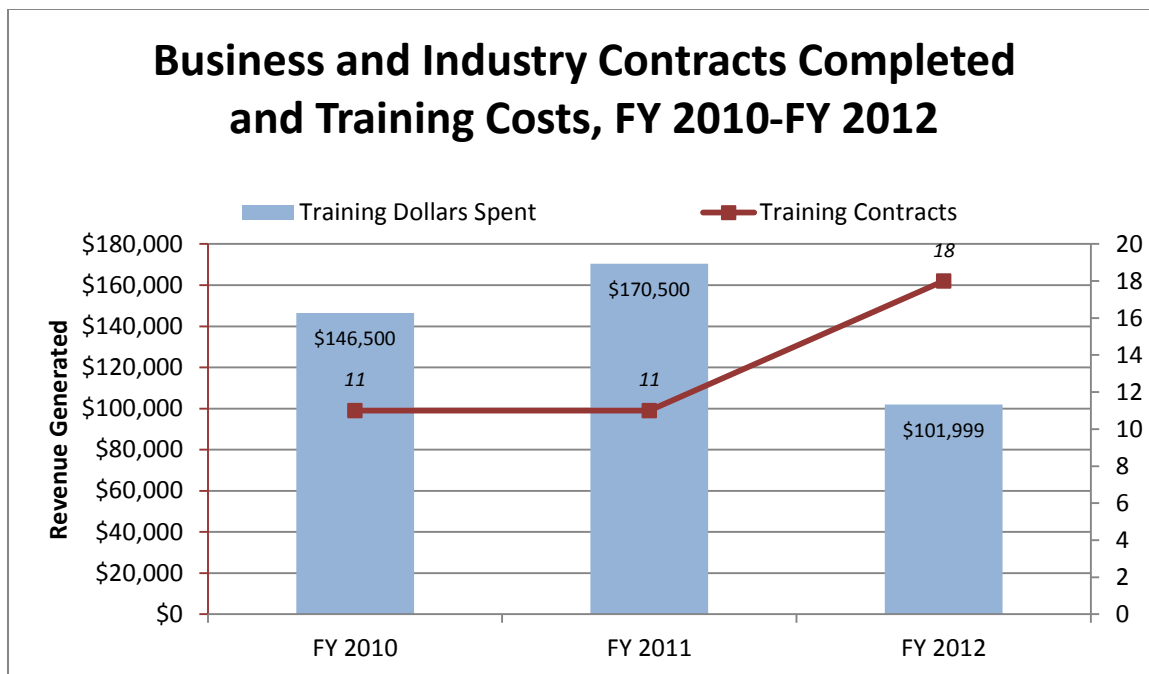
Figure 21. Number of training contracts completed and training costs for FY 2010, FY 2011, and FY 2012 for five noncredit workforce training partners participating in the study.

Web-based Survey Likert Statements and Responses

Demographic data collection of this scope was conducted to investigate and explore the similarities, differences, and varying perspectives among the sites and participants under study. In addition to these key demographic factors, the web-based survey also sought to capture both community colleges' and businesses' perceptions of the ways in which their noncredit workforce training partnerships were developed and sustained. Therefore, a series of 20 identical statements appeared on both the community college and the noncredit workforce training partners' surveys which were mapped to each element or *a priori* theme found in the one construct and two models comprising the conceptual framework.

A Likert scale was used to measure the participants' responses to the statements in this section of the survey, thereby assigning quantitative values to qualitative responses

(Likert, 1932). The use of a Likert scale permitted some basic quantitative analysis of the qualitative data collected. This section ranked participants' responses to a series of statements using a scale of strongly agree (SA), agree (A), undecided (U), disagree (D), or strongly disagree (SD). The Likert scale for this study used a number range from 1 to 5. Statements with an SD ranking were ascribed a number value of 1; statements with an SA ranking were ascribed a number value of 5.

Likert rankings: Lumpkin and Dess's (1996) Entrepreneurial Orientation Construct. The first five statements in the Likert-based survey were mapped to a component of Lumpkin and Dess's (1996) Entrepreneurial Orientation Construct. The responses reflect minute differences between the college administrators' and the noncredit workforce training partners' perceptions of the of community colleges' entrepreneurial orientation levels. The slight disparity in the averages occurring in the levels of freedom and innovation was probed further during the in-person interviews. Table 27 illustrates the following: (a) a survey statement mapped to a component of the construct; (b) the mean response from the 21 community college administrators completing the web-based survey; (c) the mean response from the five community college administrators who completed both the survey and the in-person interview; and (d) the mean response from the survey of the five noncredit workforce training partners who were subsequently interviewed for the study.

Table 27. *Survey Items Mapped to Lumpkin and Dess's (1996) Entrepreneurial Orientation Construct, Along with Mean Responses from 21 Community College Administrators Completing Survey, 5 Community College Administrators Subsequently Completing In-person Interview, and 5 Noncredit Workforce Training Partners*

Item Mapped to Construct	CCs Completing Survey (n=21)	CCs Completing Survey and In-person Interview (n=5)	Training Partners Completing Survey and In-person Interview (n=5)
Statement 1: Our partner has the freedom and creativity to champion new ideas when developing a partnership with us.	4.25 (Agree)	4 (Agree)	3.8 (Neutral)
Statement 2: Our partner has the ability to be innovative and come up with new practices and processes to serve us.	4.5 (Agree)	4 (Agree)	4 (Agree)
Statement 3: Our partner has the ability to take risks, including borrowing or committing resources or capital, in exchange for a high rate of return on their partnership with us.	3.25 (Neutral)	2.1 (Disagree)	3 (Neutral)
Statement 4: Our partner has the ability to be proactive to seek new opportunities for partnerships and to strategically introduce or eliminate practices in response to our needs.	3.75 (Neutral)	3.6 (Neutral)	3.6 (Neutral)
Statement 5: Our partner is competitively aggressive, meaning it meets our demand and responds aggressively if there is competition for our business.	3.25 (Neutral)	2.93 (Disagree)	3.2 (Neutral)

Note. Strongly Agree (SA) = 5; Agree (A) = 4; Neutral (N) = 3; Disagree (D) = 2; Strongly Disagree (SD) = 1.

Likert rankings: Amey, Eddy, and Ozaki's (2007) Partnership Development Model. The next ten web-based survey statements were mapped to a component of the Partnership Development Model conceptualized by Amey et al. (2007). The responses reflect that community college administrators and their business and industry partners are in general agreement on the motivating and sustaining factors comprising the partnership. Of interest in these responses are the slight differences in the business partners' perceptions of partnership development and the role of the champion. These responses stress differences in four key areas: (a) unique motivators prompt partnership development; (b) partnerships are not concluded—indeed, they may continue—when the partnerships' objectives are met; (c) community college administrators routinely solicit feedback after the partnership has been developed; and (d) community college administrators believe they routinely provide a champion to develop and sustain partnerships. Again, these distinctions were probed further during the in-person interviews. Table 28 illustrates the following: (a) a survey statement mapped to a component of the model; (b) the mean response from the 21 community college administrators completing the web-based survey; (c) the mean response from the five community college administrators who completed both the survey and the in-person interview; and (d) the mean response from the survey of the five noncredit workforce training partners who were subsequently interviewed for the study.

Table 28. *Survey Items Mapped to Amey, Eddy, and Ozaki's (2007) Partnership Development Model, Along with Mean Responses from 21 Community College Administrators Completing Survey, 5 Community College Administrators Completing In-person Interview, and 5 Noncredit Workforce Training Partners*

Item Mapped to Model	CCs Completing Survey (n=21)	CCs Completing Survey and In-person Interview (n=5)	Training Partners Completing Survey and In-person Interview (n=5)
Statement 6: There are issues (or antecedents) that prompt a noncredit workforce training partnership, such as past relationships with the community college.	3 (Neutral)	3.33 (Neutral)	3.6 Neutral)
Statement 7: We find that both our business and the community college have unique motivators for pursuing a partnership.	3.5 (Neutral)	3.6 (Neutral)	4.4 (Agree)
Statement 8: Our community college has a "champion" who possesses the social capital, trustworthiness, and respect to forge and sustain a partnership.	4 (Agree)	3.73 (Neutral)	3.8 (Neutral)
Statement 9: When we enter into a partnership, it is for a contextual reason, such as a decrease in productivity, a need for technical support, or a lack of skill.	2.5 (Disagree)	3.13 (Neutral)	3.4 (Neutral)
Statement 10: As we work together, the strengths that each side brings to the partnership become clearer.	4 (Agree)	3.86 (Neutral)	4 (Agree)

Table 28. *Survey Items Mapped to Amey, Eddy, and Ozaki's (2007) Partnership Development Model, Along with Mean Responses from 21 Community College Administrators Completing Survey, 5 Community College Administrators Completing In-person Interview, and 5 Noncredit Workforce Training Partners*

Item Mapped to Model	CCs Completing Survey (n=21)	CCs Completing Survey and In-person Interview (n=5)	Training Partners Completing Survey and In-person Interview (n=5)
Statement 11: In the past, we have terminated or concluded a partnership when we determined the partnership's objectives had been met.	3.25 (Neutral)	3.26 (Neutral)	2.8 (Disagree)
Statement 12: In the past, we have terminated or concluded a partnership when we determined the partnership had failed.	3.75 (Neutral)	3.33 (Neutral)	2.4 (Disagree)
Statement 13: In the past, our partner has terminated or concluded a partnership with us when they determined the partnership had failed.	3.25 (Neutral)	3 (Neutral)	2 (Disagree)
Statement 14: The community college routinely solicits feedback on the effectiveness of the partnership DURING the process of developing the partnership.	3.5 (Neutral)	3.4 (Neutral)	3.8 (Neutral)
Statement 15: The community college routinely solicits feedback on the effectiveness of the partnership AFTER the partnership has been developed.	3.25 (Neutral)	3.53 (Neutral)	4 (Agree)

Note. Strongly Agree (SA) = 5; Agree (A) = 4; Neutral (N) = 3; Disagree (D) = 2; Strongly Disagree (SD) = 1.

Likert rankings: Kirkpatrick and Kirkpatrick's (1993) Four Levels of

Training Evaluation. The last five web-based survey statements were mapped to a

component of the Four Levels of Training Evaluation proffered by Kirkpatrick (1993).

The responses provide an interesting perspective on how and in what ways the

effectiveness of noncredit workforce training is evaluated. While it appears all

participants agree that reaction to the training experience is measured, there appears to be

lack of consensus on the ways in which higher levels of evaluation are designed and

delivered—or whether those higher levels are delivered at all. Because these distinctions

were noticeable and required further investigation, they were probed further during the

in-person interviews. Table 29 illustrates the following: (a) a survey statement mapped

to a component of the model; (b) the mean response from the 21 community college

administrators completing the web-based survey; (c) the mean response from the five

community college administrators who completed both the survey and the in-person

interview; and (d) the mean response from the survey of the five noncredit workforce

training partners who were subsequently interviewed for the study.

Table 29. *Survey Items Mapped to Kirkpatrick and Kirkpatrick's (1993) Four Levels of Training Evaluation, Along with Mean Responses from 21 Community College Administrators Completing Survey, 5 Community College Administrators Completing In-person Interview, and 5 Noncredit Workforce Training Partners*

Item Mapped to Model	CCs Completing Survey (n=21)	CCs Completing Survey and In-person Interview (n=5)	Training Partners Completing Survey and In-person Interview (n=5)
Statement 16: When the community college evaluates the effectiveness of its training, they measure what the participants' reactions were (e.g., did the employees like the training).	4.5 (Agree)	4.4 (Agree)	3.6 (Neutral)
Statement 17: When the community college evaluates the effectiveness of its training, they measure what the participants learned (e.g., they pre-test and post-test the employees).	2.75 (Disagree)	3.46 (Neutral)	2.2 (Disagree)
Statement 18: When the community college evaluates the effectiveness of its training, they measure how the employees' behaviors have changed as a result of training (e.g., do the employees perform a task differently or better as a result of the training).	2.75 (Disagree)	3.4 (Neutral)	1.8 (Strongly Disagree)
Statement 19: When the community college evaluates the effectiveness of its training, they measure whether the training has achieved quantifiable results (e.g., has our production increased; has our error decreased; has our quality improved).	3 (Neutral)	3.13 (Neutral)	2 (Disagree)

Table 29. *Survey Items Mapped to Kirkpatrick and Kirkpatrick's (1993) Four Levels of Training Evaluation, Along with Mean Responses from 21 Community College Administrators Completing Survey, 5 Community College Administrators Completing In-person Interview, and 5 Noncredit Workforce Training Partners*

Item Mapped to Model	CCs Completing Survey (n=21)	CCs Completing Survey and In-person Interview (n=5)	Training Partners Completing Survey and In-person Interview (n=5)
Statement 20: If the community college evaluates quantifiable results of the training, they use a control group.	2 (Disagree)	2.33 (Disagree)	2 (Disagree)

Note. Strongly Agree (SA) = 5; Agree (A) = 4; Neutral (N) = 3; Disagree (D) = 2; Strongly Disagree (SD) = 1.

Entrepreneurial pursuit of noncredit workforce training contracts. In addition to the 20 Likert-based statements, a final survey question addressed whether the community college administrators and their business and industry counterparts viewed the college as *entrepreneurial* in the pursuit of noncredit workforce training contracts. The focus on how and in what ways the institution was entrepreneurially oriented, exhibiting the characteristics proffered by Lumpkin and Dess's (1996) Entrepreneurial Orientation construct, is the cornerstone of this study. Of the 21 community college administrators completing the survey, fewer than half (42.3%) responded positively, and nearly four in ten (38%) offered no response at all. Of particular interest are the responses from the five administrators completing both the web-based survey and the in-person interview and their business and industry counterparts. The participants' perspectives vary significantly as to the entrepreneurial orientation of the institution, as illustrated in Figure 22.
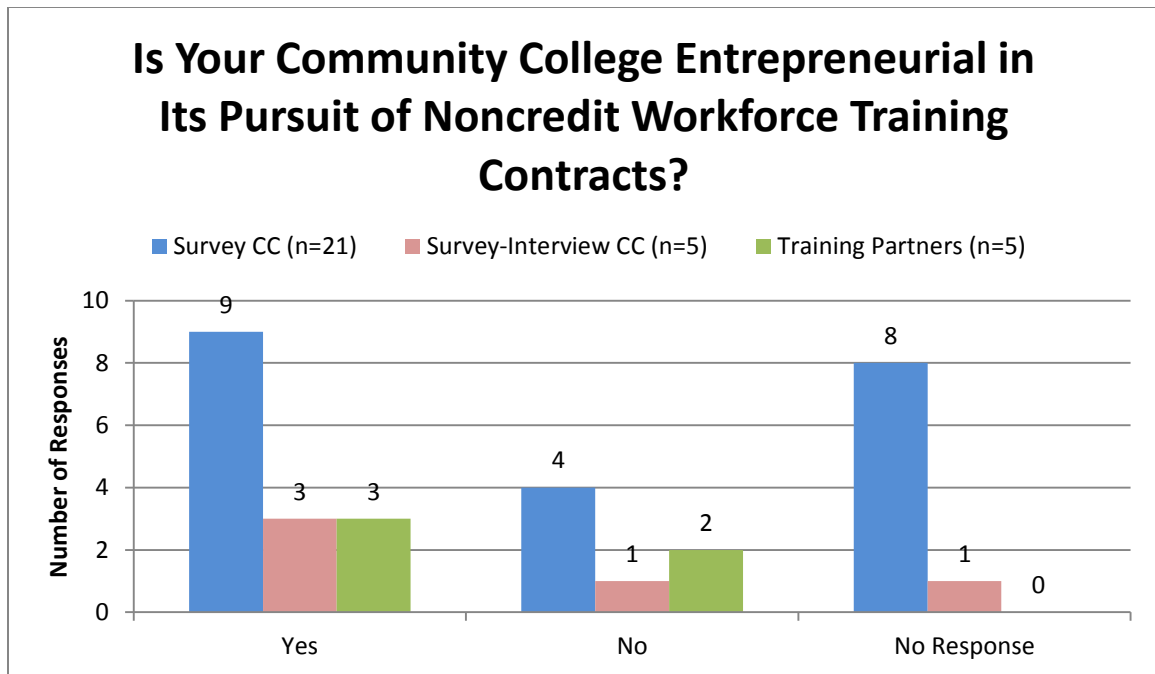
Figure 22. The entrepreneurialism of community colleges in pursuing noncredit workforce training contracts for 21 community college administrators completing survey, five administrators completing both survey and in-person interview, and five noncredit workforce training partners.

Both community college administrators and their noncredit workforce training partners were given an opportunity to expand upon their answer to this question in an additional survey comments field. Three of the five community college administrators who were subsequently interviewed, as well as their business and industry counterparts, offered narrative responses to this question. The responses of the college administrators and the noncredit workforce training partners illustrate the widely varying perceptions of the colleges' entrepreneurial orientations.

Evergreen Community College and Greening Partners. Evergreen Community College's dean of Corporate and Continuing Professional Education was among eight of 21 participating community college administrators (and one of two interview participants) opting not to self-evaluate the institution's level of entrepreneurialism. However, Greening Partners' executive director readily commented favorably upon

Evergreen's entrepreneurialism: "They are alwas [sic] looking for ways to expand their business services."

Gerard Community College and Kappa Construction. An opposing self-perception of entrepreneurial spirit was found in Gerard Community College's survey. Gerard's dean of Careers and Technology captured the institution's level of entrepreneurism with a simple statement: "We react. We don't lead." This perception was shared by the president of Kappa Construction, Gerard's noncredit workforce training partner, who stated: "They [Gerard] did have a liaison officer who worked with local businesses, but they let him go. I don't feel they reach out to businesses or tailor their available training to the needs of local businesses."

Hamilton Community College and Quickspeed Transportation. The dean of Continuing Education and Business Outreach at Hamilton Community College perceived the institution as entrepreneurially oriented and commented at length on Hamilton's definition of entrepreneurialism:

> Two measures of entrepreneurialism are the rate of new program creation and the degree of measured risk. Hamilton measures new course creation ratio as one indicator of program success, and our division has separated operational functions from entrepreneurial functions, allowing creative people to be more creative, and operational people to excel at their work. This also frees the CEO of the division (the dean) to focus on new business.

This self-perception is in surprising contrast to the perception of Hamilton's noncredit

workforce training partner, the manager of Quickspeed Transportation's Project

Management Office (PMO). While Hamilton's dean defined the institution's level of

entrepreneurialism as one predicated upon the rate of new program creation and the

degree of measured risk, Quickspeed's PMO manager perceived Hamilton's

entrepreneurial spirit quite differently. This manager stated:

> Hamilton, while considered the "Cadillac" of community colleges, doesn't seem
> to be very forward thinking in terms of their offerings. This is for both noncredit
> and credit programs. It seems like there [sic] are a bit behind the market in terms
> of providing offerings needed by local businesses.

Pierce Community College and Miller Manufacturing. While Pierce

Community College's dean of Continuing Education evaluated the institution as

entrepreneurial, this dean was one of two administrators from the five under study who

chose not to explain how Pierce demonstrates its level of entrepreneurialism. In contrast,

the training coordinator with Miller Manufacturing, Pierce's noncredit workforce training

partner, readily offered a succinct, positive assessment of Pierce's entrepreneurial

outreach: "They actively propose program ideas."

Richard Community College and Otis Mechanical. Similarly, both the director

of Corporate and Community Education at Richard Community College and the training

and development specialist at its noncredit workforce training partner, Otis Mechanical,

concurred on Richard's level of entrepreneurialism. Their complementary responses

serve to highlight Richard's approach to the development and sustenance of relationships

with their business and industry counterparts:

> **Richard Community College:** We are always looking ahead for the next
> occupational trends or changes in the current occupations which drive our
> programming.

Otis Mechanical: I have been presented with several proposals for training or have had Richard CC bring in trainers just to meet with me to see if they could provide us any value added training. Richard knows it's [sic] market and is continuously looking for trainers who can meet its clients [sic] needs.

Strategies for Data Analysis

All data collected was analyzed through the use of *a priori* themes found in the conceptual framework of the study. The purpose of such analysis was to seek patterns and emerging themes that could further expand upon the ways in which community colleges and their noncredit workforce training partners develop and maintain effective partnerships. In order to fully analyze the data, three key processes were employed: (a) conducting a pilot study with one community college and one noncredit workforce training partner, which verified the suitability and the construction of both the web-based survey and the in-person interview questions; (b) analyzing the data systematically using Creswell's (2007) Data Analysis Spiral; and (c) transferring all of the data, interview transcripts, and related information into NVivo10® to complete the data analysis.

Pilot Study

Prior to initiating the data collection process, a small pilot study was conducted. The purposes of the pilot study were to check the survey and interview questions for accuracy and clarity and to solicit feedback on how the questions could be improved. The researcher's community college and one of its noncredit workforce training partners were selected for participation in the pilot study. Both sets of participants were chosen because of their interest in the study, and they each completed the web-based surveys and in-person interviews pursuant to the contact protocol. To avoid any perception of ethical bias, neither set of responses was used in the finished study; therefore, these participants were particularly useful as pilot test participants.

Both participants offered helpful feedback and suggestions for improvement and clarification. Table 30 summarizes the participants' feedback and suggestions and the corrective action taken.

Table 30. *Pilot Survey Feedback, Suggestions, and Corrective Action Taken*

Pilot Survey Participant	Feedback or Suggestion	Corrective Action Taken
Community College	Since colleges will need to provide the names of two business and industry partners in order to conduct the in-person interviews, let them know that in advance so they do not have to stop the survey and restart it.	Introductory survey page edited to note that two business and industry partners' contact information would be needed; further recommended that this information be gathered prior to starting the survey.
Community College	For Question #5, is the question on initiating a partnership referring to initiation *after* the community college has known a business and industry or *as the result of* a cold call?	The question refers to outreach, which could occur as a result of a cold call. The question was reworded to include the phrase *new noncredit workforce training partner.*
Noncredit Workforce Training Partner	Survey question about training budgets could be a problem if the question is required and the partner has not gathered the appropriate information.	Introductory survey page edited to note that budget information would be needed; further recommended that this information be gathered prior to starting the survey.
Noncredit Workforce Training Partner	Survey question regarding "contracts completed" may be confusing and might include training providers other than the community college.	Reworded the survey question to include the phrase *contracts your company completed with the community college(s) and training costs.*

Table 30. *Pilot Survey Feedback, Suggestions, and Corrective Action Taken*

Pilot Survey Participant	Feedback or Suggestion	Corrective Action Taken
Noncredit Workforce Training Partner	"Impetus" is a "lawyer word." Use it sparingly.	The words *impetus, motivation,* and *prompts* were used throughout the in-person interviews to avoid confusion.

Systematic Data Analysis Using Creswell's (2007) Data Analysis Spiral

The Data Analysis Spiral modeled by Creswell (2007) was employed in this study to maintain trustworthiness in analyzing the complex and multilayered data generated. This spiral framework provides for multiple process loops designed to (a) manage data; (b) read and memo data; (c) describe and classify data; and (d) represent and visualize data.

Managing data. The process of data management involved specific activities with specific data sources. The in-person interviews were researcher-transcribed to provide an early first review of the content. In addition, the transcribed interviews were sent to participants for member checking to confirm the transcripts' accuracy. The paper documents reviewed during the data collection process were converted to digital format for uploading into NVivo10®. All pre-digitized documents were uploaded directly into NVivo10®.

Reading and memoing. The process of reading and memoing involved multiple reviews of the transcripts and the documents collected. Initial review involved reading for comprehension and for an initial assessment of the document's usefulness to the study. Subsequent reviews involved noting reactions to and impressions of the information uncovered. In addition, notations tracked the presence of *a priori* themes

embedded in the conceptual framework and new or emerging themes not previously considered.

Field notes also served as a critical component of the reading and memoing processes. Descriptive field notes, taken prior to and during the in-person interviews, were used to capture information about the interview environment or pieces of data that would require post-interview examination. Reflective field notes, taken at the conclusion of the interview, were used to capture perceptions, thoughts, impressions, and reactions to the interview.

Describing, classifying, and interpreting data. The description, classification, and interpretation of the collected data involved the "winnowing" or narrowing of categories to which Creswell (2007, p. 152) refers. A two-phase coding process was employed to winnow this data into usable categories. The first phase involved initial descriptive coding in order to capture the basic content and substance of the data. Initial descriptive coding began with a shortened list, or list of "lean codes" (Creswell, 2007, p. 152), with the option to expand the categories as the database was reviewed and revisited. The second phase involved analytical coding in order to ascribe the data to one or more driving questions in the study. During the initial descriptive and analytical coding processes, special care was taken to capture segments of data that could represent emerging themes. These code segments can be used to support existing themes and to develop emerging themes in three key ways:

- The codes can reflect information that was anticipated as part of the data collection.

- The codes can reflect new or emerging themes that were unanticipated as part of the data collection.

- The codes can reflect "conceptually interesting or unusual" information that may be of interest to both participants and readers (Creswell, 2007, p. 153).

As part of the *lean coding* to which Creswell refers, the a priori themes embedded in the study's conceptual framework yielded several initial and descriptive codes. These codes were then used to winnow the data into a manageable format that could subsequently be analyzed, represented, and visualized for the reader in the data analysis and conclusions presented in Chapters 5 and 6. Table 31 provides the codes used to describe, classify, and interpret the data by theme.

Table 31. *Codes Used to Describe, Classify, and Interpret Data, Organized by Theme*

Theme	Code
Lumpkin and Dess's (1996) Entrepreneurial Orientation Construct	
Innovativeness	LUM-INNO
Risk taking	LUM-RISK
Proactiveness	LUM-PACT
Autonomy	LUM-AUTO
Competitive Aggressiveness	LUM-AGGR
Amey, Eddy, and Ozaki's (2007) Partnership Development Model	
Partnership Development	AME-DEVO
Partnership Maintenance	AME-MAIN
Antecedents	AME-ANTE
Motivation	AME-MOTI
Context	AME-CNTX
Sustainability	AME-SUST
Unsustainability	AME-UNST
Goals Satisfied	AME-SATS
Outcomes	AME-OUTC
Feedback	AME-FEED
Champion	AME-CHAM

Table 31. *Codes Used to Describe, Classify, and Interpret Data, Organized by Theme*

Theme	Code
Kirkpatrick and Kirkpatrick's (1993) Four Levels of Training Evaluation	
Level 1-Reaction	KRK-REAC
Level 2-Learning	KRK-LRNG
Level 3-Behavior	KRK-BEHV
Level 4-Results	KRK-RSLT
Memorable Quotes from Interview Participants	QUOTE
Emerging Themes	EMERGE

A priori Themes

The *a priori* themes comprising the conceptual framework employed in this study

enhanced the processes of data collection and, subsequently, data analysis. These themes

included (a) entrepreneurial orientation; (b) development and sustenance of partnerships;

and (c) four levels of training evaluation, as noted here.

> *Lumpkin and Dess's (1996) Entrepreneurial Orientation Construct.* How do
> community colleges employ the five characteristics of entrepreneurial
> orientation—innovativeness, risk taking, proactiveness, autonomy, and
> competitive aggressiveness—to impact their relationships with noncredit
> workforce training partners?
>
> *Amey, Eddy, and Ozaki's (2007) Partnership Development Model.* How do
> community college noncredit workforce training units implement the components
> of this model to build and sustain effective relationships with their business and
> industry partners?
>
> *Kirkpatrick and Kirkpatrick's (1993) Four Levels of Training Evaluation.* How
> do community colleges utilize training evaluation to demonstrate the value of the
> services they provide to their business and industry counterparts?

All of the data collected from interviews, documents, surveys, and field notes

were coded and mapped to one or more of the *a priori* themes using the schema outlined

in Table 31. In addition, new or emerging themes and memorable quotations were also

captured and coded to ensure that the data was preserved for analysis. Table 32

illustrates the four driving questions developed for this study and each question's

connection to the relevant *a priori* theme.

Table 32. *Driving Questions and Relationship of* a priori *Themes to Conceptual Framework*

Driving Question	Construct or Model Used for Data Analysis

How do noncredit workforce training units support the community college's mission?	Amey, Eddy, and Ozaki (2007)
	     Partnership Development
	     Partnership Maintenance
	     Antecedents
	     Motivation
	     Context
	     Sustainability
	     Unsustainability
	     Goals Satisfied
	     Outcomes
	     Feedback
	     Champion
	
	Lumpkin and Dess (1996)
	     Innovativeness
	     Risk Taking
	     Proactiveness
	     Autonomy
	     Competitive Aggressiveness

What characteristics define effective community college noncredit workforce training partnerships?	Lumpkin and Dess (1996)
	     Innovativeness
	     Risk Taking
	     Proactiveness
	     Autonomy
	     Competitive Aggressiveness

Table 32. *Driving Questions and Relationship of* a priori *Themes to Conceptual Framework*

Driving Question	Construct or Model Used for Data Analysis

How does the community college initiate community outreach to develop noncredit workforce training partnerships?	Amey, Eddy, and Ozaki (2007)
	    Partnership Development
	    Partnership Maintenance
	    Antecedents
	    Motivation
	    Context
	    Sustainability
	    Unsustainability
	    Goals Satisfied
	    Outcomes
	    Feedback
	    Champion
	
	Lumpkin and Dess (1996))
	    Innovativeness
	    Risk Taking
	    Proactiveness
	    Autonomy
	    Competitive Aggressiveness

What characteristics or elements contribute to successfully maintaining noncredit workforce training partnerships?	Amey, Eddy, and Ozaki (2007)
	    Partnership Development
	    Partnership Maintenance
	    Antecedents
	    Motivation
	    Context
	    Sustainability
	    Unsustainability
	    Goals Satisfied
	    Outcomes
	    Feedback
	    Champion
	
	Kirkpatrick and Kirkpatrick (1993)
	    Level 1 (Reaction)
	    Level 2 (Learning)
	    Level 3 (Behavior)
	    Level 4 (Results)

Qualitative Data Analysis and the Use of NVivo10®

All four stages of Creswell's (2007) Data Analysis Spiral were implemented and even enhanced by the use of NVivo10® qualitative analysis software. The processes of digitizing paper documents, collecting pre-digitized documents, and uploading those documents into a database organized by the *a priori* themes embedded in the conceptual framework of the study provided additional strength to the data analysis. In addition, the software's enhanced data analysis capabilities permitted the uploading of data from social media sites and documents generated in a format other than standard Microsoft Office® applications. Table 33 illustrates the NVivo10® features that were utilized in the data collection and analysis processes and their application to the appropriate phase of Creswell's (2007) Data Analysis Spiral.

Table 33. *NVivo10® Features Utilized in Data Analysis and Application to Creswell's (2007) Data Analysis Spiral*

Feature	Application to Phase of Data Analysis Spiral
Created nodes for storage of *a priori* themes	Phase 1 (Data Managing Phase) Phase 3 (Describing, Classifying, and Interpreting Phase)
Imported Microsoft Word® and Adobe Acrobat® documents, audio files, and Microsoft Excel® spreadsheets, and grouped by node	Phase 1 (Data Managing Phase) Phase 3 (Describing, Classifying, and Interpreting Phase)
Imported web pages and social media data and subsequently grouped by node	Phase 1 (Data Managing Phase) Phase 3 (Describing, Classifying, and Interpreting Phase)
Grouped data sources by folders when data shared characteristics, such as training contracts	Phase 1 (Data Managing Phase) Phase 3 (Describing, Classifying, and Interpreting Phase)

Table 33. *NVivo10® Features Utilized in Data Analysis and Application to Creswell's (2007) Data Analysis Spiral*

Feature	Application to Phase of Data Analysis Spiral
Created memos and annotations to capture observations and linked them to materials with time-stamp	Phase 2 (Reading and Memoing Phase) Phase 3 (Describing, Classifying, and Interpreting Phase)
Created transcripts for audio files and linking them to themes	Phase 1 (Data Managing Phase) Phase 2 (Reading and Memoing Phase) Phase 3 (Describing, Classifying, and Interpreting Phase)
Classified participants' answers by collection	Phase 2 (Reading and Memoing Phase) Phase 3 (Describing, Classifying, and Interpreting Phase)
Queried data to track frequency of phrases used	Phase 3 (Describing, Classifying, and Interpreting Phase) Phase 4 (Representing and Visualizing Phase)
Generated reports, models, and charts based upon themes established in nodes	Phase 4 (Representing and Visualizing Phase)

Adapted from *NVivo10® feature list*, 2012, http://download.qsrinternational.com/ Resource/NVivo10/NVivo10-feature-list.pdf. Copyright 2012 by QSR International.

Document Data Analysis

The documents gathered from the community college noncredit workforce training units and their business and industry partners served not only to triangulate the data, but to add rigor and trustworthiness to the study. A wide variety of documents which addressed the driving questions and provided evidence of *a priori* and/or emerging themes were collected, reviewed, coded, and analyzed. Additionally, the explosion of social media and real-time access to information speaks to the importance of "innovative data collection," which Creswell (2007) defines as "new and creative data collection methods that will encourage readers and editors to examine their studies" (p. 129). To

document that process of innovative data collection, Table 34 offers a listing of the documents provided by the community college participants and those located and collected by the researcher. Table 35 offers a listing of the documents provided by the noncredit workforce training providers and those located and collected by the researcher.

Table 34. *Community College Documents Provided and Located for Data Analysis*

Community College Partner	Training Contracts	Course/ Revenue Statistics	Organization Charts	Web Site Content	Social Media	ICCB Program Reviews	HLC/ AQIP Systems Portfolios	Other
Evergreen Community College	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Slide shows, flyers
Gerard Community College	No	Yes	No	Yes	No	Yes	Yes	N/A
Hamilton Community College	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Flyers, brochures
Pierce Community College	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A
Richard Community College	Yes	Yes	Yes	Yes	Yes	Yes	No	Brochures, catalog

Table 35. *Noncredit Workforce Training Partner Documents Provided and Located for Data Analysis*

Noncredit Workforce Training Partner	Training Contracts	Course/ Revenue Statistics	Organization Charts	Web Site Content	Social Media	ICCB Program Reviews	HLC/ AQIP Systems Portfolios	Other
Greening Partners	No	N/A	No	Yes	Yes	N/A	N/A	Brochures
Kappa Construction	No	N/A	No	Yes	Yes	N/A	N/A	Brochures
Miller Manufacturing	No	N/A	No	Yes	Yes	N/A	N/A	Brochures
Otis Mechanical	Yes	N/A	No	Yes	Yes	N/A	N/A	Brochures
Quickspeed Transportation	No	N/A	No	Yes	No	N/A	N/A	N/A

A variety of documents were sought to facilitate the data analysis process. These documents included (a) training contracts; (b) course and revenue statistics; (c) organization charts; (d) web site content; (e) social media content; (f) Illinois Community College Board program reviews; (g) Higher Learning Commission AQIP systems portfolios; and (h) other miscellaneous promotional materials. Training contracts were requested to determine the kinds of products and services provided to the noncredit workforce training partner. Statistics on the kinds of courses offered and the revenue they generated was also instructive to determine the potential financial influence the noncredit workforce training units could have on the colleges' budgets. Organization charts, which illustrated the location of the noncredit workforce training unit in the institution's hierarchy, were retrieved from the institutions' web sites. Web site content often provided valuable information on the kinds of partnerships the community colleges were developing and maintaining with their business and industry partners, particularly when a new and innovative project was announced in the media. Similarly, social media, including the colleges' Facebook® and YouTube™ postings, referenced relationships between the institutions and their noncredit workforce training partners.

Two unanticipated, yet extremely useful, sources of documents came in the form of Illinois Community College Board program reviews and Higher Learning Commission AQIP systems portfolios. Many of these documents showcased entrepreneurial initiatives between the community colleges and their business and industry counterparts; other program reviews and systems portfolios illustrated the lack of such relationships as impediments to the institutions' progress and even the fulfillment of their missions. Finally, most of the community colleges and businesses interviewed had developed their

own print promotional material, such as catalogs, program brochures, or flyers, which were reviewed and mined for information corresponding to the *a priori* themes utilized in this study.

Summary

This chapter described the processes of qualitative data collection and analysis in order to seek the "extensive detail" to which Creswell (2007, p. 126) refers. The data collection process employed in this study occurred concurrently with initial phases of data analysis. The goal of these concurrent, overlapping activities was to reduce this *extensive detail* into a usable, meaningful format that can be used to draw conclusions or verify study findings (Miles & Huberman, 1994).

The chapter began with a discussion of the site and participant contact protocols implemented for this study. The purposes of a detailed site selection protocol were to establish the study's credibility and dependability and to confirm the findings from the data gathered from community colleges and their noncredit workforce training partners. In addition, the contact protocol included a detailed discussion of how the community college administrators and business and industry managers were selected for participation in the study, again to illustrate the study's dependability and confirmability.

Participant demographics, gleaned from both phases of the sequential multi-method data collection process, were presented and compared in this chapter. Reducing these demographics into a usable format provided a meaningful foundation for the data analysis that will be presented in the following chapter. In addition, the demographics illustrated how the community college and noncredit workforce training partners were purposefully sampled for this study and provided the maximum variation sought. The web-based survey responses provided by the five community colleges subsequently

participating in the in-person interview and their noncredit workforce training partners reflected some disparity in the perception of the colleges' entrepreneurial orientation. These disparities warranted further observation, discussion, and clarification, and they were addressed further during the in-person interviews with the five participating community colleges and their noncredit workforce training partners.

Strategies for data analysis were also introduced and explained in this chapter. The results of the pilot study, which served to refine the web-based survey and in-person interview processes further, were presented. A discussion of the analysis process, conducted utilizing Creswell's (2007) Data Analysis Spiral, also provided context for the tasks of managing, reading and memoing, and describing, classifying, and interpreting the data. The initial and analytical coding sequences were also introduced, and an inventory of the documents and other information sources collected was provided. Each of these documents and information sources yielded useful data that can be mapped to the *a priori* themes comprising the conceptual framework. The chapter concluded with a discussion of how this document inventory was uploaded into NVivo10® for in-depth data analysis and further, how implementation of NVivo10® offered added strength, rigor, and transparency to the data analysis process.

Chapter 5: Data Analysis

Introduction

This chapter offers a detailed explanation of how the data and information

gathered for this study was collected with a view toward the analysis process. All

interview transcripts, survey responses, documents, and related data sources were

uploaded into NVivo10® for analysis through the lens of the one construct and two

models comprising the study's conceptual framework. In addition to multiple reviewing

and coding of all data and information where the *a priori* themes were found, the data

analysis process sought to capture emerging themes of import to both community

colleges and their noncredit workforce training units. An analysis of this information and

the related emerging themes will be instructive to both community colleges and

businesses seeking to develop and sustain effective noncredit workforce training

partnerships.

The chapter is organized into four sections, each addressing a set of *a priori*

themes found in the conceptual framework and employing coding mechanisms for the

analysis process. The Entrepreneurial Orientation Construct (EO), developed by

Lumpkin and Dess (1996), provided one component of the study's conceptual

framework. The five dimensions of the construct included (a) innovativeness; (b) risk

taking; (c) proactiveness; (d) competitive aggressiveness; and (e) autonomy. The

Partnership Development Model, developed by Amey, Eddy, and Ozaki (2007), provided

the second component of the study's conceptual framework. The characteristics of this

model included (a) the partnership development phases of antecedents, motivation, and

context; (b) the partnership sustainability phases of outcomes, sustainability, and goal

satisfaction; and (c) the utilization of a champion and a feedback loop. The Four Levels

of Training Evaluation, developed by Kirkpatrick and Kirkpatrick (1993), provided the third component of the study's conceptual framework. The four levels of this corporate training evaluation model included measuring (a) reaction; (b) learning; (c) behavioral changes; and (d) results. In addition to the examination of these *a priori* themes, several emergent themes were captured and coded. The chapter concludes with a discussion of these emerging themes.

Lumpkin and Dess's (1996) Entrepreneurial Orientation Construct

The concept of *entrepreneurship* has evolved from disrupting the status quo of market structures and introducing new products (Schumpeter, 1934, 2002) to Lumpkin and Dess's (1996) five-dimensional "corollary concept" of *entrepreneurial orientation* (p. 136). The evolution of this *corollary concept* acknowledges the work of Covin and Slevin (1989), who initially cited three dimensions—innovativeness, risk taking, and proactiveness—as key components of entrepreneurial orientation. Lumpkin and Dess's (1996) Entrepreneurial Orientation (EO) Construct builds upon Covin and Slevin's (1989) three-dimensional structure and offers two additional dimensions—competitive aggressiveness and autonomy—comprising the five elements of entrepreneurially oriented businesses. All five dimensions of the EO Construct were used to analyze the data obtained from the five community colleges and the five noncredit workforce training partners interviewed for this study. This analysis produced themes that were illustrative of these five dimensions.

Each dimension of the EO Construct was employed as part of the study's conceptual framework to add meaning and context to the study's purpose. This was accomplished through the development and use of methods designed to uncover data from multiple sources, including (a) online demographic survey questions; (b) in-person

interview questions; (c) documents provided by the interview participants; and (d)

documents provided by third-party sources and/or located independently by the

researcher. Illustrative quotes from both community college administrators and their

noncredit workforce training partners are provided to substantiate the findings and to

offer the qualitative research hallmarks of credibility, transferability, dependability, and

confirmability (Lincoln & Guba, 1985). Table 36 illustrates the dimensions of the EO

Construct and the driving questions and interview questions to which the dimensions are

mapped.

Table 36. *Dimensions of Lumpkin and Dess's (1996) Entrepreneurial Orientation (EO)
Construct and Driving and Interview Questions to Which Each Dimension is Mapped*

EO Construct Dimension	Driving Questions and Interview Questions
Innovativeness **Proactiveness** **Competitive** **Aggressiveness**	**Driving Question:** *How do noncredit workforce training units support the community college's mission?* **Interview Questions:** 1. How do noncredit workforce training units support the community college's mission?
Innovativeness **Risk taking** **Proactiveness** **Autonomy** **Competitive** **Aggressiveness**	**Driving Question:** *What characteristics define effective community college noncredit workforce training partnerships?* **Interview Questions:** 1. Describe the characteristics of an effective noncredit workforce training partnership your community college has had with a local business or industry.
Innovativeness **Proactiveness** **Autonomy** **Competitive** **Aggressiveness**	**Driving Question:** *How does the community college initiate community outreach to develop noncredit workforce training partnerships?* **Interview Questions:** 1. How and in what ways does staying current with industry trends help to initiate outreach with a

Table 36. *Dimensions of Lumpkin and Dess's (1996) Entrepreneurial Orientation (EO) Construct and Driving and Interview Questions to Which Each Dimension is Mapped*

EO Construct Dimension	Driving Questions and Interview Questions
	noncredit workforce training partner?
	2. Have you found that there are external or internal impediments to initiating a noncredit workforce training partnership?

Entrepreneurial Orientation (EO) Construct Dimension: Innovativeness

Lumpkin and Dess (1996) posit that *innovativeness* may "occur along a continuum from a simple willingness to either try a new product line or experiment with a new advertising venue, to a passionate commitment to master the latest in new products or technological advances" (p. 13). This dimension of EO was found to be employed with varying degrees of consistency across the community college administrators participating in this study, a trend verified by their noncredit workforce training partners. Eleven themes of innovativeness were extracted from the data collected and analyzed.

Innovativeness theme 1: The purpose of continuing education. Participants agreed upon two key points: First, community members frequently do not understand the function of noncredit education; and second, the innovative role and function of noncredit workforce training should be included in the community colleges' mission statements, institutional identities, and strategic plans. Two community college administrators cited examples of their innovative activities promoting the purpose of continuing education. Pierce Community College's dean of continuing education agreed enthusiastically with the innovative role noncredit workforce training should (and often does) play in advancing the institution's mission, noting that the college's president referred to Pierce's

noncredit workforce training unit as the college's "research and development arm."

Richard Community College's administration moved its continuing education facilities to

a local mall storefront to make the noncredit workforce training unit more visible to the

community and to encourage enrollment. In addition, both Pierce and Richard

Community Colleges' administrators specifically referenced the contributions of

noncredit workforce training in their mission statements. Finally, Evergreen, Hamilton,

and Pierce Community Colleges have incorporated the goal of developing and sustaining

noncredit workforce training partnerships into their institutional strategic plans, thereby

making explicit their efforts toward entrepreneurial orientation.

Three business and industry partners concurred with the inclusion of noncredit

workforce training in the college's mission statements, institutional identities, and

strategic plans as evidence of innovativeness. These three partners noted that their

community college counterparts effectively demonstrate value by making noncredit

workforce training's contributions visible to the community. The earliest evidence of

innovativeness, according to these business and industry stakeholders, is found when the

noncredit workforce training units are given positions of importance comparable to the

institutions' credit divisions, beginning with inclusion in the mission statement and the

acknowledgement of the units' importance to the economic health of their communities.

For example, Quickspeed Transportation's Project Management Office manager

commented that "colleges embed themselves in the community by working with

businesses." In addition, Otis Mechanical's training and development specialist stated,

"If they [community college noncredit workforce training units] don't help the businesses

that are here, the community will suffer, and then . . . there isn't anyone for them to

educate or train." Finally, Miller Manufacturing's coordinator of training stated, "It's my definition of community, that they're there to educate the community and you know, if you think about it and look at it right now, one of the biggest challenges is the workplace is finding the skilled workers [that the community college is charged with training]."

Innovativeness theme 2: Community colleges' visibility to noncredit workforce training partners. Both community college administrators and their noncredit workforce training partners agreed that the institutions' public visibility can be an indicator of the colleges' innovativeness and entrepreneurial orientations. Community college administrators universally agreed that the simplest activity on the innovativeness continuum includes understanding a client's market and related concerns about designing, developing, and/or delivering training. These administrators also agreed that understanding the business and making a genuine effort to speak its language enhances open communication with business and industry partners. To add to these innovativeness characteristics, Gerard Community College's dean opined that while broad understanding of the industry is important, community colleges must also "know the industry trends and where things are going [and] be pretty grounded into what's actually here."

Interestingly, the president of Kappa Construction, Gerard's noncredit workforce training partner, noted that Gerard had eliminated the position which was responsible for building noncredit training relationships with business and industry. Kappa's president suggested that, as a result, Gerard makes little attempt to learn what local industry trends are evolving. Kappa's president specifically cited Gerard's lack of effort in this area as detrimental to a more in-depth relationship with Kappa, stating:

> He [the Gerard employee whose position was eliminated] was really disappointed
> and upset because he'd worked pretty hard to form some relationships and, you

know, that opportunity just went away. And . . . I haven't heard a peep out of anybody at Gerard since [the elimination of the position]. So.

Similarly, Greening Partners' executive director concurred with Kappa's president's opinion that community college innovativeness is driven by good listening, outreach, and visibility. The executive director commented:

> So, and the only way to keep it [noncredit workforce training] relevant, useful, important, and actually connected to the employers is to have people out there, you know, boots on the pavement, really pounding doors, and making sure that it's what they're offering [that] is working.

Both community colleges and their noncredit workforce training partners found that good listening, outreach, and visibility were important innovations that demonstrated an entrepreneurially oriented approach to the partnership.

Innovativeness theme 3: Community colleges' responsiveness to training needs. At the most basic level on the innovativeness continuum, community colleges can demonstrate innovativeness by responding to training needs rapidly and efficiently. Richard and Hamilton Community Colleges' administrators demonstrated this basic approach by asking their noncredit workforce training counterparts whether they were experiencing specific problems or had specific training needs. However, Pierce Community College's noncredit workforce training unit chose to employ a "consultative" approach to needs assessment, discouraging the "order taker" approach of simply asking what the client needs.

Business and industry participants emphatically asked for more than the simplest "What do you need?" questions and strongly suggested that innovativeness is more than asking what the problems are. In particular, Quickspeed Transportation's Project Management Office manager agreed with the effectiveness of Pierce's *consultative*

approach, suggesting that its noncredit workforce training partner, Hamilton Community

College, could innovate more effectively by employing this strategy. This manager

stated:

> Periodically I get a call and it's like, what kind of training do I need. . . . There's
> not really this fact-finding thing. . . . We have succession planning issues . . . I
> mean, over 50% of the workforce will be eligible to retire in the next five to ten
> years. . . . So there's issues [sic] there, and how do we get the next part of the
> workforce ready to assume some of those duties. Nobody's come to talk to me
> about that. . . . [Hamilton] really could be on the cusp of change, they could be
> more leading edge, they could be more rapid in their response. . . . How long is it
> going to take them to get their [name redacted] degree in what is it [name
> redacted] or whatever it is? I mean, it's going to take them forever. . . . I want to
> talk to that individual about starting one [a noncredit certificate] for
> transportation. I've never gotten a call back. I don't know what her name was,
> but the lady never called me back. So it's like, "My goodness sakes, if you had a
> whole opportunity for business here and [sic] you just don't take it?" That to me
> is amazing. . . . [If] you were a for-profit business, you'd be looking for business,
> you'd be looking for opportunities, and you'd follow up because there'd be extra
> money that you'd be making.

In addition, Pierce's dean of continuing education emphasized that responsiveness to

employer training needs also involves defining the community college's market and

being mindful of other markets, such as libraries or park districts, which may offer

continuing education as personal development and subsequently compete with the

community college for business. The study participants universally agreed that the most

entrepreneurially oriented community colleges demonstrated a level of innovativeness

that is consistent with a business model, including following up and conducting in-depth

discussions with their business and industry partners about the partners' training needs.

Innovativeness theme 4: Staying current with trends. Both community

college administrators and their noncredit workforce training counterparts emphatically

agreed that staying current with business and industry trends demonstrates the

community colleges' innovativeness. However, only Pierce Community College's

noncredit workforce training unit consistently employed environmental scanning as a proactive method of determining noncredit workforce training needs. A recent Pierce Community College program review prepared for the Illinois Community College Board noted that environmental scanning had generated an enrollment increase in noncredit courses with a Program Classification Code (PCS) of 1.6 (vocational skills). Richard Community College used less formal assessment processes when the perceived training need was identified by the business and industry partner; these processes included asking the training partner for an outline of topics to be covered during the training, with no specific training needs assessment conducted. These methods were supported by Otis Mechanical's training and development specialist, who works closely with Richard Community College. All study participants indicated that staying current with industry trends puts the community college's noncredit workforce training unit on the cutting edge of innovation and demonstrates an entrepreneurial orientation to its partners.

Innovativeness theme 5: Prudent use of grant funding to underwrite training initiatives. Community college administrators generally agreed that grant funding can be an innovative initiative to spur new training partnerships. The administrators at Richard, Evergreen, and Gerard Community Colleges noted that overreliance on workforce training grants can condition business and industry partners to seek training only when those monies are available. Specifically, Gerard Community College's dean commented that colleges often over rely on grant monies as a revenue source, not as a tool to generate new revenue sources. This administrator stated:

> We're all committed to the partnership until you need our money, so to speak. . . . [H]aving a partnership of communication and you know, relationships and discussion, everybody's willing to do that. But where that partnership really happens when the money's tight is a challenge. . . . [E]ven during the grant

somehow we allowed that to become the measurement. . . . [W]e were going to make money and that it was going to be profitable to the college.

When community colleges attempt to use grant funding as a tool to encourage business and industry partnerships, this attempt at innovation may, in fact, have an inverse impact on the relationship and make the college appear less entrepreneurially oriented to the business and industry partner.

Innovativeness theme 6: Involvement in local economic development organizations. Both community college administrators and their business and industry counterparts agreed that a college's involvement in the local economic development organization or chamber of commerce can demonstrate innovativeness and outreach. Involvement in Workforce Investment Boards, local economic development consortia, or area chambers can provide potentially innovative opportunities to collect information, make connections, and spur conversation about training partnerships. Two community college and three noncredit workforce training partners supported the idea of their colleges' involvement in local economic development organizations. These partners stated:

> **Richard Community College, director of corporate and community education:** [The local economic development organization] is tabulating a parallel industry survey on recent, local trends in education requirements and will compare both reports against state data. . . . Richard Community College uses the business survey information in its long-term curriculum and training planning. "We're glad they collect it," said Richard's president. "We really look at the list to make sure our programs are in range with the community's needs."

> **Pierce Community College, dean of continuing education:** I will say we've used contacts and events through the chamber and the EDC [Economic Development Council] quite a bit. Both [names redacted] have chambers or EDCs. . . . We try to get involved in those communities also.

> **Kappa Construction, president:** [The former workforce training employee at Gerard] is now involved with the [local name] Economic Development

Foundation. . . . He's done it all, so. He just had that entrée into people, you know, the top managers in all the businesses.

Otis Mechanical, training and development specialist: They stay current by staying in touch. . . . The [local name] Economic Development piece. I talk to all the manufacturing cluster and hear what they're looking for. I know that [Richard Community College's] NIMS [National Institute for Metalworking Skills] certification process was prompted by a conversation with this cluster.

Quickspeed Transportation, department manager, Project Management Office: [The study participant was acquainted with a community college contact who] sits on the [local] Workforce Board. . . . This is a resource that has my interests in mind. They know people I can have contacts with them, and I can meet people that can help me in my path as well. And it can be a very holistic thing.

Community college noncredit units that actively reach out to local workforce boards and chambers can be perceived by business and industry as innovative and, by extension, entrepreneurially oriented in their approach to cultivating and maintaining training partnerships.

Innovativeness theme 7: Articulation of noncredit to credit-bearing coursework. Community college administrators generally agreed with the idea that their institutions could spur innovativeness by articulating noncredit training to credit-bearing coursework. However, many cited potential conflict with the administration and the credit divisions of their institutions as reasons for not pursuing this articulation. In particular, both Pierce Community College and Evergreen Community College have successfully built noncredit coursework bridges to credit-bearing coursework. These deans commented on their bridge-building efforts as follows:

Pierce Community College, dean of continuing education: Coordination [of curricula] with other instructional units at the college will be important to maximize responsiveness and perhaps identify opportunities for students to parlay the vocational [continuing education] credit into other degree and certificate programs. For example, the college currently provides the core continuing education curriculum for law enforcement officers as vocational skills classes.

There may be ways to articulate these courses so that they apply toward the AAS in Criminal Justice Studies.

Evergreen Community College, dean of corporate and continuing professional education: [A]nd so what I ended up doing is I created noncredit courses for what they needed, OK, and in order to take the wind out of the credit side's sails that these courses aren't any good, the curriculum is identical. The only difference is the course number. One's credit and one's noncredit. Taught by the same instructor, same individual, so tell me what's not good about this course? . . . In many cases, they just need to be able to take the course to be able to take the [career program's certification] exams. . . . We just had the [career program's] graduation last week and I was acknowledged for building this program to what it currently is because it wouldn't have existed otherwise.

Other community college administrators expressed concern that building a bridge

from noncredit to credit-bearing coursework could result in the institution competing

against itself for students—a counterpoint to Evergreen's more positive perspective.

Hamilton Community College's dean of continuing education and business outreach

offered this perspective:

I mean the two programs [credit and noncredit] have to be coordinated and not conflict with one another and serve individual populations, but you can't have credit faculty controlling the types of programs that are offered in noncredit. Because what would end up happening is that eventually you're going to recreate a credit model in a noncredit program. You're going to lose a lot of entrepreneurial aspects. . . . We don't want to pull students, students who are appropriately placed in your [credit] program, we don't want to pull them off. Or siphon them off. . . . We want to make sure that it's coordinated, that there isn't a conflict. That we're not drawing on the same market of students.

Gerard Community College's dean had joined the institution from a Pacific state

community college that focused on bridges from noncredit to credit coursework, but

expressed frustration at the inability to develop a similar bridge at Gerard. Conversations

between this dean and Gerard's leadership on this topic had proven fruitless, and further

investigation of this bridge program had been delegated to an associate dean who

discontinued work on the project. Gerard's dean was clearly frustrated by the college's

inability to complete the project. During the interview, this dean openly considered revisiting the idea with college leadership, but dismissed it, saying, "You know, I'd like to talk to some of—well, it's not my problem anymore."

Of the business and industry participants citing innovative practices, Greening Partners' executive director noted that community colleges should offer noncredit to credit bridges. In addition, Greening's executive director posited that community colleges could be much more innovative, and, by extension, more entrepreneurial if they were less restricted by their districts' geographic boundaries and more focused on regional recruitment. The executive director stated:

> . . . colleges are trying to work on this, you know, articulation from the noncredit side to the credit side. . . We need to offer it on our own schedule so we can't follow the normal semester schedule. We need to offer it in a nontraditional timeline and we're interested in certificates. . . . I do think that's useful to have this articulation for [noncredit] students to be able to get credit. . . . Because the opportunity and chance that someone does want to pursue a degree, ultimately. Then they went through our program to get a job and they ultimately want to get an AAS in manufacturing, which Evergreen Community College offers, these four classes that they spent six months taking should apply. . . . Because it benefits the college either way. . . . I think it's a mistake for the colleges to duplicate each other's programs. . . . When you're investing in capital equipment and it's, you know, it's going to expire, it's only going to be relevant for a couple of years and then we'll need, it'll need to be replaced, you have to be smart about it.

Although only two of the five community colleges participating in this study cited frequently insurmountable obstacles to articulating noncredit and credit-bearing coursework, business and industry partners noted that regional outreach is an important component of entrepreneurial orientation. A community college's attempt to build bridges between noncredit and credit-level coursework can be seen as entrepreneurially oriented to the businesses and industries served by the institution.

Innovativeness theme 8: Bringing potential noncredit workforce training partners to campus. Community college administrators agreed that innovativeness can frequently be demonstrated to noncredit workforce training partners when those partners participate in on-campus activities. For example, Richard Community College hosts career orientations and career fairs to bring employers to campus. In addition, Richard offers skills assessments, such as the ACT-based WorkKeys© examinations, to prospective employees of area businesses at no charge to the business and industry partner. Richard also offers "Breakfast and Learn" sessions to demonstrate new manufacturing training opportunities to prospective employers. Similarly, Gerard Community College offers periodic "manufacturing roundtable" discussions with area employers to get a better grasp of the area's training needs. The executive director of Greening Partners, the noncredit workforce training partner of Evergreen Community College, concurred with colleges' outreach efforts to business counterparts, especially if the business partner has had a prior unpleasant experience with the college. The executive director illustrated this point, stating:

> Sometimes the colleges have to overcome their own reputations. . . . [P]eople remember things from a long time ago and then decide never to come back. . . . So we are trying to reaffirm outside of the college, look, the colleges are offering great programs. Maybe you don't know. Maybe you don't know what's happened in the last ten years. Maybe you're not aware of how we're customizing things for this growing industry.

All study participants agreed that the effort to bring business and industry to the college campus, with the goal of providing creative opportunities to meet and connect with prospective employees, is illustrative of an entrepreneurially oriented community college.

Innovativeness theme 9: Coordinating training logistics. Both community college administrators and their business and industry counterparts agreed that the

colleges can demonstrate innovativeness by effective coordination of training logistics, such as convenient times and locations or flexible course start and end dates. The administrators at Evergreen, Hamilton, and Richard Community Colleges all cited the importance of open entry/open exit scheduling and finding classroom space for those noncredit courses as evidence of innovation. Pierce Community College's dean of continuing education added that making the training available on the employer site demonstrates innovation and makes a noncredit workforce training session accessible and less threatening for an employee who is reluctant to come to a college campus. This dean commented:

> And as the conversation nationally is about completion and all of that, I think it ties right into that. It's taking these students one step farther down their educational path and that's what we're here for and so we're meeting students where they are. Talk about student success and personalized student support, it's accessible, it's at the union hall, where these guys go already, they're intimidated to come to campus, they are, so.

Similarly, two noncredit workforce training partners offered specific examples of innovativeness in coordinating training logistics. Otis Mechanical's training and development specialist, who is the business and industry partner of Richard Community College's noncredit workforce training unit, cited Richard's ability to work around 24/7 production schedules as an example of innovativeness. This training specialist stated, "And it's easier to customize what we need through them [Richard Community College], particularly you know, we run here 24/7 at most of our facilities, so accommodating shifts and all of that, they're very helpful with." Miller Manufacturing's coordinator of training, who is the business and industry partner of Pierce Community College's noncredit workforce training unit, believed that Pierce's ability to coordinate flexible scheduling and on-site training were two examples of innovativeness. Miller's coordinator

additionally felt that Pierce's ability to bill for training services and prorate payments across two fiscal years demonstrated an innovative approach. This evidence of Pierce's entrepreneurial orientation was particularly helpful to Miller in an economy where training dollars continue to be tight.

Innovativeness theme 10: Compliance with Illinois Community College Board registration guidelines. Two community college administrators suggested that current Illinois Community College Board (ICCB) guidelines hampered their ability to generate noncredit workforce training partnerships with business and industry. Specifically, Hamilton and Gerard Community Colleges' deans stated that because employers were often reluctant to provide employees' birthdates and Social Security numbers, the colleges were often precluded from collecting state reimbursement for vocational skills courses. The lack of clarity in whether and how personal student data should be collected resulted in confusing policies and procedures within each institution, as illustrated by the following:

> **Hamilton Community College, dean of continuing education and business outreach:** [T]here are additional protocols layered on by ICCB, which is very limiting. So, for example, one of the big barriers that we have. . . is that you need to have a student's soc [Social Security] number. You don't have to but it's frowned upon it you don't have it, that unique identifier. Well, you have to build a student record for the student. In many cases, the employer will simply say no, we're not going to give you that information, you know, that's confidential information. . . . [H]ow do you build a student record, a credit record, if they won't give you the student's name, address, phone number, date of birth? Because otherwise you're just creating duplicate records in your registration system, and midterm enrollment verification. . . . There are various components that become very difficult in an employer setting.

> **Gerard Community College, dean of careers and technology:** [W]e would often get chastised from administration that we didn't have a student Social Security Number. And so you know . . . the lady refuses to give us her Social Security Number and yet, then I go to Chicago and I hear that there's colleges who don't collect Social Security Numbers even for their credit students. But yet

our institution is telling us that it's required by ICCB and you aren't going to collect their Social Security Number, then you can't allow them to take the class.

Both Hamilton and Gerard Community Colleges' deans were seemingly unaware that many community colleges work around this dilemma, and thereby register noncredit students, by assigning unique identifiers to students who decline to offer a Social Security Number. In fact, ICCB enrollment reporting policy specifically requires the collection of either a Social Security Number *or* a "locally assigned identifier," such as a college-assigned identification number (ICCB, 2009, p. V-5). Not surprisingly, none of the business and industry partners surveyed cited ICCB compliance issues as an impediment to developing entrepreneurially oriented partnerships with community colleges; however, the community college administrators' comments reflect a lack of understanding of ICCB procedures that could potentially be detrimental to the relationships they are attempting to develop and maintain.

Innovativeness theme 11: Partnership strategic planning. Both community college administrators and their noncredit workforce training partners spoke to the importance of strategic planning as an innovative, entrepreneurially oriented practice. Hamilton Community College's dean of continuing education and business outreach spoke enthusiastically of regular planning meetings with some of their largest clients so that the college could respond quickly to client requests. This administrator stated:

> Well, we have for our regular clients, we have regular meetings, planning meetings. We reach out to them annually at a minimum. We work with a client, especially clients that we have an ongoing relationship with, we try to get a sense of their plan. And that's one of the things we do, you know, we think deliberately about training. I would say that that's probably the most important thing that we can do with the client. Some of them don't have an interest in it because they're more short-term focused. But I would say if you're going to sustain a lasting relationship, at some point, you need to get to that.

Pierce Community College's dean of continuing education, who engages in strategic

planning with the institution's business and industry partners, urged other institutions to

strategically plan for training. This dean also believed that community colleges can

enhance the training environment by transforming noncredit training courses into places

where clients can "test the waters." Evergreen Community College's dean of corporate

and professional education commented that entrepreneurially oriented institutions can not

only provide rapid response to training needs, but can also add value and innovation to

future training initiatives. This administrator commented, "And that's the one thing that

we tell them, is that we're here to serve you and respond to whatever your training needs

may be. And we just leave it as we have a rather substantial cadre of subject matter

experts that can literally respond to anything that you need."

Noncredit workforce training partners also commented favorably on the

importance of a strategic training plan between their businesses and the community

college. The president of Kappa Construction, the business and industry partner of

Gerard Community College, noted that employers wait for the community college to

contact the employer and plan for training needs, not the other way around. This

president stated, "We wait for the community college to contact us. We don't go

knocking on your door." Similarly, Miller Manufacturing's coordinator of training, who

is the business and industry partner of Pierce Community College, cited Pierce's

informal, annual approach to strategic efforts, including the creation of a "catalog" of

courses that Miller would like to conduct over the calendar year and the coordination of

schedules, budgets, and resources. This coordinator stated:

> One is they [Pierce Community College] will work to establish classes that will
> meet the schedules of our participants. That's the main thing. Otherwise, well,

> couldn't happen if we had to fit into what's in the catalog. Um, they are moderately priced, so we can get a lot of bang for our buck there. Um, tremendous facilities that we don't have to pay for. And they're very open to listening. . . . [Pierce continuing education staff] looks at what the needs are and even if they can't do it, [they] help me find alternatives to get it done, which you know, again is a tremendous value.

Both community colleges and their business and industry partners agree that the focus on a strategic planning and scheduling effort demonstrates a level of innovativeness indicative of an entrepreneurially oriented community college.

Entrepreneurial Orientation (EO) Construct Dimension: Risk taking

Lumpkin and Dess (1996) further posit that *risk taking* is a critical dimension of entrepreneurial orientation and is often exemplified by assuming "heavy debt or making large resource commitments, in the interest of obtaining high returns by seizing opportunities in the marketplace" (p. 144). This dimension of EO was found to be employed to varying degrees among the participants interviewed. Four themes of risk taking were extracted from the data collected and analyzed.

Risk taking theme 1: Definitions of calculated risk. Both community college administrators and their noncredit workforce training partners agreed that risk taking is critical to the growth and development of the partnership, though the processes did not involve the assumption of debt or large resource commitments as proffered by Lumpkin and Dess (1996). Instead, both community college administrators and their business and industry counterparts suggested more deliberate measures of calculated risk in their responses. Pierce Community College's dean of continuing education commended the institution's president for providing the freedom to take a calculated risk for the client's benefit. Pierce's dean felt that the noncredit workforce training unit had the freedom to take calculated risks and to inform the client of new products and services which may be

needed in the future. This freer approach to risk taking is in marked contrast to the

approach utilized by Hamilton Community College. Hamilton's dean of continuing

education and business outreach offered the most conservative approach to the idea of

calculated risk, limiting the institutional risk level to that which they were certain they

could provide the customer. Hamilton's dean stated:

> Training resources that are needed to solve a problem are like within a sweet spot
> for us. It's a developed area of expertise. There oftentimes, we pass up, not
> always, but often we pass up on opportunity because the expertise that's needed,
> we just can't go out and buy. Or it's kind of artificial for us to go out and buy it
> through consulting.

Similarly, business and industry partners agreed that the mark of an

entrepreneurial partnership involves the dimension of risk taking; however, the

participant businesses and industries were not in agreement that their community colleges

engaged fully in such risk taking. Quickspeed Transportation's Project Management

Office manager, who is the noncredit workforce training partner of Hamilton Community

College, lamented Hamilton's overly conservative approach to risk taking. This manager

stated:

> [I]t would be nice to also have . . . something where it was just a little more
> progressive and maybe a little more assertive in how they are approaching me. . . .
> I don't have the impression [Hamilton] is really the most progressive. It may be
> the Cadillac of community colleges, but it maybe isn't the most progressive.

Conversely, the executive director of Greening Partners, the noncredit workforce training

partner of Evergreen Community College, praised Evergreen for its ability to assume risk

and compete with an increasing influx of for-profit training providers and four-year

colleges and universities. The executive director stated:

> We're competing with lots of things. We're competing with the for-profit
> training providers. We're competing with all four year universities, our own
> institutions, all kinds of things. So figuring out markets that are growing. . . . In a

way that's new and unique and ahead of the curve is our constant battle. . . . [T]here's so much that you have to sort of follow that and try your best to be in front of it.

The idea that a community college would engage in some level of risk to serve the partnership more effectively holds appeal for the business and industry partner and is a hallmark of an entrepreneurially oriented community college.

Risk taking theme 2: Positioning the community college as a regional training provider. Illinois community colleges have historically been geographically landlocked within their specific districts. This "gentleman's agreement" between institutions has traditionally meant that colleges avoid recruiting students outside of the district's boundaries. Unfortunately, this strategy often does not adequately serve a business and industry partner with plant facilities located in multiple community college districts. The study found both community colleges and their business and industry partners agreed that colleges could demonstrate an inclination to take risk by partnering together and offering services as regional training providers, thereby pooling resources and better serving their business and industry partners.

Two community college administrators offered specific examples of regional training partnerships that cross their districts' geographic boundaries. Hamilton Community College's dean of continuing education and business outreach discussed a noncredit workforce training partnership with a local business requiring the development of a "train the trainer" curriculum for trained commercial driver's license (CDL) credentialed tractor trailer drivers. Hamilton's training staff developed a custom curriculum for CDL trainers in conjunction with the business's human resources area. This custom training program could then be distributed to each community college

district where the business has a satellite location, thereby maintaining consistency in the delivery of the training content. Hamilton's dean noted, however, that creating such a network to serve the needs of regional employers is a calculated risk because of the territorial nature of community college boundaries. For example, a neighboring community college district might perceive this regional outreach as a threat to its own economic livelihood and result in turf battles between institutions.

Evergreen Community College's dean of corporate and continuing professional education acknowledged this territorial approach to college district boundaries, yet commented at length on how regional networks could add value to businesses and industries when multiple community colleges enter into the partnership. Evergreen, in partnership with Greening Partners and two other Illinois community colleges, has developed a manufacturing credential that gives each community college the ability to leverage their resources in a manner best befitting the institution. Evergreen's dean noted:

> I mean, that's a little different model, and it was challenging initially, because especially when you have three different colleges, getting them to work together closely and respect each other's territories. . . . I mean, [institution name redacted] was in our area all the time, and that's improved considerably, and so we're—we try to be respectful and try to work together, and I think there's the understanding now that if we work together we accomplish more than trying to work against one another. . . . Each college [in the manufacturing partnership] has different equipment, each college has a slightly different grouping of courses that they offer as part of this, and so, each one does what they can.

The executive director of Greening Partners, Evergreen's noncredit workforce training partner, concurred with the idea that thinking regionally, while a calculated risk, can result in benefits to all stakeholders. The executive director provided an apt description of thinking regionally, stating:

> [M]anufacturing is where there are opportunities. And it's green because not only are we manufacturing goods in alternative industry sectors like wind turbine production, solar panel production, etc., but we are helping companies become leaner and more efficient. . . . Not to mention that getting people employment in jobs where they live reduces transportation, reduces emissions, it reduces general carbon footprints, so we're, so it might be a little bit of a creative explanation, but we believe that the jobs are green. . . . [W]e made a case to [name redacted] that we should focus on manufacturing. . . . [A]nd we were looking at [institution name redacted] and Evergreen because geographically they were local. [Institution name redacted] because it really had the expertise in the industry. So [name redacted] has the most advanced manufacturing training program at a college in the region. By far.

Although community colleges engage in calculated and even leveraged risk taking, it is apparent that they do not engage in the level of high-stakes risk taking to which Lumpkin and Dess (1996) refer. In fact, the notable reluctance to engage in high-stakes risk taking appears to be grounded in the community colleges' approach to serving the community located exclusively within the district boundaries.

Risk taking theme 3: Notable characteristics of risk aversion. Both administrators and their noncredit workforce training partners agreed that community colleges behave in a particularly risk-averse fashion. Interestingly, the study participants often appear to place accountability for that risk aversion on the other partner, offering a dynamic that could impact a partnership's ability to be flexible and attentive to stakeholder concerns.

Gerard Community College's administrator, the noncredit workforce training partner of Kappa Construction, stated it succinctly: "We're pretty risk averse." This administrator expanded upon that statement, commenting:

> [T]he college has really questioned whether or not this [noncredit workforce training] is a viable option because we're not generating enough revenue to fund the expenses. And so I don't think we're necessarily an entrepreneurial college. . . . I think that those of us that work in the workforce or noncredit or any of the kind of extraneous missions of the college really see the need. . . . but given the budget situation, being able to sustain it is a challenge. . . . So far the majority of employers, the connections seem to be entirely on our part. You know, they're happy to work with us, but they want to kind of sit at the end of the pipeline and watch the trained students pop out.

Two noncredit workforce training partners cautioned community colleges against being so risk averse that the institutions let new and potentially valuable relationships drift, or even fail before they have begun. The executive director of Greening Partners, who is the business and industry partner of Evergreen Community College, spoke at length about a former community college administrator who opted out of a high-stakes, high revenue-generating partnership, only to regret it when another community college partook in the financial success of the partnership some months later. Greening's executive director noted that this administrator's regret has lasted until the present day, stating:

> They are also not a part of the big INAM [Illinois Network for Advanced Manufacturing] grant . . . and that was another unfortunate set of circumstances because all of those [INAM participating] colleges have gotten half a million dollars for capital improvements in a growing industry and they're [institution name redacted] not part of it. So anyway, they were not excluded purposefully. They were invited and chose not to.

Similarly, Quickspeed Transportation's Project Management Office manager, who is the business and industry partner of Hamilton Community College, suggested that

Hamilton's aversion to risk had a negative impact on its relationships with area

employers. This manager described this risk aversion at length, stating:

> It's almost like they're instead of being on the leading edge of a trend and looking at trends themselves and figuring it out, it's almost like there's this mindless following of . . . following the stereotype of government that this is how we're that hot field, well that hot field may no longer be hot. . . . [S]ometimes it seems like Hamilton, just as Quickspeed, is mired in the bureaucratic mindset. So you have a self-selection process of people who are into that and are comfortable with that, and are probably risk-averse by their very nature who are then running these programs and you don't want to do anything that's too radical because that's just an uncomfortable thing. And they're also looking at well, there's these obstacles in terms of how you could look at a situation and go, "OK, these are all the obstacles we have," and let that wall build and stop you, or you can go, "OK, so these are the obstacles, now let's figure out how we can get through them." And that will determine your outcome.

Community colleges by virtue of their funding streams may not be able to leverage the

kind of high-stakes risk taking proffered by Lumpkin and Dess (1996). However, an

aversion to risk of any kind appears to have the ability to affect negatively this important

dimension of entrepreneurial orientation.

Risk taking theme 4: Competing with external and internal training

initiatives. Illinois community colleges, like other two-year institutions nationally, are

continually competing for increasingly scarce fiscal resources. This financial dilemma,

found at the federal, state, local, and institutional levels, makes competing with other

training providers for business a particular risk. Both community colleges and their

noncredit workforce training partners commented on the need to be creative in the

competitive processes for earning those training contracts.

In June 2013, Richard Community College applied for grant funding from the

United States Department of Labor to build an advanced manufacturing mechatronics

laboratory on its campus. Richard's administration intended to build the facility

regardless of the grant award, but sought the assistance of Otis Mechanical, its noncredit workforce training partner, to support the grant application. Otis's leadership wrote letters of support for the grant, which will be awarded in late 2013 or early 2014, and issued joint press releases with Richmond's administration touting the community college, the curriculum, and the ability to partner on a training effort that would bring good-paying jobs to the community. Richard's administration returned the favor to Otis for the manufacturer's support when Otis received Illinois tax credits and grant dollars to upgrade a manufacturing facility that brought 60 new jobs to the area. These grant dollars were used to underwrite a training partnership between Otis and Richard to develop skills and competencies for those new hires.

Two other community colleges agreed with Richard's efforts at creativity in responding to the external and internal training initiatives. Evergreen Community College, the noncredit workforce training partner of Greening Partners, sought to maintain high-quality programs through the purchase of updated classroom equipment and cutting edge technology. In addition, Evergreen's dean of continuing and professional education actively seeks participation from Evergreen's business and industry partners on the college's career education advisory committees, thereby providing a showcase for the noncredit education training functions it provides. Pierce Community College, the noncredit workforce training partner of Miller Manufacturing, is located in a community with several Fortune 500 corporations. All of these international corporations have in-house training departments. Pierce's dean of continuing education noted that creativity and risk taking are keys to urging participants to leave the corporation and come to Pierce's campus. Pierce's dean cited the offering of a

nontraditional training opportunity as a way to compete with corporate in-house training,

explaining the challenge as follows:

> The battle we fight is that companies like [names redacted] are so big that they do a lot of their [training] internally. So we do very little with our biggest employers in the community because they do so much of it internally although we are just in the second year of a leadership series [where] we've worked with an instructor who teaches a [name redacted] curriculum. And that's been incredibly successful. And we . . . probably wrote the biggest contract we've ever had with [name redacted] as they've sent, they had us set up a whole separate section for them and then they wanted other people to enroll in it, too, because they liked the interaction their staff was having with other people in other companies . . . just to the different ways of thinking. . . . Something unique that they weren't doing internally, but we were able to offer.

Entrepreneurial Orientation (EO) Construct Dimension: Proactiveness

Lumpkin and Dess (1996) posit that *proactiveness* is a complementary dimension

to *innovativeness,* stating that *proactiveness* "suggests a forward-looking perspective that

is accompanied by innovative or new-venturing activity" (p. 146). This dimension of EO

requires initiative on the part of the community college, yet many business and industry

partners indicated that the community college could do a better job of being proactive or

taking initiative. Three themes of proactiveness were extracted from the data collected

and analyzed.

Proactiveness theme 1: Involvement with local workforce investment and

economic development boards. Most community college administrators

enthusiastically agreed that the colleges' participation on local workforce investment or

economic development boards was key to being viewed as entrepreneurially oriented. In

particular, Richard Community College's director of corporate and community education

had partnered with the local workforce investment board to build a high school career

education program which would subsequently bridge to both credit and noncredit

coursework. This director stated:

> You have to be able to like, working with [name redacted] at Economic
> Development and [workforce investment location redacted] and being part of the
> councils and getting yourself out there so they know that you're there. That was
> the toughest thing when I first started. Nobody knew what we did.

Yet this proactive, self-initiating approach has not yielded tangible results for Gerard

Community College. When asked whether the college had proactively reached out to a

local economic development board to develop a partnership, Gerard's dean explained that

such proactiveness had only resulted in confusion to the local business community.

Gerard's dean stated:

> We have a really good partnership with the [name redacted] Foundation,
> workforce development office, and we have a really good partnership between
> that. But again it's dependent on one of the entities having the money to fund the
> training. . . . The person that is currently the interim at the [economic
> development] Foundation was an interim and a consultant here that really started
> the college four or five years ago on the need to reach out to the community. . . .
> They're in the process of hiring a new president for the [name redacted]
> Foundation. . . . And the need for Gerard to develop our system of who do you
> contact, who should an employer contact, and it's too confusing, you know, and
> who is that contact.

Kappa Construction's president agreed with the statement from Gerard's administrator

that the community college lacked a proactive approach to outreach. Kappa's president

suggested that in a smaller community, self-directed and proactive outreach can change

the community's perception of the college, offering this perspective:

> I haven't really reached out. . . . We're busy, especially in the current economy,
> just trying to stay in business. We don't have a lot of time to be saying, Oh, gee,
> what ideas can we get to help Gerard this week. . . . Most of us, we wait for you.

Several of the community colleges participating in this study either underutilized

their connections to workforce investment or economic development boards or did not

utilize those connections at all. Conversely, their noncredit workforce training partners use these connections as a forum to grow business, to network, and to reach out to future customer or vendor contacts. With Illinois community college districts having representation on area workforce investment or economic development boards, noncredit workforce training units have a unique forum for proactively developing training partnerships and demonstrating this salient dimension of EO.

Proactiveness theme 2: Assessing training needs and researching the industry. Both community colleges and their noncredit workforce training partners agreed that properly assessing training needs and researching the business partners' industries is critical to an entrepreneurial orientation. However, several community colleges and their business and industry partners disagreed on whether the college is always able to offer the rapid response that is a hallmark of continuing education.

Pierce Community College's dean of continuing education, who is the noncredit workforce training partner of Miller Manufacturing, believed that environmental scanning and the use of training coordinators allowed Pierce to better research and plan for client training needs. Pierce's administrator noted that the institution conducts the scan of current employers, area workers, and current students and solicits the suggestions of potential students in order to keep its noncredit workforce training courses cutting edge and relevant. In addition, Pierce's noncredit workforce training unit uses training coordinators, or account representatives charged with developing training contracts and bringing business into the unit. Pierce's administrator cited the efforts of one particular training coordinator, who researches new client markets "like a dog with a bone" and goes beyond the coordinator position description in order to develop and cultivate client

relationships. Miller Manufacturing's coordinator of training agreed with Pierce's assessment of the college's training coordinator, noting that the coordinator had gone so far as to build Miller a custom Facebook page to more effectively promote and survey Miller employees about noncredit offerings.

Gerard Community College's dean, who is the noncredit workforce training partner of Kappa Construction, offered a much different point of view, opining that Gerard's own proactiveness had backfired in the implementation of a manufacturing curriculum. While Gerard had purchased cutting-edge manufacturing materials, the institution quickly found that environmental scanning would have shown a need for precursor, baseline manufacturing coursework. This dean stated:

> I think most of our employers are behind industry trends. . . . We bought a whole bunch of computerized lathes and mills when we started our manufacturing program. And what we found was that we needed to start with the basics and teach people the manual mechanical knowledge and so we jumped right into the computerized part, and we didn't have any instruction in the basic manual skills.

Business and industry training partners agreed that community colleges' due diligence in researching the market can indeed yield an important dimension of entrepreneurial orientation. Otis Mechanical's training and development specialist, who is the noncredit workforce training partner of Richard Community College, felt that Richard's training staff was particularly effective at synthesizing discrete pieces of training curricula into a new, customized format tailored to Otis' identified training needs. Similarly, the executive director of Greening Partners, the noncredit workforce training partner of Evergreen Community College, lauded Evergreen's proactiveness in designing and developing curricula in mechatronics and robotics which will eventually yield good-paying jobs to an economically depressed region.

While many of the community colleges and their noncredit workforce training

partners spoke to the importance of their colleges' due diligence efforts and the need to

be proactive, Hamilton Community College's dean of continuing education and business

outreach and Quickspeed Transportation's Project Management Office manager had very

differing perspectives on Hamilton's effectiveness in this dimension of entrepreneurial

orientation. Hamilton's dean noted that Hamilton staff conducts regular training planning

meetings with large clients to build a training calendar and to coordinate initiatives. This

dean stated:

> Then you can anticipate problems and issues and when we have a schedule of training, things tend to move a lot more quickly from our end, more efficient, and also from their end they, they tend to see results more quickly because they're more deliberate and tend to be more planful in how the training is constructed rather than fixing this immediate need.

Yet Quickspeed Transportation's manager cited this "deliberate" and "planful" approach

to training as one of the impediments to its relationship with Hamilton, particularly when

a business has issues of statutory or regulatory compliance at stake. This manager

illustrated these impediments at length, stating:

> Well, you know the business time schedule. So there's a law that says that you have to have underground storage tank training if you have underground tanks with fuel in them. And I don't know exactly when the law was passed, but it was sometime in the summer. Every single potential [training] contractor we looked at was for-profit. OK? And it's all online, there was come classroom training, but we picked the online training. Think of the turnaround time these guys had. Now granted, they knew the law was in process, but I mean they were ready to go. It was passed, within a week, the training was up and running. . . . No community colleges . . . were providing any kind of training like that. And they couldn't turn it around that quickly.

Community colleges and their noncredit workforce training partners universally

agreed that the colleges' in-depth knowledge of the business or industry under study is a

salient component of an entrepreneurially oriented partnership. However, the study

participants differed in their interpretations of how and in what ways the community

colleges develop that in-depth knowledge. It is critical that entrepreneurial orientation

involves both immersion in the business and industry partner's market and the

willingness to view the training partnership from the employer's perspective as means of

demonstrating proactiveness.

> **Proactiveness theme 3: Keeping communication lines open.** Participants also

cited the process of keeping open communication with business and industry as a

proactive and salient dimension of entrepreneurial orientation. Richard Community

College's director of corporate and community education, who is the noncredit workforce

training partner of Otis Mechanical, often brings Otis and other employers' "main

players" to campus and offers them a forum to discuss future training needs, trends, and

business practices. In addition, Richard's administrator keeps its president "in the loop"

about noncredit workforce training partnerships, noting that this practice has been

effective when the president has reached out to business and industry for support in

underwriting campus expansion initiatives. This administrator expanded upon the

approach, stating:

> [The college president] asked me to go to one of my clients the other day and she
> said, "Do you think you could go ask them for money [to support college
> Foundation efforts] because they gave it to you last year? [E]ven though they
> gave it because of you?" And I said, "I have to go ask them for money? Why
> don't we go together?" And she goes, "OK." She knows what's going on in our
> companies. Calls on them. It may be to ask for money, but she always calls me
> and says, "What are you doing with this company?" You know, "What have you
> done for the last five years?" So she really knows what we're doing. And I try to
> keep her in touch with projects that are going on.

For Pierce Community College's dean of continuing education, who is the

noncredit workforce training partner of Miller Manufacturing, the "consultative"

approach is effective. Pierce's training consultants stay in regular contact with business

and industry partners and also use the local chamber of commerce as a mechanism for

maintaining those contacts. This dean expanded upon the benefits to this open

communication with the college's partners:

> But you know, we envision ourselves being more consultative, I guess, so helping
> companies define what their needs are, helping them find where their gaps are,
> where their holes are, not just relying on them to tell us, but making sure that in
> fact what we're hearing is what the gaps are.

Interestingly, not all community colleges believed that this open communication

resulted in noncredit business for the institution. Gerard Community College's dean

suggested that the college's communication efforts did not result in credit-bearing

business for the institution. This comment was particularly interesting when the intent of

the outreach was to solicit noncredit training contracts. Gerard's dean noted that there

were so many internal barriers to credit-level curriculum development at the college that

focusing on customized, noncredit workforce training seemed to be the path of least

resistance. At the same time, though, Gerard's dean noted that contract training began to

"monopolize" the department's function, which was in conflict with the institutional goal

of generating state reimbursement for credit-level coursework. The dean expanded upon

how this monopoly had affected revenue generation, stating:

> We're not, in some ways, it's not really, you can't divide credit and noncredit
> anymore, but we, we feel that if you know, if the contact comes because of a
> specific business need, you know, even if that class becomes credit, it's handled
> by our workforce development folks even though we often end up offering credit.

As a result, Gerard's dean believed that communication with business and industry had

not yielded any long-lasting noncredit relationships with those partners. While Gerard's

proactive attempts at communication with its partners may not have yielded the intended

effect, it is clear that business and industry values the attempts of the community college to develop and maintain open lines of communication. Making such an effort is time-consuming and labor intensive, yet these efforts at open communication mean that training can be rapidly and responsively deployed when the need arises.

Entrepreneurial Orientation (EO) Construct Dimension: Competitive Aggressiveness

Lumpkin and Dess (1996) posit that *competitive aggressiveness* can present itself in business by either a "head-to-head confrontation" with a competitor or by reaction to a "competitive challenge" (pp. 148-149). *Competitive aggressiveness* can also present itself through a "willingness to be unconventional rather than rely on traditional methods of competing" (Lumpkin & Dess, 1996, pp. 148-149). This dimension of EO was rarely cited by either community colleges or their noncredit workforce training partners. None of the training participants referenced the *head-to-head* confrontation or the *willingness to be unconventional* as salient dimensions of their entrepreneurial orientations. The idea that community colleges are rule-bound by statutory and ICCB guidelines, which consequently makes them risk averse, may have something to do with the lack of competitive aggressiveness they demonstrate.

Only two illustrations elicited from community college study participants offer minimal support for competitive aggressiveness as a salient dimension of EO. Both Richard and Hamilton Community Colleges' administrators cited the value of the Illinois Community College Training and Resource Information Network (weTRaIN) to promoting unique, though not necessarily unconventional, methods of competing for corporate training partnerships. WeTRaIN, a consortium of 132 workforce training

representatives at 38 Illinois community colleges, provides noncredit workforce training to 3,000 Illinois firms annually (weTRaIN, 2012a). The consortium offers access to a diversity of subject matter and content experts who then partner with the community college in designing, developing, delivering, and evaluating training curricula. Richard Community College's director of corporate and community education noted that the Illinois Green Economy Network (IGEN) contacted weTRaIN to offer grant funding for customized training partnerships. This, in turn, allowed Richard to develop a noncredit workforce training curriculum that was unique to the region. Similarly, Hamilton's dean of continuing education and business outreach commented that the college's president is heavily involved with weTRaIN to make community colleges more responsive to regional needs than to strictly local, in-district training initiatives.

While compliance with ICCB registration guidelines illustrated innovativeness as a salient dimension of entrepreneurial orientation as discussed earlier, those compliance issues also speak to a community college's ability to be competitively aggressive. Hamilton Community College's dean of continuing education and business outreach commented at length on how statutory and administrative rule-making can, in fact, hamper a community college's competitive aggressiveness and may make the institution more risk averse. For example, Hamilton's administrator acknowledged that guidelines involving the use of consultants versus adjunct faculty can deter a community college from engaging in *head-to-head confrontation* or the *unconventional* approach to which Lumpkin and Dess (1996) refer. This dean offered the following illustration of reluctance to engage in confrontation or unconventional approaches when it comes to distinguishing between consultants and adjunct faculty:

> What is a consultant. . . . Well, they're working for me regularly. Well, how are they different from adjuncts? Well, the tests that the IRS uses is [sic] OK, it looks like a duck, he quacks, he has webbed feet. This one looks like a duck, he quacks, he has webbed feet. Well, how come this one's a consultant and this one's an adjunct faculty member? Well, so they just started listing differences. . . . That's a huge, huge issue for Hamilton Community College. And that . . . they feel the scrutiny of the IRS, I understand. We've never been questioned on it. But other schools have. So we're just very careful. And Hamilton Community College, as a rule, is very conservative from a financial perspective, from an academic perspective, from an organizational management perspective, we're very conservative. . . . [So] the general feelings are that there are guidelines and policies in place to protect the institution, and what you just need to do is follow the rules. . . .

Illinois statutes and Illinois Community College Board administrative guidelines prescribe operational standards for these institutions (ICCB, 2009). Because community colleges are bound by these administrative rules, competitive aggressiveness as a salient dimension of entrepreneurial orientation was found to be less prevalent than the other dimensions of EO uncovered during the data analysis process.

Entrepreneurial Orientation (EO) Construct Dimension: Autonomy

Finally, Lumpkin and Dess (1996) posit that *autonomy* in business signals a willingness to be self-directed in the pursuit of business opportunities leading to new entry. Specifically, *autonomy* "refers to the independent action of an individual or a team in bringing forth an idea or a vision and carrying it through to completion. . . . [I]t means the ability and will to be self-directed in the pursuit of opportunities" (Lumpkin & Dess, 1996, p. 140). This dimension of EO was illustrated frequently by community college administrators. It is interesting to note, however, that none of the institutions' noncredit workforce training partners spoke specifically to the autonomy of their community college counterparts. Two themes of autonomy were extracted from the data collected and analyzed.

Autonomy theme 1: Role of the college president in initiating connections.

Community colleges universally agreed that the president serves as a champion in

initiating business and industry connections and delegating development of those

connections to the noncredit workforce training unit. Hamilton Community College's

dean of continuing education and business outreach, who is the noncredit workforce

training partner of Quickspeed Transportation, spoke of the college's leader as the

"connecting president." The dean offered this illustration to support the point:

> [Hamilton's president] is very well connected in workforce circles. . . . So often
> what he will do is just get the people at the table. And then it's passed on to my
> boss and myself. . . . [W]hen I call him the connecting president, that's what I
> mean—he likes to connect things rather than be a lone wolf. . . . He has no time
> or interest to actually, to implement a project. In fact, sometimes I have to make
> sure I update him, because he's moved on to the next thing. He's creating the
> next opportunity.

> Pierce Community College's dean of continuing education spoke similarly the

college's current and founding presidents, noting that both leaders saw the importance of

noncredit workforce training to the institution's mission. The dean defined the current

president's involvement in noncredit workforce training, stating:

> I would say that our president is a huge advocate for us, though. He, when he's
> out in the community working with the business and industry partners, I know he
> mentions us and speaks of us and kicks clients our way if his conversation leads
> him to think that it's somebody good for us to connect with, even if they don't
> have an immediate need, but it's somebody that he feels like we should know, or
> take on a tour. . . . [I]t's just really nice to have him thinking of us as he's making
> these connections, because I know not all presidents do that. He really values
> what continuing education broadly does.

Miller Manufacturing's coordinator of training, who is Pierce's noncredit workforce

training partner, concurred with Pierce's assessment of the institution's current president,

adding that the founding president also enjoyed the respect of the community and was

perceived as a "rainmaker" for the institution. This coordinator expanded upon the

community's perception of Pierce's president, stating:

> [Name redacted], who is the president, extremely high on community. He was
> incredibly there. . . . You know, and I'm sure he, well I never saw him as a hands
> on person. I'm sure he was a leader by you know, just being aware of what was
> there and making sure it continued to grow as it goes.

Gerard Community College's dean had a different view of the institution's

president, noting that the "president's probably a lot more involved in things like United

Way and the community as opposed to having that connection really with a lot of the

employers," although employers are indeed a part of the college community and

frequently employ community connections as a way to develop partnerships. This dean

lamented Gerard's lack of focus on corporate training and expressed concern that this

inattention from the highest institutional level could be a death knell for the noncredit

workforce training unit. The dean stated:

> I just hope that there's commitment from the college to at least give them
> [noncredit workforce training] a year or two to try. There's more and more
> scrutiny on all of the extra, noncritical missions, or I don't know if some people
> think it's critical, others don't. So that's a challenge.

The president of Kappa Construction, who is Gerard's noncredit workforce training

partner, concurred that the college president, who has been in office for less than two

years, was not necessarily engaged in building and sustaining noncredit workforce

training partnerships. Kappa's president noted that Gerard's former consultant, who has

a long history in business and industry and is currently the interim leader of the region's

economic development consortium, was truly Gerard's partnership champion, stating that

this consultant "probably garnered more respect than the president at the time." In order

to successfully employ this salient dimension of entrepreneurial orientation, the visibility and support of the community college president is crucial.

Autonomy theme 2: Role of the noncredit workforce training unit in sustaining connections. In addition to the key role of the president in initiating connections, the noncredit workforce training unit must have the autonomy to develop and sustain those connections once the task has been delegated. Hamilton Community College's dean of continuing education and business outreach noted that while the president had the institutional capital to initiate the training partnership, the authority for the planning and execution of the partnership was delegated to the noncredit workforce training unit. Similarly, Pierce Community College's dean of continuing education described the college's president as the "vehicle" for the training partnership, which then allowed the noncredit workforce training unit to plan and execute the contract. Referring to the depth of the president's involvement, Pierce's dean stated, "He really doesn't have much involvement beyond making the connection, which is, that's what we need. We can take it from there."

Gerard Community College's dean opined that a presidential lack of commitment to the noncredit workforce training function has had a trickle-down effect on the unit's very survival. This dean stated:

> The college has really questioned whether or not this [noncredit workforce training] is a viable option because we're not generating enough revenue to fund the expenses. And so I don't think we're necessarily an entrepreneurial college. . . . [P]art of the difficulty in sustaining those [partnerships] is given the current budget situation, and it's difficult to sustain that if we're not showing revenue. And so I don't think that there's a commitment from the college to this goal and to the partnerships. . . .

While autonomy is cited as a salient dimension of Lumpkin and Dess's (1996) entrepreneurial orientation construct, the participant responses also demonstrate two points. The first point is that presidents are critical generators of noncredit workforce training partnership leads by virtue of their visibility and focus on institutional mission. The second point is that entrepreneurially oriented community colleges offer their noncredit workforce training units the autonomy to develop, cultivate, and refine their partnerships with business and industry.

Lumpkin and Dess's (1996) Implications for This Research

Lumpkin and Dess's (1996) Entrepreneurial Orientation Construct has implications for this research in two key areas. The first implication is that while all five dimensions of the EO Construct are "salient components" of an entrepreneurially oriented business (p. 140), those dimensions do not necessarily manifest themselves to the same degree in an entrepreneurially oriented community college because of the statutory and agency guidelines by which the college is bound. The second implication is that while business and industry partners may exhibit all five dimensions of the EO Construct, they also expect their community college counterparts to exhibit these dimensions in the development and maintenance of their noncredit workforce training partnerships.

Amey, Eddy, and Ozaki's (2007) Partnership Development Model

While many models exist for the development of business partnerships, the Partnership Development Model created by Amey et al. (2007) is uniquely community college-oriented. Adopting characteristics of entrepreneurial orientation consistent with Lumpkin and Dess (1996) as well as strategies of evaluation consistent with Kirkpatrick and Kirkpatrick (1993), the Partnership Development Model provides an integrated

approach to developing and sustaining partnerships between community colleges and the business and industry constituents they serve. The model consists of a two-stage process of partnership development and partnership sustainability, with overlying dimensions of a partnership champion and a feedback loop. The model provides a synergetic approach to the ways in which community colleges serve their noncredit workforce training partners.

Each component of the Partnership Development Model was employed as part of the study's conceptual framework to add depth and breadth to the study's findings. This was accomplished through the development of driving questions designed to uncover data from multiple sources, including (a) online demographic survey questions; (b) in-person interview questions; and (c) documents provided by third-party sources and/or located independently by the researcher. The model's first phase, known as *partnership development*, contains the components of *antecedents, motivation, context,* and *the partnership itself.* The model's second phase, known as *partnership sustainability,* contains the components of *sustainable, untenable,* or *completed* outcomes. The role of a *partnership champion* and a *feedback loop* are additional components threaded throughout the model. Relevant quotations from both community college administrators and their noncredit workforce training counterparts are included to expand upon and substantiate the study's findings. Table 37 illustrates the components of the Partnership Development Model and the driving questions and interview questions to which the components are mapped.

Table 37. *Components of Amey, Eddy and Ozaki's (2007) Partnership Development Model and Driving and Interview Questions to Which Each Component is Mapped*

Partnership Development Model Component	Driving Questions and Interview Questions
Stage 1, Development: Antecedents Motivation Context Partnership Itself	**Driving Question:** *How do noncredit workforce training units support the community college's mission?* **Interview Question:** 1. If your institution has a champion who initiates and maintains noncredit workforce training partnerships, how and in what ways does that person initiate and maintain those partnerships?
Stage 2, Sustainability and Maintenance: Sustainable Partnerships Untenable Partnerships Completed Partnerships	**Driving Question:** *How does the community college initiate community outreach to develop noncredit workforce training partnerships?* **Interview Questions:** 1. (For the community college) What prompts a local business or industry to pursue a noncredit workforce training partnership with your college? 2. (For the noncredit workforce training partner) What prompts a community college to pursue a noncredit workforce training partnership with your local business or industry? 3. Describe the process you followed to reach out to a noncredit workforce training partner.
Overlying Themes: Feedback Loop Champion	**Driving Question:** *What characteristics or elements contribute to successfully maintaining noncredit workforce training partnerships?* **Interview Questions:** 1. Explain the processes or mechanisms you utilize to maintain a successful relationship with a noncredit workforce training partner.

Partnership Development Model, Stage 1: Partnership Development Process

Amey et al. (2007) suggest that community colleges, which are known to their constituents as "entrepreneurial organizations with a tradition of responsiveness," often act as a "broker," or link to businesses, units of government, and other educational institutions (p. 6). The first phase of the Partnership Development Model, which involves the creation of the partnership itself, consists of several components. These components include (a) antecedents; (b) motivation; (c) context; and (d) structure of the partnership itself. All of these components were found with varying degrees of consistency across the community colleges participating in this study. This trend was also exhibited to varying degrees by the noncredit workforce training partners participating in this study.

Antecedents. Amey et al. (2007) define *antecedents* as incentives "derived from the context and issues facing individual partners. . . . External policies or regulations, prior relationships, resource needs, or a challenging issue can all serve as an impetus" (pp. 9-10). These relationships can be fixed on a "continuum," from a very formal written agreement to a very informal, conversational agreement between the parties (Amey et al., 2007, p 10). The examples of antecedents provided by community college administrators and their noncredit workforce training counterparts can be grouped into three areas: (a) strategic plans and resource sharing; (b) validating needs; and (c) understanding of relationships and roles.

Antecedent theme 1: Strategic plans and resource sharing. Two community college administrators and their noncredit workforce training counterparts spoke at length about strategic plans and resource sharing as antecedents to a partnership. Evergreen Community College, the noncredit workforce training partner of Greening Partners,

specifically incorporates community partnerships into its strategic plan. The plan references a "comprehensive approach for establishing, maintaining, and strengthening mutually beneficial partnerships" and a collaboration "with community partners on grant opportunities and other innovative ways to share resources" (Evergreen Community College Strategic Initiatives, 2013, p. 4, para. D1). This collaboration is supported by Greening Partners, whose own publications referencing its partnership with Evergreen cite the importance of resource sharing. One of these publications describes Greening Partners' partnership with Evergreen Community College in this way:

> Workforce Partnerships develop deep, long-lasting relationships among employers; the public workforce system; and education, training, and support service providers, organizing them to provide a continuum of education, training, career coaching, asset development, job placement, job retention and advancement, and support services (Greening Partners Manufacturing Partnership Overview Flyer, 2011, p. 1, para. 2).

Greening Partners' executive director expanded upon the importance of antecedents to the success of Greening's partnership with Evergreen Community College. The executive director expressed appreciation that Evergreen's mission statement explicitly refers to a "stated objective of meeting with industry partners." In addition, the executive director commented on Greening's additional outreach efforts to community colleges in the Chicago suburban areas as an antecedent to its current partnership with Evergreen and stated:

> So we've always seen ourselves as having this office in the [redacted] suburbs as being a regional entity . . . that it's really about the [redacted] suburbs as not defined by the individual boundaries of any individual small community. It's only together that we can find the critical mass we need, for instance, for recruitment for our training programs . . . to have impact when we meet with employers, that we can serve enough people to meet their needs.

Similarly, Pierce Community College's dean of continuing education offered an example of an antecedent to the college's effective business and industry partnerships. Pierce participated in a 2008 discussion with two four-year institutions in its region, a host of business and industry partners, and the local economic development agency in order to discover more effective methods of preparing residents for meaningful employment. The resulting white paper noted that the rapidly changing local economy had provided new antecedents and subsequently new opportunities for partnerships (Folse et al., 2009). The white paper recommended the development of partnerships between the community, two- and four-year institutions, industries, and labor organizations to "develop non-college preparation programs for individuals whose aptitudes are better served in non-college careers" (Folse et al., 2009, p. 3). The paper further recommended that business and education should "partner to provide more practical examples within curricula that set real world expectations for newly graduated workers" (Folse et al., 2009, p. 2).

Antecedent theme 2: Validating needs. Pierce Community College's dean of continuing education offered validation of training needs as an antecedent to partnership development. This dean noted that noncredit education often serves as a precursor or bridge to credit-bearing coursework, a position echoed by Van Noy et al. (2008). Pierce's dean stated, "We don't run a program, just throw it out there. Everything is customized and oriented to the needs of a specific business and if there is . . . training ahead of time that they need to do to be prepared for the training they're coming to campus for, we [also] do that." The dean noted this practice had resulted in physical therapy assistant (PTA) noncredit training providing the antecedent for a credit-level

PTA curriculum. The dean expanded upon the importance of noncredit workforce

training's role in validating a need as an antecedent to this partnership:

> You can try some things out before you go to the work of developing a
> curriculum and . . . a full blown program in an instructional division, you can run
> some continuing ed programs. I think our college is working on developing a
> PTA program right now, and I'll say that we got a lot of requests from physical
> therapy centers for continuing ed for PTs and PTAs, and it was through those
> conversations that we started to hear of a real need for not only the continuing
> education once people are licensed, but then also just people were having a hard
> time getting PTAs in general. . . . So I think sometimes we can validate a need in
> the community by the conversations we have with our business and industry
> partners, through customized training, or community ed.

Antecedent theme 3: Understanding of relationships and roles. While both

Evergreen and Pierce Community Colleges' administrators spoke of the import of

antecedents to relationship-building, Gerard Community College's administrator offered

a differing point of view. This administrator suggested there is little value to noncredit

education as an antecedent to a longer-term relationship with business and industry,

stating:

> So most people here, you either go to a bachelor's degree or you go to work. And
> there's still a lot of not necessarily, they haven't necessarily bought into the value
> of career education, whether it be credit or noncredit, and that it's worth the
> investment. . . . I don't know.

During this same discussion, however, Gerard Community College's

administrator seemed to contradict an earlier position that noncredit could provide a

valuable bridge to credit-bearing coursework. This dean noted that while the region has

an extremely low unemployment rate, there could be a market for community colleges to

provide upgrade training to incumbent workers. This dean stated:

> The biggest reason to partner with us is primarily due to the shrinking population
> of high school graduates. [T]heir workforce of tomorrow is either already in the
> workforce or is not working and . . . needs the basic skills. . . . So, if we are
> actually probably the second lowest unemployment in the state. So we are rapidly

reaching the point where there aren't any more qualified workers here. You can't rely on the high school graduates. Whether that's their own entry employees, and having them upskill into additional jobs and then backfill . . . taking maybe some of the easier filled jobs and seeing if those people want to cross train into other areas. . . .

In addition, Gerard Community College's administrator was of the opinion that close partnerships with the local economic development agency only seem to occur in emergency situations where the business or industry was threatening to leave the region. If the business and industry partner was threatening to leave, this administrator reasoned, then there was no value to the community college in developing the partnership. This administrator expanded upon this reasoning:

> We're very tied in with WIA and with the [local economic development agency]. And . . . Sometimes we're involved in their retention calls or sometimes we're not, but we have a very close partnership in the sense that if either one of them goes on a retention call, if ever there's a question of well, we could do this if we had quality employees or quality training or so anything that comes from them, but unfortunately at that point if it's really a retention call and the company's in danger of leaving, then it's [the community college partnership] not probably the best option.

Interestingly, Kappa Construction, the noncredit workforce training partner of Gerard Community College, saw the antecedent's role in developing the partnership quite differently. Kappa's president viewed the role of the community college to the region from a much different perspective and expressed concern about Gerard's inability to use antecedents as a means of building and sustaining partnerships:

> But you know, considering that the community college is supported by the community, largely taxes, of course, but lots of other ways as well, [this region] is a very supportive community in general. You know, I think [Gerard Community College] has an obligation to give back, you know, not just take, but to give back and to be a resource for the community other than just for college-age students. . . . Every kid doesn't have to go off to some four-year college and get an art history degree or something they'll never be able to use. Some kids are better suited to more of a votech type career, or a two-year degree is all they need to do what they want to do. They don't have to go on. But those kids have got to

have marketable skills, and especially if they want to stay in this community, they've got to have the marketable skills for the industries that are here. [This region] has some pretty good industry and pretty good job opportunities, and you don't need a four-year college degree for a lot of it, but you do need certain skills.

The nature of these responses reflects that both community colleges and their business and industry counterparts have antecedents for forging training partnerships. These antecedents are derived from the partners' individual needs and serve as incentives to training partnership development. These responses further indicate that community colleges not actively searching for these incentives may miss important opportunities for conversation with prospective noncredit workforce training partners.

Motivation. Amey et al. (2007) note that the partners may bring varying levels of power or social capital to the partnership, or the partners may have widely varying motivations for partnership involvement. Participants in this study generally agreed that motivation was predicated upon four key points: (a) funding considerations often motivate partnership development; (b) funding considerations involve *each partner's* fiscal or other visible support to the partnership; (c) training partnerships are often motivated by skill-building considerations; and (d) training partnerships can be enhanced by the role of the local economic development agency or a regional network. Generally speaking, as long as the partnership itself is "mutually beneficial" to both sides, the partners' motivations for participating normally do not pose a problem (Amey et al., 2007, p. 11).

Motivation theme 1: Partnership funding. Three community college administrators and one business and industry partner generally agreed that the funding sources a community college can bring to the table are often powerful motivators for both sides of the partnership. In the case of Richard Community College, its business and

industry partners, including Otis Mechanical, wrote letters of support for a United States Department of Labor grant to install a mechatronics lab on the Richard campus. Richard's academic vice president was quoted in newspaper reports as saying, "If we don't get those grant funds, we'll still put in a mechatronics lab; it just might take us a little longer" (Roehm, 2012, para. 12). While the grant proposal was pending, Richard created a 24 credit-hour mechatronics certificate program to which Otis and other area employers sent training participants. In addition, Otis received both Illinois tax credits and a grant to support leadership training conducted by Richard.

The importance of noncredit workforce education to an institution's bottom line is also demonstrated by the efforts of some community college study participants to seek credit hour reimbursement from the Illinois Community College Board (ICCB). In the case of Richard Community College, the noncredit workforce training courses delivered to business and industry clients are frequently constructed with ICCB credit hour reimbursement in mind, a recommendation of Van Noy et al. (2008). Richard's clients are billed for the instructional time, thereby allowing the college to receive compensation from both the state and the client for the training performed. Interestingly, none of the other community colleges participating in this study could offer examples of how their noncredit workforce training units employed this approach to reimbursement, which is an obvious method of generating revenue for the institution. Neither the data collected nor the in-person interviews revealed whether administrators were aware of this approach or simply chose not to employ it.

Three of the community colleges participating in this study commented on the difficulty they have motivating a business and industry partner to act unless the college

has a grant to underwrite all or part the part of the cost of training. Richard Community

College's training coordinator commented on the almost single-minded focus of some

business and industry partners who were motivated to train employees when Richard

offered an Employer Training Investment Program (ETIP) grant. ETIP, a grant funded

through the Illinois Department of Commerce and Economic Opportunity, is defined as

> a competitive application program for Illinois based manufactures [sic] and service companies to facilitate upgrading the skills of their workers in order to remain current in new technologies and business practices. Participation in the program will enable companies to remain competitive, expand into new markets, and introduce more efficient technologies into their operations. ETIP grants may reimburse Illinois companies for up to 50 percent of the eligible cost of training their employees" (IDCEO, 2013, para. 1).

Richard's training coordinator commented on Otis's focus on ETIP, saying:

> I mean, I constantly have people calling and saying—in fact, [name redacted] from Otis. He knows better. He called me yesterday and said, "Is this leadership training going to be covered by your ETIP grant?" I thought doggone it [name redacted], we haven't had grants for a year ago last December, kindly tell him that.

> Similarly, Pierce Community College's dean of continuing education experienced

a comparable difficulty with corporate clients whose motivation for training was spurred

by grant funding. This dean expanded upon the difficulty Pierce has with the partners'

overemphasis on grant funding, saying:

> The danger in having a grant like ETIP is that companies start to only want to work with you if you have the grant. . . . First question. Do you have ETIP money? Not that that's not ideal, and [name redacted] really struggled with how to get them to see him as more of a resource and us as more of a resource than just the grant funds.

> Gerard Community College's dean had also encountered business and industry

partners whose focus on grant funding resulted in considerable difficulty cultivating

noncredit relationships. In addition, this dean viewed the grants as problematic from a

college administrative perspective, indicating that the institution often considered the

grant an ancillary revenue source that became a lost revenue source when it was not

renewed. The administrator expanded upon this statement:

> When we had stimulus money and we also had a CBJT [community-based job training] grant, was really when we started to work with some of the manufacturers, which is where most of our workforce training efforts have been. We've had some in the past we've had the [ICCB] Workforce Prep Grant, which through the state and of course we lost that this last year. And that grant helped to fund basically the organization of maintaining the contacts with the employers. So with that being cut, the college has really questioned whether or not this is a viable option because we're not generating enough revenue to fund the expenses. And so I don't think we're necessarily an entrepreneurial college. . . . I don't think our community and our employers necessarily value the education if they have to pay for it themselves. So I don't think we're [truly] at that partnership stage.

As a result of this overemphasis on grants as an ancillary revenue source, Gerard's

administrator suggested that the college's motivation to conduct noncredit training is

strictly financial. This often results in offering training without conducting appropriate

needs assessments or designing appropriate curriculum to the client's ultimate detriment.

This administrator stated, "I think the pressure of sales and the need to make themselves

[the college] cost-effective is sometimes overshadowing actual work." This

administrator commented that the community college is located in a region where a

number of large employers have left the area. This departure of employers and the

overemphasis on selling training business were cited as additional reasons for not

aggressively pursuing noncredit workforce training partnerships. This administrator

expanded upon this thinking, stating:

> They take them [our Requests for Proposals, or RFPs], but we know darn well that they don't have any intent to do them because we price ourselves out of the market. . . . I think there's the assumption that they [the businesses] can't afford anything. But of the ones where we've actually got to the price point, especially if it's noncredit, I think we've those are the ones that have just fallen apart

because of other external odd situations. . . . [the businesses' external impediments] and the different companies getting bought out or they have just fallen apart later.

Motivation theme 2: Funding from both partners. Amey et al. (2007) posit that

the partnership is mutually beneficial as long as the partnership does not provide one

partner a disproportionate benefit. This mutual benefit was discussed among community

colleges and their business and industry partners participating in this study and

specifically addressed funding. In several cases, community colleges and their business

and industry counterparts each contributed to the other's academic and philanthropic

endeavors. To most of the study participants, this was considered an important

motivating factor.

In the case of Richard Community College, the institution had applied to the

United States Department of Labor for a mechatronics lab grant. While the grant

application was pending, Otis Mechanical donated $20,000 to the Richard Community

College Foundation for manufacturing scholarships for its credit-seeking employees.

Otis' chief executive officer commented, "A workshop with a high degree of science,

math and technology skills is now critical to sustaining and growing our business. That is

why, working with key partners, such as Richard Community College, we want to offer

local students the opportunity to develop these skills and take advantage of the job

opportunities that we have to offer" (Commercial News, 2012, para. 4).

One college and one business and industry counterpart spoke to the importance of

funding each other's efforts as a partnership motivator. In one example, Miller

Manufacturing, the noncredit workforce training partner of Pierce Community College,

demonstrated its support of Pierce by making a $10,000 annual gift to the college's

Foundation to support student tuition, child care assistance, and other programs and services that are not normally funded through financial aid. Another example was provided by Kappa Construction, the noncredit workforce training partner of Gerard Community College. Kappa's president noted that the local community is small, and the social and political expectations in the community are that businesses help each other, which subsequently provides a motivator for a relationship. Kappa's president expanded upon this comment, stating:

> You talk about these relationships and these liaisons and what they can do for me and what I can do for them, and you know, when you're in a business like mine, and I mean, I know my [spouse] does it, too. I mean, I don't know if Gerard buys [product name redacted] from my [spouse] or not, but if they don't when they come asking for money, [my spouse] isn't going to give them any. . . . There's a lot of that well, OK, I'll donate money to your cause or whatever, but I expect you to utilize my business.

Motivation theme 3: Emphasis on skill-building. Both community colleges and their noncredit workforce training partners agreed emphatically that skill-building is a powerful motivator for a partnership. Hamilton Community College, the noncredit workforce training partner of Quickspeed Transportation, explicitly references its motivation to build skills in the institution's strategic plan. This plan states that noncredit workforce training "focuses on providing workforce development that ensures and [sic] adequate supply of human capital for local businesses and other entities" (Hamilton Community College, 2012, p. 12). Hamilton's dean of continuing education and business outreach concurred with this emphasis, noting that "employers really aren't interested in credit. They really are not. They're interested in skills. . . . They're looking for real tangible results. The credit hours are secondary."

Richard Community College's academic vice president, the noncredit workforce training partner of Otis Mechanical, agreed with the significance of skill-building as a motivator. This vice president was quoted in a recent publication as saying the need for skilled workers was not "local, but national," and that "local employers contacted the college wanting a blended skill set. They did not want a specialist in any one area" (Roehm, 2012, para. 7). Similarly, Miller Manufacturing's coordinator of training, who is the noncredit workforce training partner of Pierce Community College, concurred with skill-building as a motivator for a community college partnership. Miller's coordinator explained this thinking:

> One of the biggest challenges in the workplace is finding skilled workers. We've got everybody in college, but who's going to fix my plumbing when it goes down? They can't find enough truck drivers. They can't find enough welders. Those things that happen here are needs within not only community, needs within the total workplace that just aren't being focused on in most places. So they're [the community colleges] really providing service even to the folks who aren't using it because we're going to have people capable of doing the things that most of us don't want to do.

Pierce's dean of continuing education agreed with Miller that skill-building is the primary motivator for a community college partnership. This dean suggested, quite succinctly, that skill building is "an itch they [the business and industry partner] need scratched."

Motivation theme 4: Role of local economic development agency or regional partner. Three community colleges specifically emphasized the importance of local economic development agencies, workforce investment boards, or regional economic partners as key motivators to a partnership. Otis Mechanical's training and development specialist, who is the noncredit workforce training partner of Richard Community College, agreed that the local economic development agency provides a strong

motivation for Otis to partner with Richard on noncredit workforce training initiatives. This training and development specialist noted that the local economic development agency has a manufacturing "cluster," or subgroup of industry stakeholders who referred Otis to Richard for customized manufacturing training. In addition, this local economic development agency has collected data on workforce trends and skills competencies, sharing those results with Richard to spur future training initiatives. Richard's training coordinator concurred with the importance of the local economic development agency to develop relationships with area businesses, saying, "It is the ability to get yourself known. You have to be able to like, working with [name redacted] and being part of the councils and getting yourself out there so they know that you're there. That was the toughest thing when I started. Nobody knew what we did."

Similarly, Gerard Community College's longstanding relationship with its local economic development agency is considered by many in the community to be a motivator for partnership development. When Gerard's noncredit workforce training liaison position was eliminated, the individual in that position transitioned to become the interim director of the local economic development agency. In a recent interview at the unveiling of Gerard's campus workforce development complex, the local economic development agency's president stated:

> Thanks to Gerard, we feel like we're ahead of the game. For years members of our business and educational communities have been sitting around the table discussing how we can work together to develop a plan that makes sense. We didn't know just how important and timely workforce development would become (Economic Development Foundation, 2010, para. 3).

Interestingly, Gerard Community College's dean did not view the local economic development agency's motivation to partner as putting the agency *ahead of the game*. In

fact, this dean saw the role of the local economic development agency as lagging behind

Gerard's own efforts. This dean stated:

> We have a really good partnership with the [local economic development agency]. But again it's dependent on one of the entities having the money to fund the training. The person that is currently the interim at the [local economic development agency] was an interim and a consultant here that really started [Gerard] four or five years ago on the need to reach out to the community and that we needed to be talking to employers, whereas that really wasn't effectively happening before that. And so that person, he's now actually on the board of [a local four-year university] and he is encouraging them that they also need to be reaching out and being more involved in employee training. So I would say that they're [the local economic development agency] not doing it either, but you know, maybe a year or two behind us in making those connections.

In the case of Hamilton Community College, the dean of continuing education

and business outreach suggested that regional connections outside the boundaries of the

community college's district can be a powerful motivator to build partnerships.

Referring to Hamilton's president as "the connecting president," this dean discussed at

length how making regional connections can provide a powerful motivator to build

community college partnerships. The dean stated:

> We really like to call him the connecting president. He likes to connect things. And now he's working with weTRaIN. It's something weTRaIN has worked on for at least five years to respond to regional needs, not just district needs. . . . [M]any of the folks we serve have multiple locations, or they're just on our border, or they're right over our border. But your local community college doesn't have the resources to serve their needs. Maybe Hamilton does. So creating a network of these where we can serve the needs of regional companies in a better way, more effective way. A good example is [company name redacted]. Their headquarters is here but they have locations in [two other counties] and, how do we as Hamilton Community College—it sounds very limiting saying, "Well, we can only serve your facility here in our district." So our president is working to build a statewide network that would actually have infrastructure for a way of addressing those needs in a more coordinated way.

Context. Amey et al. (2007) posit that the context of the partnership is critical to the partnership's success, stating:

> [T]he environment typically furnishes at least part of the rationale for initial involvement and usually has an impact on sustainability. State mandates, declining institutional enrollment or revenue, opportunities to share costs, grant funding initiatives, community needs, limited instructional capacity, and unused facilities are just some examples of context that may stimulate the need for partnering (p. 10).

Although many of the study participants offered examples of partnership contexts, their comments were general in nature and often only addressed the decision to enter into a partnership. The examples of context provided by community college administrators and their noncredit workforce training partners were grouped into three areas: (a) rationale for involvement; (b) opportunities to share costs; and (c) community needs.

Context theme 1: Rationale for involvement. Both community college administrators and their business and industry counterparts suggested that rationale for involvement had an impact on both the development and the sustainability of the partnership. These participants spoke of a noncredit trainer's ability to understand business and industry's unique training needs and to accommodate those needs in a rapidly responsive, flexible manner. The participants also suggested that all areas of the community college, not just noncredit education, should demonstrate rapid response and flexibility in accommodating the needs of business and industry. In particular, the administrators commented on credit educators' perceived inability to reach out to or listen to customers' needs, which puts noncredit workforce trainers at the forefront of cultivating those relationships with their business partners. In the case of Evergreen Community College's dean of corporate and continuing professional education, the unique function of noncredit workforce training is to cultivate partnerships and to

demonstrate to employees that noncredit training can provide the rationale for building a

longer-term partnership. This dean stated:

> Having that business background, I think I tend to look at things a bit differently
> because I view students . . . the companies that we work with, you know, they are
> clients, they are customers. And the entities are, they're stakeholders within the
> institution, they're also partners in a sense and they're customers. There's
> external [business] and internal clients [Evergreen Community College
> personnel], and so we need to be able to treat everyone pretty much the same way,
> and even though they're internal customers, they're [Evergreen Community
> College personnel] one or two steps away from working with or reaching out to
> an external customer, and I think . . . we seem to understand that here on the
> corporate ed side, but I think the traditional academic side seems to have lost that
> somewhere or never had it in the first place.

Greening Partners' executive director, who is Evergreen Community College's training

partner, agreed with this dean's assessment. The executive director noted that resource

sharing and entrepreneurialism are important components to the context of a partnership.

The executive director also commented that noncredit workforce training administrators

are frequently more responsive to business and industry needs than those directing credit-

bearing curricula. The executive director expanded upon this thinking, stating:

> [They] should be listening to industry and making sure that what they're offering
> is relevant. So the college credit side doesn't employ people who are tasked with
> doing that. So I think these [noncredit] departments are important to make that
> link.

Similarly, Hamilton Community College's dean of continuing education and business

outreach, who is the noncredit workforce training partner of Quickspeed Transportation,

concurred with the importance of context to the implementation and maintenance of a

partnership. This dean commented that community colleges "leverage the [college's]

resources" as a "developed area of expertise—a sweet spot for us." This dean expanded

upon the "sweet spot" concept with an illustration of how Hamilton's president had

provided the context for a large-scale training partnership:

They had a need for trained CDL drivers. . . . And they had a problem. Our president convened a meeting with their national HR director, and our folks sat down with this person, and delineated the need. We had one meeting together. After that, he delegated it to us to meet with [client name redacted], and we met three or four times, and developed a customized program that we're piloting here in the [geographic area redacted]. The interesting thing about that product, that project, is that if we get it to work, they're [the client] going to roll it out across the United States. Now Hamilton won't be implementing it across the United States. This HR director actually has a very unique vision. He's hoping to implement it with their area community college, wherever that is, and that we would then train the trainer, pass out this program.

Interestingly, Quickspeed Transportation's Project Management Office manager, who is the noncredit workforce training partner of Hamilton Community College, lamented Hamilton's failure to apply the "sweet spot" approach to its partnership with Quickspeed. This manager, noting that Quickspeed's attempts to build a noncredit bridge to credit-bearing coursework at Hamilton have failed, had taken some of Quickspeed's training business to Indiana and was considering reaching out to Illinois Community College Board (ICCB) administration to resolve concerns about Hamilton's inability to forge this relationship. This manager stated:

> [While a noncredit partnership would also meet the training need], it would be nice to have a credit-based; I met this person who's in Springfield with the Community College Board. I'm going to make an appointment with her after the first of the year, and I want to go and talk to her. . . . I want to find out more about how they work, how do you get credit programs going. Because Hamilton, you know, there's many ways to look at something. . . . But sometimes your entry point into a problem then limits what your outcome is. . . . I have doubled my tuition reimbursement from last year because of this [out-of-state] program. I would like to keep the money in Illinois. . . . I'm having trouble finding a place to do it. So how hard can it be to get an online associate's as an example? I mean, the private schools can do it. How come Hamilton can't do it?

Context theme 2: Opportunities to share costs. Amey et al. (2007) note that a partnership's context is frequently prompted by cost-sharing opportunities. Only one of the study participants commented upon cost-sharing as important to the context of a

partnership. Greening Partners' executive director has partnered with several Chicago-area community colleges over the past decade to bring training and employment opportunities to local communities. The key to this success, the executive director suggested, is because Greening Partners has the connections to community, church, welfare, and employment agencies and can cultivate grant funding to underwrite the curricula developed and implemented by community college trainers. The end result is a cost-sharing opportunity which allows both parties to serve the residents of the community college district. The executive director expanded upon this concept and stated:

> No one college can meet an entire sector's needs. And the colleges have scarce resources. . . . So it's useful to them [the community colleges] I think to have third party people like us go out and say, we are working with all these colleges and they're doing great programs, there are little differences in what the menu of services looks like. But our region can meet your needs. . . . It's only together that we can find the critical mass we need, for instance, for recruitment for our training programs, for, to have impact when we meet with employers, that we can serve enough people to meet their needs.

Context theme 3: Community needs. In addition to the rationale for involvement and cost-sharing benefits to noncredit workforce training partnerships, one study participant also commented on community needs as a context for a partnership. In the case of Miller Manufacturing's coordinator of training, who is the noncredit workforce training partner of Pierce Community College, the partnership's context was based upon the need for Miller to provide non job-related workforce training. Miller Manufacturing donates ten cents per hour worked by each of its 400 employees into a non-job training fund. Based upon surveys administered to Miller employees, the training fund is used to underwrite the requested personal development and skill-building opportunities delivered by Pierce's trainers. Miller Manufacturing has 14 larger manufacturing facilities in the

United States. The training coordinator noted that in the case of these 14 other facilities, the fund could generate in excess of $1 million per facility annually. The facilities' training coordinators partner with the community colleges' noncredit workforce training administrators to generate non job-related training serving the community's needs.

Partnership itself. The strength of a partnership, according to Amey et al. (2007), lies in how both the organizations and their members "frame the partnership and how this [framework] changes as the partnership continues" (p. 11). Four of the five participating community college administrators commented at length on how both sides of the partnership should view the relationship and how changes to the framework can impact the partnership's progression.

Hamilton Community College's dean of continuing education and outreach, who is the noncredit workforce training partner of Quickspeed Transportation, commented that credibility is a key factor in framing the partnership and further, that the community college must be aware of how business and industry views the institution as a noncredit workforce training provider. Noting that a major telecommunications manufacturer is in Hamilton's district, this dean offered an example of how credibility and reputation factor into the partnership's framework:

> We do line training and some other specific things, sales training maybe, but for the directors and above, these people have MBAs from Chicago. They look at Hamilton Community College is going to come in and teach us something about I don't know what, organizational development? Not likely. So even if we could obtain the resources, first of all, we don't have the resources, but if we could obtain the resources, buy it from somebody, consultant, there's a credibility issue.

In addition, Pierce Community College's dean of continuing education, who is the noncredit workforce training partner of Miller Manufacturing, commented on the

importance of collaboration to the success of the partnership's framework. This dean

stated:

> I think just working with a client that's open to working with us and views our relationship as a partnership, I think that's the first piece. It's not a this-this. It's a, you know, more where we're both coming at it, approaching it together instead of, again, the order taker mentality. . . . [J]ust being open to suggestions and open to hearing our team's recommendations as far as instructors or what their sense is of what might work best to meet that company's need.

Richard Community College, the noncredit workforce training partner of Otis

Mechanical, cited the importance of noncredit workforce training partnerships in a recent

ICCB program review. This program review underscored the value of the partnership

beyond the obvious revenue generated. The review stated:

> Although the costs [for noncredit instruction] may run higher, these are courses we plan to continue because they benefit the surrounding communities. These courses are not for credit, so the people who enroll in them are not eligible for financial aid or scholarships, but need and want to upgrade their skills (Richard Community College, 2010, p. 27).

A very different motivator for the ways in which partnerships themselves are

framed was offered by Gerard Community College's dean, who is the noncredit

workforce training partner of Kappa Construction. This dean cited revenue as an

influence on the partnership itself. In the absence of that revenue, and with the college's

administration viewing the noncredit education critically, this dean took a differing

approach to offering noncredit coursework for the good of the community. Citing

noncredit education as an "extraneous mission" of the community college, this dean

stated:

> I think that those of us that work in the workforce or noncredit or any of the kind of extraneous missions of the college really see the need [for noncredit workforce training] and we think it's critical and essential, but given the budget situation, being able to sustain it is a challenge.

Partnership Development Model, Stage 2: Sustainability and Maintenance

Amey et al. (2007) posit that the second stage of the model involves the longer-term preservation and maintenance of a partnership and can result in one of many outcomes, including sustainability (or continuation of the partnership), termination of the partnership, or completion of the partnership because the partnership's goals have been accomplished. Each of these outcomes is a logical continuation of the partnership development process. Amey et al. (2007) note that a partnership that has terminated may do so because of a "positive-natural finish," where the stated goals have been accomplished, or a "negative-unnatural finish," where the project has failed (p. 11).

Sustainable partnerships. The study participants commented both on the importance of communication and the community college administrators' attempts at personal contact with their business and industry partners as components of sustainable partnerships. In the case of Richard Community College, the noncredit workforce training partner of Otis Mechanical, both Richard's director of corporate and community education and the training coordinator commented on the degree to which personal communication impacts the relationship. Richard's administrators not only report to their state legislators the number of people and the areas in which the college has trained those people, but the training coordinator was self-described as "the face of Richard Community College." Interestingly, Richard's president was not similarly described by the two study participants from Richard or by Otis's training and development specialist.

The chief executive officer (CEO) of Otis Mechanical spoke to the importance of communicating with Richard about Otis's training needs. In a recent press release, Otis's CEO said, "A workshop with a high degree of science, math, and technology skills is

now critical to sustaining and growing our business. That is why, working with key

partners, such as Richard, we want to offer local students the opportunity to develop these

skills and take advantage of the job opportunities we have to offer" (Commercial News,

2012, para. 4). At Otis's local facility, its training and development specialist

commented on the depth and breadth of contact with Richard, saying, "The relationship,

there are so many things going with them all the time that I feel like the relationship is

kind of self-sustaining." Similarly, Pierce Community College's dean of continuing

education, who is the noncredit workforce training partner of Miller Manufacturing,

concurred with the importance of regular, personal communication to the sustainability of

the relationship. This dean commented:

> I would say that we work hard to sustain those relationships once they come our
> way. You know, our team works to make sure we're in contact with our clients
> and following up with them if we've not heard from them in a while. Or if we're
> doing regular training that we're meeting their needs. So I would say that we kind
> of take ownership and responsibility for sustaining and maintaining that
> relationship once someone kind of comes our direction.

Untenable partnerships. While a partnership sometimes concludes positively

because the partnership's goals have been met, Amey et al. (2007) suggest that a

partnership becomes untenable when a negative circumstance impacts its sustainability.

To gather a variety of perspectives on this point, both community colleges and their

business and industry partners were asked whether they could offer an instance of either

an internal or an external impediment to successfully sustaining a partnership. An

internal impediment was defined as a limitation within the community college or the

business and industry rendering the partnership untenable. Examples of internal

impediments within the community college or the business could include personnel

shortages, institutional politics, or organizational budgetary restrictions. An *external*

impediment was defined in this study as an outside influence upon the community college or a business and industry that would render the partnership untenable. Examples of external impediments could include government funding restrictions, state mandates, scheduling issues, or institutional goals (Amey et al., 2007). Three community college administrators and two of their noncredit workforce training partners offered multiple examples of such impediments.

   Untenable partnerships theme 1: Internal impediments. Both community colleges and their business and industry counterparts commented that academic politics can pose an internal impediment to noncredit workforce training partnerships. Gerard Community College's dean of careers and technology, who is the noncredit workforce training partner of Kappa Construction, suggested that the college is focused on the revenue generated by the partnership and not on the long-term, intangible value embedded within the partnership. This has resulted in the college's decision not to offer such courses as fundamental computer applications training to its business and industry partners. The dean expanded upon this thinking:

> If the goals had been better aligned about the value is in the partnership itself and it's worth the investment of the college to truly just have those partnership, that maybe we'd be better able to move down that road. I don't know. . . . But whether or not we're making progress in those, in profitability of those, I don't know. I know at the end of each year, the measure is always going to be how does the revenue compare to the cost.

   Pierce Community College's dean of continuing education, who is the noncredit workforce training partner of Miller Manufacturing, concurred with the assessment that academic politics can impede partnership developing. Noting that the logistic of locating office space is a challenge to coordinate a client's training session on short notice, this dean stated:

I think just being part of an educational institution, which by nature moves a little slow and kind of clunky, sometimes I think we get bogged down in our own processes internally. You know, we, everybody fights for space, even though we have this beautiful campus, everyone is fighting for space, and if [name redacted] has a company that wants to do a 40 hour a week training, Monday through Friday, in a computer lab, good luck. You know, especially she's got four weeks' notice, good luck.

Hamilton Community College's dean of continuing education and business outreach, who is the noncredit workforce training partner of Quickspeed Transportation, also expressed dismay at how academic politics impedes the development of these partnerships. The dean expanded upon this idea, stating:

I would say the biggest internal impediment we have is probably administrative practices of the college. It doesn't seem like a month goes by where we're not challenging a process that they have, and I've been at this a long time, and there are still things that come up and you go, "You're really making us do that?" Whether that's a purchasing practice or an accounting practice or a payroll practice. . . . I can't believe how complicated that was. And for someone in the private sector, it would be like a no-brainer. And it became so complex for us, and it was a company that is in our district, but their headquarters is in [city name redacted]. And [the client] wanted us to take the same training there. Can't you just, well, we'll just invoice you. . . . And we feel that to be entrepreneurial, if we're not pushing the envelope with the rules that we're not doing our job.

Greening Partners' executive director, who is the noncredit workforce training partner of Evergreen Community College, also noted that academic politics can impact the sustainability of a training partnership. This executive director had worked with a workforce training dean at another Illinois community college whose predecessor had declined to participate in the current Illinois Network for Advanced Manufacturing (INAM) grant program. Greening Partners' director described the current workforce dean as "regretful about some of the decisions that were made before he came on" and noted that the internal political climate fostered by his predecessor factored into a missed opportunity for the institution.

One business and industry partner commented on an internal impediment from the within the business environment. Miller Manufacturing's coordinator of training, who is the noncredit workforce training partner of Pierce Community College, suggested that encouraging participation in training courses at a community college is difficult when the participants associate training with more traditional definitions of "going to school." The coordinator of training expanded on the challenge to encouraging enrollment, stating:

> We get 10% of the members use it, 15%, which is the norm for our business. I mean, it doesn't matter if you have 10,000 [employees], it'll be 10%. If you have 400, it'll be 10%. So, there's some people who hopefully, in the kind of business we're in, they did not have good experiences in school, and this looks an awful lot like school, I don't want to put myself into it.

Untenable partnerships theme 2: External impediments. Both community college administrators and their noncredit workforce training partners also commented on the myriad of external impediments that can render a partnership untenable. These external impediments included (a) the business's lack of planning for training opportunities; (b) the business's own logistical issues, such as scheduling conflicts; (c) the economic impacts on a business, such as the 2008-2009 recession; (d) the cost to the business of providing training; (e) the amount of employee turnover in the business; and (f) the difficulty in establishing the community college's identity and credibility with business and industry.

The first of these external impediments involved the employer's lack of planning for training opportunities. Both Richard Community College's training coordinator and its noncredit workforce training partner, who is Otis Mechanical's training and development specialist, agreed that poor planning was a clear impediment to sustainability. Richard's training coordinator commented on how a company's failure to

plan for costs actually meant cutting corners and compromising training quality for the

business and industry partner. This training coordinator stated:

> Well, it wasn't really solidified in the first place. It was one of those that just kind of, I think I need this. Can you come talk to us? We went out there. Well, we don't have any money, blah blah blah, and you know, could you do it for this? Well, no, because you're cutting out the most important piece that you need. So we tried to kind of find other ways to do it, but it just didn't work.

Otis Mechanical's training and development specialist concurred with the

importance of planning. This specialist acknowledged that Otis's previous planning

conflicts with Richard were resolved with the hiring of Richard's current training

coordinator and an effort to schedule activities in advance. Otis's specialist expanded

upon this thinking:

> I mean, I always try to plan out in advance and give them notice. Which I think are issues that, in talking to [Richard's training coordinator], those are things that were problems between the staff here and Richard in the past. They [Otis's former training coordinator] would call two days before and say, "Well, we need to test all these people, we need a room that can fit 50," well obviously you're not going to be able to make that work. You've got to have the foresight and, you know, the planning to get all that done.

Similarly, Pierce Community College's dean of continuing education, who is the

noncredit workforce training partner of Miller Manufacturing, noted that the business and

industry partner's time constraints often affect proper planning for training. These time

constraints may be prompted by external influences on the training partner, such as a

state mandate or regulatory agency compliance by a particular deadline. This dean

commented:

> It kind of defines the relationship right out of the box, you know, and it's, when you're in a time crunch like that, you really don't even have the time to try and ask some probing questions and to feel your way through and find out if this is in fact the need that they have. You are kind of just having to go with it.

A second external impediment noted by the study participants involved the business's own logistical issues. These logistical issues could include scheduling conflicts with shift workers, the community college administrator's inability to have contact with the clients for purposes of needs assessments, or a lack of prompt response to training proposals from the business. Hamilton Community College's dean of continuing education and business outreach, who is the noncredit workforce training partner of Quickspeed Transportation, cited a variety of issues prospective clients may have that make the partnership untenable for the community college. This dean stated:

> [T]ermination of a relationship tends to happen when it's too hard. . . . [I]t's taken six months to develop a proposal for a simple two or three classes. It's too hard to get, their expectations are too high, you know, we can't get access to the employees for the time that we need to deliver, you know, and after a while, you, I don't think this is the right time for training these employees, or there is someone else who can better meet your needs. Um, those are the typical scenarios where we kind of pull out. Or we don't have the expertise to deliver, and we look at the costs to secure those resources and it's, we know it's not appropriate to deliver that, because by the same token, our pricing is within a certain market, you know, we're not—delivering champagne-level training, champagne price.

Interestingly, Quickspeed Transportation's Project Management Office manager, who is the noncredit workforce training partner of Hamilton Community College, expressed frustration at the difficulty Quickspeed has had in building a customized noncredit training program that could transition into an associate's degree. Noting that Quickspeed was not seeking *champagne-level training,* the manager reached out to other Illinois community colleges able to provide comparable online training that could be converted from noncredit to credit-level training resulting in an associate's degree. Quickspeed's manager expanded upon this idea, stating:

> We have approximately 4,500 employees and contract carrier employees over nine counties. It's like the size of oh, New Jersey or something like that. [Our

transportation service area] covers six counties. Hamilton, because it's right next door to me, could do all sorts of things. I mean there's the succession planning thing so you could do both credit and noncredit. There's the online associate's. And if Hamilton doesn't want to do it, you know what? An online associate's from [community college name redacted] would be just as good.

A third external impediment cited by study participants involved the economic downturn of 2008-2009. This impediment was mentioned by Kappa Construction's president, who is the noncredit workforce training partner of Gerard Community College. Kappa Construction provides steel fabrication and related hardware to new construction projects, yet Gerard used a steel fabricator from outside of Illinois to build its noncredit workforce training facility. This steel fabrication could have been provided by Kappa; it would have kept local residents working and would have reinvested local dollars into the local economy. After Gerard's leadership contracted this fabrication to the out-of-state vendor, the Gerard Community College Foundation's leadership solicited financial support from Kappa Construction's president. Kappa Construction's president expressed concern over whether a relationship with Gerard could continue to be tenable and was frustrated that Gerard only sought financial support from local business when it benefited Gerard. The company's president expressed disappointment and frustration at Gerard's press releases touting the use of local industries to build the college's workforce training facility:

> That one was a little infuriating because . . . our door and hardware did some work there, but Kappa did not get the deal on that. It actually went to a company in [location redacted]. . . . Which was really upsetting. Because you know, here that's a [workforce development] center, and it was a time when the businesses and the community were really hurting, and that contract went to a place in [location redacted]. And at that particular time there were about four large projects during the economic downturn, and they all went out of state. Every last one of them went to an out of state fabricator. So the [workforce development center] company that got it underbid my costs by 30%, not my price, but my costs. And the reason was because of what was going on in the economy. The

company in [location redacted] was, they built skyscrapers, you know, they would have never looked at a project like that in a million years if it hadn't been for what was going on in the economy. They had to have lost money on it, but I think what they did was they were able to keep people. . . . But that was a very frustrating situation. . . . Because you know, it's just down the street, and we didn't do any of the steel in that building. . . . But I mean they babbled on in the newspaper and everything about how they were using local contractors.

For all of the events that have strained relationships between Gerard Community College and Kappa Construction, Gerard's administrator was concerned about and interested in Kappa's perceptions of Gerard and whether a relationship with the college was tenable. During the in-person interview, Gerard's dean of careers and technology asked the researcher, "You probably can't share what the employer's [Kappa's president's] feedback was?"

A fourth external impediment related to the cost of training in difficult economic times, whether the training was provided by the community college or by another vendor. Pierce Community College's dean of continuing education, who is the noncredit workforce training partner of Miller Manufacturing, commented that smaller companies are first to slash training budgets in difficult economic times and larger companies have their own internal training departments. In that scenario, noncredit workforce trainers must be more persistent and competitively aggressive than ever. This dean explained in additional detail, stating:

> Smaller companies, nonprofits, just don't have the resources that they might have had five years ago. And we, because we aren't working with the [corporation names redacted] all that much, that's [the smaller companies are] who we're working with. And we noticed a pretty big difference. . . . It's up to us to help companies see how downtimes are when you really need to beef up your training because you want to be prepared for when things take off again. . . .

A fifth external impediment involved turnover among business and industry leadership, a concern cited by Hamilton Community College's dean of continuing

education and business outreach. Noting the general stability and low turnover in the

higher education workforce, this dean commented on how high levels of turnover among

business and industry partners essentially stalls any progress trainers can make on a

training program. This dean stated:

> The workforce in higher education is very stable. I mean folks are here a long time, ten, twenty, thirty years is common in higher education. And in the private sector that's less so. And one of the most challenging things for us is to have some initial conversations, and then all the players change, and you're starting from ground zero, and the next person has no commitment whatsoever to what the previous person was trying to achieve. Or the project gets handed off to another person. We've restructured and that person isn't here anymore. That happens more times than I care to mention.

The sixth impediment cited by the study participants involved the credibility of

the community college to businesses and industries served by the college. In the view of

Hamilton Community College's dean of continuing education and business outreach,

who is the noncredit workforce partner of Quickspeed Transportation, community

colleges face an uphill climb to offer executive-level or leadership training by industry

leaders. This dean suggested that leaders in training would probably prefer to go to a

graduate school's executive leadership program and suggested that the community

college's credibility challenge is an ongoing one. This dean expanded upon this thinking,

stating:

> There are many areas where we could deliver actually excellent training, but we don't have the credibility in that level of the organization to deliver it. And for example, we've had folks come to us with nationally recognized strategic planning curriculum. And we've and so we've talked to the gentleman and said, "What's the target market for this training?" And he said, "Really looking at C level folks, presidents, vice presidents, chief planning strategists," all that stuff. And we had to have a kind of an eye-opening conversation with him. We would have loved to partner with him and deliver that. . . . I mean the folks at your institution, how much research have they done on strategic planning? They're more likely to go to Northwestern for that expertise. And at first we were kind of threatened by that, you know, we just need to work to build credibility.

Greening Partners' executive director, who is the noncredit workforce training

partner of Evergreen Community College, concurred with Hamilton's dean's opinion that

perception and identity can be external impediments to sustaining a partnership. Noting

that Greening Partners has developed and sustained many noncredit workforce training

partnerships with several Illinois community colleges, the executive director also noted

that some of the individuals who would most greatly benefit from the partnership may

have left the community college because of a poor or unpleasant academic experience.

The executive director commented on the importance of credibility and identity further,

stating:

> [A]n external impediment could be the perception and identity of collaborating
> with the college. Not everybody wants to go to a college. People might have
> both job seekers, people looking to get into training, and employer partners have
> histories with colleges that might be negative. . . . [W]e make a choice to
> collaborate with a college and that means that's part of the identity of our
> program. . . . [P]eople have different reasons for going to college or not, you
> know, partnering, businesses partnering with colleges or not, so we are getting
> inside of that history and relationship when we decide to do that. So that could be
> an impediment.

Evergreen Community College's dean of corporate and continuing professional

education, who is Greening Partners' noncredit workforce training partner, agreed with

the opinion of Greening's executive director that credibility and identity are challenging

to market. This dean elaborated on the challenges noncredit workforce training

administrators have in marketing their units and services, stating:

> The external [impediment] is that I think in many cases, some of the companies
> really don't realize what we can actually do for them. As much as you try to
> communicate that, um, in some cases it registers, it resonates, you keep trying to
> get into companies, but it's not until they actually have a specific need, and then
> they're scrambling for potential options, that they reach out to you. . . . And in
> some cases, just the lack of awareness, no matter what we do from a marketing
> perspective, no matter what we do from an outreach perspective, they still won't
> necessarily think of the college as the source or the, the go-to source to acquire

the type of training that they need. . . . And I'm not sure how you could change that. I mean, that's just literally for just about anything and everything. We don't have a huge budget to where we could do different types of marketing, everything else, so money is obviously certainly a barrier. . . .

Overlying themes: Feedback and champion. Amey et al. (2007) offer the concepts of *feedback* and *champion* as overlays to the Partnership Development Model. *Feedback* is described as a tool to "help organizational members make sense of intended and actual outcomes" (Amey et al., 2007, p. 11). A *champion* is described as a "person or a group that advocates for the initiative. . . . The champion needs to have the support of the positional leader but does not have to be in a particular position of traditional power within the organization. . . . The personal, cultural, and social capital that the champion maintains is often what contributes to success" (Amey et al., 2007, pp. 11-12). The study participants offered several examples of both feedback and a designated champion and the roles those components played in the success or failure of a noncredit workforce training partnership.

Feedback theme 1: Input to discuss issues and concerns. Both community college administrators and their business and industry counterparts stressed the importance of regular meetings to solicit feedback on noncredit training issues and concerns. In the case of Richard Community College, the noncredit workforce training partner of Otis Mechanical, regular meetings are held to discuss concerns and possible topics for future training sessions. In addition, the college's office of Corporate and Community Education has a seat on a manufacturing program advisory committee to share what the district's business and industry partners are saying about their workforce training needs. Otis Mechanical's training and development specialist concurred with the value of meetings with Richard and added that there has never been reluctance to ask

Richard for help in implementing a new training initiative. This training and

development specialist stated:

> I'd say there's definitely a great open exchange of information between the two.
> There's no, you know, I don't feel that they feel that you're stepping on their toes
> if you say, "Hey, we saw this program that's being run somewhere else. Think
> some of it would be helpful. What can you do?" And they take the information,
> look at it, run with it or give us feedback.

Pierce Community College's dean of continuing education, who is the noncredit

workforce training partner of Miller Manufacturing, agreed that staying in touch and

working hard to solicit feedback is integral to the partnership's success. Miller's training

coordinator concurred with Pierce's approach to obtaining feedback. This training

coordinator provided a specific example of how obtaining that feedback had improved

the manner in which Miller promotes its training offerings:

> [Pierce Community College employee name redacted] took over the web site and
> said it could really use some updating. I'm looking at it, yeah. And so [Pierce
> Community College employee] said, you know, I can do this and charged me a
> minimal amount to totally redo our web site. And then the other day [Pierce
> Community College employee] said, you know, you guys really ought to have a
> Facebook site, so [the employee] just put one up for us and we're still marketing
> it.

Feedback theme 2: Input to inform future program design. In addition to the

importance of feedback to resolving issues and concerns, several study participants

commented at length on the importance of feedback to inform future training initiatives.

Using feedback to plan for future training coursework is a foundational principle of

Kirkpatrick and Kirkpatrick's (1993) Four Levels of Training Evaluation. Greening

Partners, the noncredit workforce training partner of Evergreen Community College,

cited the use of business partner feedback to plan for additional training initiatives in its

promotional materials, stating:

> As active partners . . . public workforce agencies will provide input into program design and information on labor market and industry needs. The training providers will work collaboratively with the workforce agencies on to ensure that the integrated training program is eligible for [fund name redacted] funding (Greening Partners, 2011, p. 2, para. 3).

Greening Partners' executive director commented enthusiastically about the importance of feedback to the partnership's success. The director stated:

> One of the characteristics is this real honest communication about what works and what doesn't work and how to fix it. And kind of being positively motivated by improvements. It's like if we're going to complain about something that's not working, are we just going to wallow in it's not working or are we going to be thinking, how do we fix this? How do we improve this? How is this going to get better?

In the case of Hamilton Community College's dean of continuing education and business outreach, listening to the client, coupled with extensive reflection, can result in valuable feedback to inform program design. This dean stated:

> I mean, you can't come in with solutions. And often times, the first meeting is just about listening and making them know that you listened with an open mind and not firing back solutions within the first five minutes. Because I think it's more powerful to say, "You know, I learned a lot about your company today and what your needs and issues are. We're going to take this back and we're going to think about it." Because I don't want to fire off some quick solutions. I may have some ideas, but I want to really understand what the issues are before we start pushing brochures. "Well, we have, we have management training." They might need that so they, at this point, I'm not prepared to say what you know, what the answer is without some deep reflection, and we're probably going to do some more fact-finding and listening and talking to you and talking to other people, I mean, because I'll sometimes, we have a talk with an HR director and you know, it might be helpful for us to talk to a few of the managers as well.

While the *deep reflection* to which Harper's dean refers can result in a well-considered training proposal, Quickspeed Transportation's Project Management Office manager expressed concern that the fact-finding and reflective processes often yielded no training proposals at all. The manager expanded upon this opinion, stating:

It's all for credit, a little bit toward the adult student, but it's how do you get adult students into Hamilton. . . . I don't think it's focused on the corporate [training] part at all. And that would be a very interesting thing because I'm a firm believer in—and this is not in a manipulative way—but building a network. . . . Academic, I mean the whole thing. And I never got a call from corporate [training] where they're going, I know this is manufacturing and you're in transportation, but this is something that you might find interesting. . . . You know, so there's this cross-functional approach with design thinking that companies use and it really makes for a much better product. Because it's sort of inbred otherwise. So you know, with the community college, I'd think there are quite a few things that are going on that it would be both relationally good to do and there also could be some overlap slightly, you know, because you look at something and it's like, "You know, it stimulates my thinking in this area. Let's talk about that more."

Champion theme 1: Role of the president. Three of the five community college administrators and one business and industry partner participating in this study cited the institution's president as the champion for noncredit workforce training partnerships. The presidents of Evergreen, Hamilton, and Pierce Community Colleges were cited by their noncredit workforce training administrators as champions. In addition, Pierce Community College's president was cited by Miller Manufacturing's coordinator of training as a champion.

Evergreen Community College's dean of corporate and continuing professional education noted that the institution's president rose through the administrative ranks through noncredit workforce training. For this reason, this president has an in-depth understanding of partnership development and sustainability. Hamilton Community College's dean of continuing education and business outreach also enthusiastically identified the institution's president as a champion. Hamilton's dean put it succinctly: "He sees what he brings is exactly what you describe. He brings the capital." Pierce Community College's current president and the college's predecessor were both cited by the dean of continuing education and Miller Manufacturing's coordinator of training as

champions. Both presidents were cited for acting as the *broker* to which Amey et al.

(2007) refer, or as a *rainmaker* in common parlance. Pierce's dean said about the

college's current president, "[The president's] networking with a different group of

people and with some different venues. And making different connections, so it's just

really nice to have [the president] thinking of us [while] making these connections,

because I know not all presidents do that." Miller's coordinator of training concurred

with this assessment, referred to the president as a "rainmaker," and described the

president's championing efforts as follows:

> First of all, [the president] kept the funding for it [noncredit workforce training].
> And I'm sure, well I never saw [name] as a hands on person. I'm sure [name]
> was a leader by you know, just being aware of what was there and making sure it
> continued to grow as it goes.

In the case of Gerard Community College's dean of careers and technology, who

is the noncredit workforce training partner of Kappa Construction, the president was not

perceived as a champion. This perception was based upon both this president's newness

to the job and the individual's focus on ceremonial and community-based duties that are

part of a college presidency. This dean had apparently not considered that a president's

community involvement might translate into partnership opportunities between the

college and local business and industry. The dean explained why the president was not

perceived as a champion, stating:

> We have a new president. . . . So this president's been here a year and a half, well
> no, not that long. Now our vice president of instruction at times [probably talks]
> to a specific employer and this is of interest. Not so much probably from our
> president. The president's probably a lot more involved in things like United
> Way and the community as opposed to having that connection really with a lot of
> the employers.

Otis Mechanical's training and development specialist also did not share the view that Richard Community College's president was necessarily a champion for noncredit workforce training partnerships. Although the contact with the college's president occurred in meetings with the local economic development agency, the training and development specialist did not believe that those minimal contacts established the president as a champion. This thought was further explained:

> I've met [Richard's president] on a couple of occasions, but I don't work with [the president] frequently. The times I feel like our HR group interacts with [the president] would be in some of those [economic development agency] type situations. Where we're all kind of brought together.

Champion theme 2: Role of other community college staff. When a community college president was not offered as a champion, the study participants were asked to offer an individual within the community college who would fill that role. Three community college administrators identified themselves as champions. Two training partners also identified the community college administrator participating in the study as the champion. Although Evergreen, Gerard, and Richard Community Colleges' administrators, along with Greening Partners and Otis Mechanical, all identified the administrators participating in the study as champions, a closer examination reflects that the role of champion is often tied to the administrator's visibility more than the personal, cultural, and social capital to which Amey et al. (2007) refer.

In the case of Evergreen Community College, both Evergreen's dean of corporate and continuing professional education and its training partner, Greening Partners, identified the dean as the champion. Evergreen's dean acknowledged the contributions of the college's president to building the partnerships, but expanded upon the dean's role in this way:

> I guess you can say that here, we now have multiple champions, because [our president] would definitely be one. . . . I'm certainly very much a champion of that and especially with the understanding and the background that I have, and it works out quite well. And in many ways I also serve as the subject matter expert for the credit side in the industrial technology area.

Greening Partners' executive director concurred with the appraisal of the dean's role as champion, adding:

> I mean the champion from my perspective would definitely be [Evergreen's dean]. [This dean] is absolutely interested in seeing collaboration and seeing [the] department succeed, seeing new things happen. . . . And it's not always that administrators are willing to do that. So I think the college president has been supportive in the past, the former president, but in my experience, which is just my little piece of this landscape, it's definitely been [the dean], you know, championing the department, championing Evergreen Community College in general, and their participation and collaboration.

Similarly, Gerard Community College's dean of careers and technology, who is the noncredit workforce training partner of Kappa Construction, opined that the dean's and associate dean's positions include the role of champion. This position was clarified with the monetary caveat that championing a partnership is only effective if the partnership yields a profit to the institution. This dean stated:

> I think that you know, certainly our associate dean and even myself would be the champion, and part of the difficulty in sustaining those is given the current budget situation, and it's difficult to sustain that if we're not showing revenue.

Richard Community College's training coordinator was also self-identified as a champion. This training coordinator commented that the coordinator position was more high-visibility than that of the director of corporate and community education, an assessment with which the director concurred. The director clarified this point by saying, "[The training coordinator] is the face of Richard, the face of the program, the face of quality control. . . . [The training coordinator] is your main point of entry here. I'm just the side item. [The training coordinator] is the entrée." When asked to expand upon the

president's role as champion, the training coordinator said, "[The president] is too, but I mean no, that's what I do." This perspective was echoed by Richard's noncredit workforce training partner, the training and development specialist from Otis Mechanical.

While these three community college administrators and their noncredit workforce training partners all suggest that the administrator serves as the champion for building and sustaining the relationship, these administrators do not possess the levels of capital to which Amey et al. (2007) refer in their definition of a *champion*. According to the Partnership Development Model, the partnership champion has "the personal, cultural, and social capital that . . . is what often contributes to success" (Amey et al., 2007, pp. 11-12). While these administrators all have a personal sense of connectedness to the business and industry partner, none of them has the cultural capital to allocate significant expenditures of resources to build the partnership. Additionally, these individuals have limited social capital to institute a new partnership without the authorization from a higher-level administrator within the community college. The Partnership Development Model differs from the literature on organizational change, where the champion is normally an individual in a traditional leadership role. While Amey et al. (2007) suggest that the champion can be, but does not have to be, a college president, this champion must maintain the *personal, cultural, and social capital* so necessary to a partnership's success.

What is interesting about Evergreen, Gerard, and Richard Community Colleges is that the deans and training coordinator do not develop partnerships at a macro-, large-scale level, where the champion initially brings the parties together and then moves on to another opportunity. Instead, these community college administrators work at the micro-,

detail-oriented level, where they coordinate training logistics and keep the lines of

communication open, sharing the results of their progress with the president and other

institutional leadership. These administrators have a high degree of social interaction to

offer the group and frequently have a strong interpersonal relationship with the business

and industry partner; however, this interaction functions more as a *closer*, who brings the

project to fruition, than a champion, who historically controls the organization's

resources.

   Champion theme 3: Perceived role of noncredit workforce training partner.

Two of the business and industry partners participating in this study also framed the role

of the champion differently from their community college counterparts. In the case of

Quickspeed Transportation's Project Management Office manager, who is the noncredit

workforce training partner of Hamilton Community College, the local Workforce

Investment Act (WIA) representative was identified as a champion who has made

connections for Quickspeed that Hamilton has been unable to make. Citing the personal,

cultural, and social capital to which Amey et al. (2007) refer, the manager shared the

ways in which the WIA representative has championed Quickspeed's training partnership

needs:

> What I would view as a champion is somebody who . . . sort of like consultative
> selling. You know, what is it that a client truly needs. . . . So the perfect example
> is somebody we have here. [Name redacted] is on all these workforce boards, you
> know, actively involved. And [name] has the ability to pull these things together.
> I have gotten grant money from [name], substantial amounts, because of what
> [name] knows. . . . So [name] knows on the little radar screen, which is probably
> huge, [name] knows, "Oh, this person, this person, they need to meet. This
> person here has this need. Oh, well I just found out about this. Let me connect
> them." That's how I would look at a champion and that they are aware of
> relationships amongst businesses, community colleges, sources for money,
> WorkKeys.

In the case of Kappa Construction's president, who is the noncredit workforce training partner of Gerard Community College, the college's champion was a retired area businessman who served as the college's noncredit workforce training liaison and had subsequently become the director of the area economic development agency. Kappa's president expanded upon this champion's personal, cultural, and social impact on the local community, a characteristic that this president felt Gerard's leadership did not possess:

> [The champion's] just, you'd have to know him, but he's just one of those people in the community that everybody knows and everybody really respects and likes and you know, very easy to talk to, very charming, and so I think he used those attributes knowing everybody. . . . I mean, [the champion] probably garnered more respect than the president at the time. . . . He's done it all, so. He just had that entrée into people, you know, the top managers in all the businesses in [city name redacted]. He socializes with them. He knows them. And it was very easy for him to talk to them.

Amey, Eddy, and Ozaki's (2007) Implications for This Research

Amey et al.'s (2007) Partnership Development Model has implications for this research in three key areas. The first implication is that while community college presidents are normally considered champions with the personal, social, and cultural capital to broker a transaction, there must be a champion with the same kinds and quantities of capital from the business and industry partner involved in at least the early stages of the partnership. The second implication is that businesses and industries often misconstrue the role of their community college contact person as a champion when, in fact, that person functions more as a *closer*, who attends to the minutiae of the partnership and may or may not report to the college champion on the status of the partnership. The third implication is that the failure of community colleges in this is study to consistently employ both regular planning and evaluative processes results in

miscommunication between the parties, often resulting in untenable training partnerships. Community college noncredit workforce training units relying upon Amey et al.'s (2007) Partnership Development Model can capitalize upon opportunities for partnership development and more effectively sustain and enhance existing partnerships.

Kirkpatrick and Kirkpatrick's (1993) Four Levels of Training Evaluation

The current-day gold standard for evaluating training's effectiveness and for planning future training initiatives was developed by Donald Kirkpatrick, whose 1950s-era work in training evaluation has evolved into the Kirkpatrick Four Levels of Training Evaluation. His son, James, joined him in further developing and refining this model (Kirkpatrick and Kirkpatrick, 1993). The Kirkpatrick Four Levels of Training Evaluation include: (a) *reaction* to the training; (b) *learning* that occurred because of the training; (c) *behaviors* that have changed because of the training; and (d) *results* training has had on the participants and the workplace. All four levels of training evaluation were used to analyze the data from the five community colleges and the five noncredit workforce training partners participating in this study. This analysis produced themes that were illustrative of the four levels of training evaluation.

Each level of training evaluation was employed as part of the study's conceptual framework to provide depth and breadth to the study's findings. This was accomplished through the development and use of multiple methods, including (a) online demographic survey questions; (b) in-person interview questions; and (c) samples of evaluation forms provided by the interview participants. In addition, the five community college administrators and the five noncredit workforce training partners offered quotes that elaborated on and further substantiated the findings. Table 38 illustrates the four levels

of training evaluation and the driving questions and interview questions to which the

levels are mapped.

Table 38. *Kirkpatrick and Kirkpatrick's (1993) Four Levels of Training Evaluation and Driving and Interview Questions to Which Each Level is Mapped*

Training Evaluation Level	Driving Questions and Interview Questions
Level 1: Measuring Reaction to Training	**Driving Question:** *What characteristics or elements contribute to successfully maintaining noncredit workforce training partnerships?* **Interview Questions:** 1. Describe the steps you follow to assess the effectiveness of a noncredit workforce training partnership. 2. Explain the processes or mechanisms you utilize to maintain a successful relationship with a noncredit workforce training partner.
Level 2: Measuring Learning Occurring from Training	**Driving Question:** *What characteristics or elements contribute to successfully maintaining noncredit workforce training partnerships?* **Interview Questions:** 1. Describe the steps you follow to assess the effectiveness of a noncredit workforce training partnership. 2. Explain the processes or mechanisms you utilize to maintain a successful relationship with a noncredit workforce training partner.

Table 38. *Kirkpatrick and Kirkpatrick's (1993) Four Levels of Training Evaluation and Driving and Interview Questions to Which Each Level is Mapped*

Training Evaluation Level	Driving Questions and Interview Questions
Level 3: Measuring Behavioral Changes from Training	**Driving Question:** *What characteristics or elements contribute to successfully maintaining noncredit workforce training partnerships?* **Interview Questions:** 1. Describe the steps you follow to assess the effectiveness of a noncredit workforce training partnership. 2. Explain the processes or mechanisms you utilize to maintain a successful relationship with a noncredit workforce training partner.
Level 4: Measuring Results that Have Occurred from Training	**Driving Question:** *What characteristics or elements contribute to successfully maintaining noncredit workforce training partnerships?* **Interview Questions:** 1. Describe the steps you follow to assess the effectiveness of a noncredit workforce training partnership. 2. Explain the processes or mechanisms you utilize to maintain a successful relationship with a noncredit workforce training partner.

Level 1 Evaluation: Reaction

Kirkpatrick and Kirkpatrick (1993) refer to Level 1 training evaluation as a "measure of customer satisfaction" that provides valuable feedback to both trainers and managers alike (p. 21). In addition, evaluation that measures training reaction yields quantitative information that can be used to establish benchmark performance standards for future training programs (Kirkpatrick & Kirkpatrick, 2006). On the Likert scale used in this study's online demographic survey, the community colleges' training

administrators' responses indicated they agreed with the statement that their institutions

measured reaction to training, with the average response of 4.4/5.0 (agree to strongly

agree). The colleges' business and industry counterparts were more neutral about

whether the colleges measured reaction, with an average response of 3.6/5.0 (neutral).

During the in-person interviews, several community college training administrators

indicated they used Level 1 evaluation to measure *reaction* to training. Their responses

revealed the administrators often used reaction for little more than gathering marketing

and promotional quotes instead of for informing future training initiatives. This approach

to measuring reaction was verified by one of the colleges' noncredit workforce training

partners. Four themes relating to Level 1 *reaction* were extracted from the data collected

and analyzed.

Level 1 evaluation theme 1: Use of reaction evaluation for marketing

purposes. Kirkpatrick and Kirkpatrick (2006) note that even when reaction evaluation

forms appear to be "happiness sheets," they are necessary, for dissatisfied training

participants cannot move on to effective learning if they have reacted negatively to the

training (p. 27). In addition to Hamilton Community College, which requires the

business and industry partner to authorize use of written course evaluation testimonials

for public information and marketing purposes, two other community colleges and two

noncredit workforce training partners commented on the use of the *happiness sheet*.

These community colleges acknowledged that customer comments are more often used

for marketing or for proving customer satisfaction to the supervisor paying the training

bill rather than for improving the training itself. These community college administrators

commented:

Hamilton Community College, dean of continuing education and business outreach: I'm going to take this a couple of different ways. Hamilton's evaluation of how we've delivered our product. And then there's the evaluation for the employer that helps the employer see the benefit and the value. . . . Satisfaction survey. . . . It could be an evaluation of the delivery. . . . Obviously we survey the folks in the training event and ask them to evaluate the presenter and the content and their experience and the chairs and everything. Just a traditional assessment.

Richard Community College, director of corporate and community education: [The college's training coordinator met with the technical math instructor who had just finished a course] and I said, "Could you just write me a paragraph to give to Otis Mechanical about what you just said?"

Gerard Community College, dean of careers and technology: I think when it comes up as a marketing opportunity, our marketing department probably calls and gets a quote or gets a letter that we keep on file. But it's not usually an organized systematic process.

A recent Gerard Community College ICCB program review indicated a new student satisfaction survey had been implemented in Fall 2009. The program review indicated the evaluation focused strictly on reaction to the value of the training and offered no room for evaluating other levels of training, such as learning, behavior, and/or results.

Two business and industry partners who commented on measuring Level 1 *reaction* offered completely differing views on the evaluation's usefulness. Miller Manufacturing, the noncredit workforce training partner of Pierce Community College, emphasized the importance of measuring reaction to training. Noting that the training Pierce offers Miller's employees is frequently in the areas of personal skill development or workforce development, Miller's coordinator of training commented at length on how reaction to training impacted the participation of other Miller employees. The coordinator stated:

For us, reaction is key because that word travels on the floor. Good programs, good instructors. We have instructor that we use for much of our woodworking, plumbing, it's a local contractor who enjoys our folks and he does a lot of

different things and the guys like him, OK? That's the way with our CDL. The guys really like him. They give him high marks. . . . So yeah, [reaction] can have an impact if people feel . . . if they weren't respected, if they feel like they were talked down to and things, it can be a great course, it's done.

Conversely, the manager of the Project Management Office at Quickspeed

Transportation, the noncredit workforce training partner of Hamilton Community

College, criticized Hamilton's near-exclusive use of Level 1 *reaction* as an impediment

to developing future training opportunities with Quickspeed. This manager commented:

We get the little smile sheet. . . . I'd say Level 1 completely, maybe slightly Level 2. Like, we just finished project management training, Project 2010, the program. So we had you know, did you like the instructor, did you learn something, you've got the . . . Likert scale . . . you've got one to five. Oh, you had to write something in. What did you learn that you'll take back to work? How would you like this class to be different? Now, nobody's coming back to see if anybody's capable of using the program.

These comments reflect that Level 1 *reaction* is essentially being misused if its exclusive

intent is to gather marketing testimonials. In fact, an overreliance on Level 1 *reaction*

appears to impede the maintenance and future development of those training relationships

when the business and industry partner believes the evaluation is done for the sake of

those testimonials.

Level 1 evaluation theme 2: Failure to use reaction to close the loop on a

training cycle. Three of the five community colleges and one noncredit workforce

training partner commented that evaluation, even at Level 1 *reaction*, is infrequently used

as the final step in the training cycle. While measuring Level 1 *reaction* could offer

evidence in support of the data gathered during the needs assessment process, none of the

three community college administrators who expanded upon this concept appeared to be

using evaluation as confirmation that the training needs uncovered during the assessment

process had been met.

In the case of Richard Community College's director of corporate and community education, who is the noncredit workforce training partner of Otis Mechanical, Level 1 *reaction* is important because the results Richard receives are not the results the trainer hears from the training participants. This administrator stated:

> We make a composite summary and I take those, I usually hand deliver those back with certificates, things, and talk to the person [the training participant or the business partner signing the contract], because I want their feedback. You know, what they say on those evaluations are probably not what that person that planned that training's going to hear. And I know, know, I always tell them, you know what? If you don't let me know what's wrong, I can't fix it. If it's good, and you want to keep it or you want to make some changes, I need to know that, too.

Interestingly, Richard appears to use the data gathered from Level 1 evaluation in a reactive manner when it comes to determining the root cause for the training and for checking the competencies of its faculty after the training is completed. In one example, Richard's administrator noted Level 1 *reaction* often reflects a deeper need for training than what the business and industry partner anticipates. This administrator cited an example of a client requesting spreadsheet training, yet the participants' reaction to the training reflected they needed basic math literacy, not spreadsheet skills. This administrator stated, "And they're OK with that because we've had to do that a lot, too. They'll ask for something and we'll say, 'OK, what's the real root of this problem?' And then you go back, back, back, and it's like, OK, we need to step back." In another example, this same administrator noted Level 1 *reaction* is also often used to check on "traditional academic faculty" who lack the training credentials to be effective in the classroom. Acknowledging this unusual use of training evaluation, the administrator offered this explanation:

> We had big concerns with sometimes the strictly academic faculty going out and doing training for workforce business and industry, didn't match up very well,

> because they were used to teaching you know . . . high school juniors and seniors
> . . . to some of these people who went back to school after a number of years and
> they kind of have a different learning style. . . . So they usually didn't have real
> good response to those faculty members. . . . Some of these just went through,
> you know, college, and they became, you know—textbook teachers. . . . And
> they're not experienced teachers.

These examples again make the case for using Level 1 *reaction* for more than just the "happiness sheets" to which Kirkpatrick and Kirkpatrick (1993) refer. Measuring reaction should also close the loop on pre-training needs assessment and prepare noncredit educators to function as corporate trainers.

Level 1 evaluation theme 3: Failure to use reaction to plan future training initiatives. Three community colleges and two noncredit workforce training partners commented that evaluating training, even at the reaction level, frequently goes unused when planning future training initiatives. This type of evaluation, when implemented, could be extremely helpful to community colleges as they seek to build and sustain training relationships with local business and industry.

Both Greening Partners' executive director and Evergreen Community College's dean of corporate and continuing professional education agreed that evaluation is an area in which both partners can improve. They further added that the data gathered and tracked is more often to meet grant funding requirements than to truly inform training initiatives. Evergreen's administrator indicated that a post-training evaluation is offered, but added that the institution does not currently conduct follow-up due to a lack of human and other available resources. Greening Partners' executive director acknowledged similar human and fiscal restrictions on this type of training evaluation and commented that this was an area for improvement. The executive director stated:

Mostly from the lens of you, know, sort of continuous improvement, are we meeting your needs, how do we tweak the program to meet your needs. So I think that we have probably fallen short on doing really good, effective evaluation, quite honestly. . . . We're sort of driven by did we train the number we said we would train. . . . The metrics that we put into our spreadsheets that tell us that we are on track or not. . . . We've had some issues with the training and the length of training and students' experience inside the classroom and I don't think we're using, we're doing a good job of using evaluation to inform future decisions. So if anything, I would just say . . . we've got a lot of room for improvement here.

Richard Community College's administrator, who is the noncredit workforce training partner of Otis Mechanical, indicated that college staff frequently meets with the trainer and the business partner after the training to ask about how employees perceived the session. In addition, a recent Richard ICCB program review indicated that aggregated course evaluations are shared with company leaders to determine whether the training succeeded or required changes. While Otis Mechanical's training and development specialist found the aggregated course evaluations to be helpful, this specialist also believed receiving and reviewing raw data could be useful for the business and industry partner. This training and development specialist expanded upon this observation:

Do I think Richard could work on their survey that they give people after training? Yes. . . . It's paper-based. . . . Facilities, course length, was the instructor knowledgeable. It's about five Likert questions and a couple of open-ended ones that, of course, no one ever answers. . . . [Richard's administrator] tends to aggregate them, and I get those back, which are then a little less helpful. I'd prefer to see each one. . . . They don't do [follow-up evaluations at 60 or 90 days]. I don't think a lot of places do that. Sometimes I think it might be more helpful to the business partner if we did. . . . Then on the other end I think 60-90 days out, how much difficulty would I have getting those people to turn in another survey?

Level 1 evaluation theme 4: Failure to use reaction to plan for Level 2 evaluation. Kirkpatrick and Kirkpatrick (2006) posit that effective Level 1 evaluation can yield valuable quantitative data to establish future learning benchmarks and to plan

for the effective evaluation of Level 2 *learning*. Two community colleges and two

noncredit workforce training partners spoke about their abilities, and their failures, to use

Level 1 *reaction* as a planning tool for future Level 2 *learning* activities.

Hamilton Community College's dean of continuing education and business

outreach, the noncredit workforce training partner of Quickspeed Transportation, spoke at

length about evaluation to appease the training partner, regardless of whether training

participants reacted favorably to the training or the evaluation could provide the blueprint

for future training plans. This dean stated, "The employer might not be interested at all in

a satisfaction survey. 'I don't care if they liked the training. I just want to make sure

they learned something.'" Interestingly, Hamilton's noncredit workforce training partner,

who is the Project Management Office manager with Quickspeed Transportation,

suggested Hamilton rarely, if ever, uses Level 1 evaluation findings to plan for future

training initiatives. This manager stated:

> I don't think anybody has ever done that [used Level 1 reaction to plan for future
> training]. You know, like you want us to come back and see—I'll have to do
> another intergovernmental agreement and have Hamilton come back with this
> instructor, because I do know that there's going to be some issues, not because he
> was a bad instructor—I want someone to come in in either January or early
> February and I want them to, we can do a half-day session, see if there's any
> questions, have him explain how to do things that people now have tried and they
> figured out they can't do it. Yeah, I'm going to initiate that. Hamilton is not
> going to.

Similarly, Pierce Community College's dean of continuing education commented

that the department is just now developing an employer survey to evaluate training

effectiveness in a more consistent manner. This administrator stated, "We anecdotally

follow up with them [the employers], but we want a more formal way to assess their

satisfaction with the training, if it met their expectations. And so then we'll have both the

participants in the training and then our contact at the business answer it." Yet this surveying approach limits evaluation to the Level 1 characteristics of *reaction* and customer satisfaction and is not used to measure any Level 2 *learning* that took place.

One business and industry partner commented on how its community college partner's evaluation process both limits and impedes future training opportunities with area workforce partners. The president of Kappa Construction, the noncredit workforce training partner of Gerard Community College, commented that any evaluation was formulaic and treated like a checklist item for the college. Kappa's president stated:

> I think I heard from [Gerard] as far as like, were you satisfied, it wasn't any fancy survey or anything I remembered. . . . I don't really remember much about the way of follow-up. . . . You completed the thing, you got your card that said you completed the thing, and I don't remember much follow-up beyond that. . . . It was more like, were you satisfied, yes, OK, end of discussion. . . . And I would have been sort of almost interested to see that myself, if my employees filled out something, I would have been interested to see if they felt. . . . Because these guys, most of them who took this class, they know darn well how to operate the forklift. You just have to take the refresher any so many years to have your little card in your pocket. So I would have been interested. I guess I could have done that on my own, but again, you get busy, you're like OK, class is over, pay the bill, got the cards, we're done.

The variety of responses from both the community colleges and the business and industry partners they serve reflect that, at best, Level 1 *reaction* is frequently used as a "happiness sheet" as proffered by Kirkpatrick and Kirkpatrick (1993). The evaluations are rarely, if ever, used for more than a customer service validation. While reaction to the training experience can be instructive, Level 1 evaluation, when employed to its full potential, can lay the groundwork for additional levels of training and a more triangulated approach to measuring training's effectiveness in the workplace.

Level 2 Evaluation: Learning

Kirkpatrick and Kirkpatrick (1993) refer to Level 2 training evaluation as a measurement of whether *learning* has occurred. Level 2 evaluation determines learning has occurred when "one or more of the following occurs: Attitudes are changed. Knowledge is increased. Skill is improved. One or more of these changes must take place if a change in behavior [Level 3] is to occur" (Kirkpatrick & Kirkpatrick, 2006, p. 22). On the Likert scale used in this study's online demographic survey, the community colleges' training administrators were neutral about whether they measured Level 2 *learning*, with an average response of 3.46/5.0. The colleges' business and industry counterparts, however, generally disagreed with the colleges' perceptions of their Level 2 evaluation use, with an average response of 2.2/5.0 (disagree). During the in-person interviews, three community colleges and all five of the participating noncredit workforce training partners indicated ways in which the colleges could improve in this area and provided specific supporting examples. Two themes relating to Level 2 *learning* were extracted from the data collected and analyzed.

Level 2 evaluation theme 1: Potential usefulness of pre-testing and post-testing to community colleges and businesses. Both community colleges and their business and industry partners acknowledged that pre- and post-testing participants is needed to provide quantifiable evidence that Level 2 *learning* has occurred and to inform Level 3 *behavioral* change. Pierce Community College's noncredit workforce training administrator, who is the noncredit workforce training partner of Miller Manufacturing, acknowledged that pre- and post-testing was an area where the college could improve. This administrator stated:

> What we don't do is any formal pre- or post-test. . . . And if it's a certification type of thing, then of course we would have completers or whatever [instead of a pre- and post-testing situation]. We right now don't have any formal mechanism, and I think that's something that probably down the road we'll be talking more about. I think we have some other hurdles, you know, not hurdles, but other more natural places to start and like the employer [reaction] survey, some other things we need to do first.

In the case of Richard Community College, the noncredit workforce training partner of

Otis Mechanical, preparation for post-testing involves homework for training

participants—even in the case of noncredit coursework—because the courses are

delivered by faculty who teach comparable credit-bearing courses. This administrator

stated, "[T]he companies want them [faculty] to do testing, they want them [faculty] to

give them [participants] homework, you know, and sometimes we do a lot of that when

it's a noncredit class." Interestingly, however, Richard's administrator noted the college

relies on partners such as Otis Mechanical to tell Richard not only *what* to train, but *how*

to train it. The evaluation, then, comes from Otis Mechanical as a directive, often given

from Otis's executive offices without input from the training participants themselves.

Richard's administrator commented at length on this approach:

> He [Otis Mechanical's executive officer] said, "I want to meet with these people at Richard," because he knew Otis Mechanical used us a lot. And so he did. And he said, "Here's what I need. I need operator training. And here's what I want you to teach. . . . I want you to put this curriculum together on these topics. You can figure out how much time. We have about 200 people, and they need to be trained by this time next year." . . . So, you know, they're [Otis's executive offices] reiterating all the time, these are still our issues, this is better. And he has no problem in saying it's not all the way there because of you and you.

> Interestingly, Otis Mechanical's training and development specialist, who is not

employed in Otis's executive offices, commented on how pre- and post-testing could be a

valuable tool for both Richard and Otis in planning future training initiatives. These

comments reflected, however, that pre-testing and post-testing to measure Level 2

learning is neither consistently implemented nor fully understood as the college and the

business plan for and implement training. This specialist stated:

> I mean, pre-testing and post-testing we could do, you know, and in some of these trainings, there's something to that degree. The metalworking program I talked about, you know, they have to complete a final project. So is it a test? Not necessarily. Could they have done the project before the class started? No. I'm trying to think, the SAP [Systems Applications and Products] processes and maintenance workshop. . . . It was a very fluid class. . . . If topics were brought up, the instructor would change his course for the next meeting. So in something like that, I don't—a pre- and post-test is not the right way to go.

Interestingly, the president of Kappa Construction, the noncredit workforce

training partner of Gerard Community College, disagreed with Otis Mechanical's views

on the value of using pre- and post-testing to measure Level 2 *learning*. Kappa's

president commented:

> [Gerard should have measured Level 2 learning], especially when you have that group of people who probably knew as much or more than the instructor about how to run a forklift. So maybe they could have gotten some valuable information back.

Level 2 evaluation theme 2: Use of standardized tests to measure Level 2

learning. Both community colleges and their business and industry partners

acknowledged that pre- and post-testing with nationally-recognized assessment tools such

as the Test of Adult Basic Education (TABE), or industry-specific credentials such as the

National Institute for Metalworking Skills (NIMS) examinations, can be effective tools to

measure Level 2 *learning*. One community college and two business and industry

partners discussed the value TABE testing offered, although TABE is utilized in different

ways across the institutions. In the case of Evergreen Community College and its

business and industry counterpart, Greening Partners, TABE testing is used as an entry

screening tool for its manufacturing noncredit workforce training program. Greening

Partners' executive director commented at length on TABE's use as a tool to measure

minimum work readiness competencies for entering the program, yet indicated that

TABE was not employed as a post-testing tool to measure what students learned:

> Yes, we use TABE and we use the survey format for entry screening. They're not always post-tested. So what happens is we're responsible as an organization for finding people and getting them in, finding them, screening, them, qualifying them so they get assessment tested in reading and math. They get drug tested, they get interviewed, they have to submit documents, they have to get sort of a ten multiple meetings in and appointments in, which is a screening tool in and of itself, before what we even put them into tryouts, which is an experiential day-long event where they participate in various team-building activities, following direction, critical thinking, and then us with the college decide who's going to be accepted into the class. . . . But then the college sort of takes over from there. . . . Once the students are enrolled, they're enrolled. And so they don't have to posttest in order to successfully complete the class.

Greening Partners' executive director considers TABE a pre-test. In fact, TABE

is a tool to measure prerequisite, general employment readiness competencies. TABE is

not being employed to determine what training participants know about manufacturing

prior to entering the manufacturing curriculum, which is the function of pre-testing under

the Four Levels of Training Evaluation. It seems unlikely, then, that TABE should be

used as a Level 2 *learning* evaluation tool as defined by Kirkpatrick and Kirkpatrick

(1993).

Evergreen Community College's dean of corporate and continuing professional

education viewed the executive director's perspectives on student screening somewhat

differently, suggesting that TABE is the pre-testing tool and the nationally recognized

NIMS certification examination is the post-testing tool for this training program.

Evergreen's dean stated:

> As part of this grant program, we've kind of vetted them that you know, they understand that they need to show up on time for work every day, and they've demonstrated that by being part of the class. Our instructors will not permit them,

> they will not sign off on allowing them to take that NIMS test, they're not going
> to misrepresent anything. The individual has to learn the content. They have to
> show up very day. If they are not there, then they haven't learned everything that
> they need to do to be eligible to take the test. And so again, we're, we're making
> sure we're not compromising the integrity or the quality of the training that we
> deliver.

Even though these two partnering organizations' administrators believe they are

adequately evaluating learning by employing pre- and post-testing for their training

participants, they are not implementing true evaluation of Level 2 *learning* as modeled by

Kirkpatrick and Kirkpatrick (2006). Evaluation of Level 2 *learning* specifically requires

pre- and post-tests be in the same format and cover the same curricular content. In the

manufacturing program partnership between Evergreen and Greening Partners, the TABE

assessment is used to measure minimum communication competencies needed in order to

learn the manufacturing curricular content. The NIMS assessment is used at the

conclusion of the training in order for participants to earn one of the nationally

recognized NIMS credentials. While it is true that successful completion of the NIMS

assessment would be an indicator of learning, Evergreen and Greening Partners lack a

comparable pre-test. This means the Level 2 measurement of learning is incomplete.

Quickspeed Transportation's Project Management Office manager, who is the

noncredit workforce training partner of Hamilton Community College, noted that TABE

was similarly used as an assessment tool to determine baseline competencies before

entering a computer-based training curriculum. This manager noted, however, that with

one exception, Hamilton's efforts at Level 2 *learning* have been "pretty lame." The one

exception involved the use of pre- and post-testing to determine levels of computer

competency, which were conducted in conjunction with TABE to confirm reading skill.

This manager explained:

So we actually did pre- and post-testing because the reading level for the manuals was at about a tenth grade level you know, you had to know how to use a computer, so we did a TABE and we actually did pre and post-, you know, pre-assessment hands on of how somebody could use the computer. And then we had classes that were scaffolded based on what their level was. So if you had somebody who could design a web page, they weren't sitting in the beginning class where somebody's learning this is a mouse. . . . Which we did have people like that. And then we did a post-assessment and that was actually a very integral part of a successful [project name redacted] implementation.

The myriad of ways in which Level 2 *learning* evaluation is deployed, and the inconsistent use of a pre- and post-testing instrument, reflects that community colleges in this study and their noncredit workforce training partners would be well-served with training on this important level of course evaluation.

Level 3 Evaluation: Behavior

Kirkpatrick and Kirkpatrick (2006) refer to Level 3 training evaluation as the "transfer of knowledge, skills, and attitudes" (p. 52). Acknowledging that measuring behavioral change is more difficult than measuring Level 1 *reaction* and Level 2 *learning*, Kirkpatrick and Kirkpatrick (2006) recommend that in order to measure Level 3 *behavior*, training participants should receive both "intrinsic" and "extrinsic" rewards for their training participation (p. 53). Examples of intrinsic rewards include feelings of self-satisfaction and accomplishment by changing an attitude, increasing knowledge, or improving a skill. Examples of extrinsic rewards include public acknowledgement of behavioral change, such as a raise, a promotion, or an employer's recognition. On the Likert scale used in this study's online demographic survey, the community colleges administrators' responses indicated they were neutral about whether they evaluated Level 3 *behavioral* change, with an average response of 3.4/4.0. The colleges' business and

industry counterparts strongly differed with this perception, however, with an average response of 1.8/5.0 (strongly disagree).

During the in-person interviews, both community colleges and their noncredit workforce training partners commented on the difficulty in conducting effective Level 3 *behavior* evaluation, a difficulty acknowledged by Kirkpatrick and Kirkpatrick (2006). The study participants' comments also reflected a lack of understanding that Level 1 and Level 2 evaluation must be measured prior to implementing any kind of effective Level 3 measurement. Two themes related to behavior were extracted from the data collected and analyzed.

Level 3 evaluation theme 1: Difficulty in conducting effective Level 3. Two community colleges and their noncredit workforce training partners agreed evaluation of Level 3 *behavior* is important to a training program's success. The interview responses reflect the colleges and their partners have differing perspectives on how effective the colleges are at actually implementing that level of evaluation.

In the case of Hamilton Community College and Quickspeed Transportation, the interview participants had completely differing views on how well Hamilton conducts Level 3 *behavior* evaluation. When asked whether Hamilton employed a Level 2 *learning* pre- and post-test as the basis for a Level 3 behavior evaluation, Hamilton's dean of continuing education and business outreach responded that evaluation can begin at any level in Kirkpatrick and Kirkpatrick's (1993) model. This dean stated:

> And so most of our projects include some sort of evaluation piece. . . . We do [pre- and post-testing] when there's an assessment available. . . . We do pre- and post when that's appropriate, and we present this information to them. Because we use that information to build the next relationship piece, right? We ain't going nowhere is the first one didn't go well, and if the employer has a clear—the

employer needs a clear understanding of how this impacted their core business and how this moved them forward as an organization.

While Hamilton's administrator did not offer a particular example of a Level 3 *behavior* evaluation, it is instructive that this administrator thought evaluating Level 3 *behavior*, and even Level 4 *results*, could be accomplished with optionally measuring Level 1 *reaction* and Level 2 *learning*. Kirkpatrick and Kirkpatrick's (1993) Four Levels of Training Evaluation specifically indicate that it is impossible to tie Level 3 *behavioral* change to Level 2 *learning* if the learning itself has not been measured.

Interestingly, Quickspeed Transportation's Project Management Office manager commented on a recent project management software class delivered by Hamilton's noncredit workforce training unit. The purposes of the training were to teach software skills and enhance the participants' strategic planning and project task management behaviors. While acknowledging that evaluating true behavioral change can be a challenge, this manager decided to conduct an internal behavioral evaluation in the absence of any such evaluation from the trainers provided by Hamilton. The manager commented on this decision:

> They [Hamilton] never suggest it [behavioral evaluation] either. . . . It's hard to do in certain areas. [Project management] is in its infancy, so we've gone from not having even a scope of work that's formalized for some of the projects. . . . [By measuring behavioral change, which will be two levels beyond what Hamilton evaluated for this training] I will be able to track that.

In the case of Richard Community College and Otis Mechanical, a comparable discussion yielded differing viewpoints on Richard's use of Level 3 *behavior* evaluation. Richard's director of corporate and community education noted Otis conducts Level 3 *behavior* evaluation and shares those results with Richard. Interestingly, however, Richard has no documentation on whether Otis has measured Level 1 *reaction* or Level 2

learning as precursors to measuring Level 3. Richard's training coordinator, who reports

to the director of corporate and community education and who also participated in the

interview, commented at length on a situation with Otis where behavioral change was

essentially forced on a training participant. The trainer tracked the forced behavioral

change as a measurement of successful training. This coordinator stated:

> I don't know that we measure [Level 3 behavioral change], but we work with the
> companies and they measure, so we keep in touch. One of the big trainings we've
> done for probably the last five years, and it just gets bigger every year, is
> leadership development skills. And our trainer is fantastic. The clients love him.
> He's tough. He says it exactly as it is. . . . [The other day] I said, "It finally
> happened. He got into it with the person who we were afraid that might happen
> with. . . ." The trainer won. The guy who was tough to work with came around to
> seeing it [the trainer's] way. But [the trainer] was very blunt with him. I mean,
> [the trainer] said, "I wasn't quite sure what was going to happen. You missed it."
> And I said, "I'm glad I did." Because anyway. It was fine.

In this situation, the instructional techniques used to facilitate behavioral change were

completely inconsistent with the intrinsic and extrinsic rewards to which Kirkpatrick and

Kirkpatrick (2006) refer.

Otis Mechanical's training and development specialist concurred with the

difficulty in conducting effective Level 3 *behavior* evaluation. This specialist, who

comes from a human resources background, discussed the challenges inherent to

delivering effective behavioral evaluation. Noting the difficulty trainers have in getting

training participants to complete basic Level 1 *reaction* post-training evaluation forms,

this specialist stated:

> As far as something more behavioral, like OSHA classes, could they be changing
> their safety behaviors, when the come back to work, do we expect Richard
> Community College to come in here and evaluate their safety behaviors out on the
> shop floor? No. So I myself struggle with, I mean, that's on the of the big
> research pieces in HR in total, how do you evaluate the effectiveness of training?
> And I don't think academia or anyone who's been in HR for years has figured out
> the best way to do that. So I wouldn't expect Richard to be able to do it, either.

> Or if [Richard's training administrator] did, I would call and say, "You send me that information right now!" [Laughs]

While the challenge is indeed difficult, Kirkpatrick and Kirkpatrick (2006) offer several strategies for implementing effective Level 3 *behavior* evaluation, including using a control group to measure behavioral change, surveying subordinates or supervisors to triangulate the data collected on behavioral change, and repeating the evaluation periodically to measure the ongoing impact of behavioral change. None of these strategies was employed by the community colleges or requested by the colleges' noncredit workforce training partners.

Level 3 evaluation theme 2: Inapplicability to certain kinds of training programs. One noncredit workforce training partner specifically commented on the difficulty in asking Pierce Community College to evaluate Level 3 *behavior* because of the curricular content. Miller Manufacturing's coordinator of training noted Miller's collective bargaining agreement with its unions provides funding for a variety of non work-related courses delivered by Pierce. Examples of these non work-related courses included archery and woodworking. Because these courses are for personal interest and not directly applicable to workforce development, Miller's coordinator indicated that evaluating Level 3 *behavior* is neither warranted nor useful. This coordinator commented:

> Now, one of the challenges with this, you know, you take a look at Level 3 and Level 4, they aren't job-specific, so you can't really take it back and say, you know, how well are they doing on the job? The [Level 2] tests show they have the skill and the ability, but they're not taking it back on the job so it doesn't have an influence on the organization per se. As you look at it. So it's a different world as you look at, my knowledge of Kirkpatrick, you know, and the four levels, it's a different world when you look at community education because you can't, to me, you can't look at three and four the same way as you'd look at if you were within an organization.

While it is true that personal interest coursework may not initially be perceived as impacting the organization as a whole, these intrinsic motivators that are part of Kirkpatrick and Kirkpatrick's (2006) Level 3 might themselves be considered as a type of evaluation. If an individual completing a personal interest course *reacts* favorably (Level 1), demonstrates *learning* (Level 2), and becomes a more productive and satisfied employee because the employer supports this personal interest pursuit, it may be possible to quantify and qualify the *behavioral* change under Level 3 guidelines.

Level 4 Evaluation: Results

Kirkpatrick and Kirkpatrick (2006) refer to Level 4 training evaluation as "determining what final results occurred because of attendance and participation in a training program" (p. 63). The Four Levels of Training Evaluation provide for ideally reaching Level 4 *results* after measuring the participants' reactions to training, the amount of learning that occurred, and the changes in behavior that resulted. Under the Four Levels of Training Evaluation, Kirkpatrick and Kirkpatrick (2006) believe examples of results-based evaluation could include the following metrics:

- The amount of quality improvement because of a TQI (Total Quality Improvement) initiative for managers;

- The amount of productivity increase because of a diversity program;

- The amount of reduction in turnover and scrap rate because of a new employee orientation program;

- The amount of improvement in work life because of implementing "management by walking around" training;

- The amount of improvement in interpersonal communications and human relations because of interpersonal skills training;

- The amount of productivity increase because of self-directed work teams;

- The amount of quantifiable, tangible benefit an organization has received from training programs on leadership, time management, and decision making;

- The amount of sales increase because of a market research and sales training session; and

- The amount of the return on investment due to training (pp. 63-64).

On the Likert scale used in this study's online demographic survey, the community college training administrators' responses indicated they were neutral about whether they use Level 4 *results* evaluation, with an average response of 3.13/4.0. The colleges' business and industry counterparts differed with this perception, with an average response of 2.0/5.0 (disagree). During the in-person interviews, not one community college or business and industry counterpart could provide a specific example of a Level 4 *results* evaluation, although Kirkpatrick and Kirkpatrick's (1993) Four Levels of Training Evaluation suggest that all evaluation should be constructed to reach Level 4 *results*.

The sole commentary on the use of Level 4 *results* evaluation came from the dean for continuing education and business outreach at Hamilton Community College, the noncredit workforce training partner of Quickspeed Transportation. This administrator acknowledged the business value of a Level 4 *results* evaluation, stating, "There isn't an employer around anymore who doesn't want proof that what you did had an effect on their organization, a positive effect, whether it be on sales, directly to production, lost time on job, training, whatever it is." Yet Hamilton's dean, like the other four community college administrators participating in this study, could not offer a specific illustration of an evaluation specifically targeted to Level 4 *results*. This position was echoed by Quickspeed Transportation's Project Management Office manager, whose own

frustration with Hamilton's inability to deliver a higher-level evaluation resulted in developing an internal Level 4 *results* instrument to gather data not gathered by Hamilton.

Keeping in mind that the business and industry partner is a *corporate jury* where the trainer's burden to prove a successful training program is based upon a *preponderance of evidence* (Kirkpatrick Partners, 2009), it is somewhat surprising that none of the community colleges participating in this study had considered the business and industry partners' *return on expectations,* or *ROE* ("Kirkpatrick Foundational Principles," section 2). The evaluation of training begins with Level 1 *reaction* and moves through Level 2 *learning*, Level 3 *behavior*, and Level 4 *results*. Developing an effective training plan involves a process of reverse engineering, where the trainer should partner with the client to determine which Level 4 *results* are to be achieved, which Level 3 *behaviors* should be changed, which Level 2 *learning* tasks should occur, and which Level 1 preferred *reaction* is sought. Kirkpatrick and Kirkpatrick (2006) specifically offer a variety of training needs assessments to begin this reverse engineering process. These methods include surveys, interviews, and advisory committees serving to triangulate the data and to provide stakeholder input into the training results. Neither the online demographic survey nor the in-person interviews employed in this study reflect the use of any such mechanisms among any of the community colleges.

James Kirkpatrick's (2009) Chain of Evidence[SM] stresses the overarching question framing all training initiatives: "What do you want success to look like?" Answering this question requires the process of reverse engineering in order to strengthen the case for training. Consequently, without any exemplars of Level 4 *results*, it is

impossible to determine the training participant *behaviors* necessary to be developed or modified under Level 3. Without any determination of Level 3 *behaviors* to change or modify, it is impossible to design effective Level 2 *learning*. Without any Level 2 *learning* benchmarks in place, it is impossible to determine how the training should be designed to facilitate optimal Level 1 *reaction*.

Kirkpatrick and Kirkpatrick's (1993) Implications for This Research

Kirkpatrick and Kirkpatrick's (1993) Four Levels of Training Evaluation have implications for this research in three key areas. The first implication is that the failure of community colleges in this study to consistently employ the Four Levels results in missed training opportunities with the very business and industry partners whose business the colleges seek to cultivate. The second implication is that effective noncredit workforce training evaluation should implement the same reverse engineering strategies employed by other training providers in order to answer the question, "What do you want success to look like?" The third implication is that noncredit workforce training partners, who are continually trying to do more with less in increasingly tight economic times, need the *chain of evidence* to which Kirkpatrick Partners (2009) refers. Community college noncredit workforce training units consistently employing Kirkpatrick and Kirkpatrick's (2009) Four Levels of Training Evaluation can capitalize upon opportunities to build and sustain partnerships with their business and industry counterparts. They can also build a *chain of evidence* to demonstrate the value of training both to the business's bottom line and to the college's administration and Board of Trustees.

<div align="center">**Emerging Themes**</div>

In addition to the examination of *a priori* themes developed from the study's conceptual framework, four themes arose during the processes of data collection and

analysis. These emerging themes were captured and coded in NVivo10® and queried using an NVivo10® custom query function. These emerging themes included: (a) the unified definition of the community college *champion* from the perspective of the college and the noncredit workforce training partner; (b) the significance of a *closer,* who attends to the micro-level details of the partnership and keeps the champion informed of partnership development and sustainability issues; (c) the importance of technology to partnership development, specifically the integration of contact resource management software utilized by all stakeholders across the community college; and (d) the use of noncredit advisory committees to foster communication, discussion, and feedback.

Emerging Theme 1: Unified Definition of the Community College Champion

Amey et al. (2007) suggest that a *champion* is an "initiator," or an individual from the community college, an employer, a community member, or even a student who brings "forms and levels of power that are relevant to the partnership, notably reputation, resources, political influence, and expertise" (p. 7). In addition, while the champion is not required to be the organizational leader, this individual must have the support of the organizational leadership in order to function in the champion's role. The Amey et al. (2007) Partnership Development Model refers to a single champion and leaves open the possibility that the champion may come from the noncredit workforce training partner, not the community college. This study's findings indicate that development of successful partnerships requires a champion representing the community college. In addition, the findings further indicate that both sides need to view the college administrator as this champion to make this partnership successful.

In the case of Evergreen and Pierce Community Colleges, the noncredit

workforce training administrators each cited the president as a partnership champion.

While Greening Partners' executive director, who is Evergreen's business and industry

partner, concurred with the assessment of Evergreen's dean of corporate and continuing

professional education, the executive director added that Evergreen's dean also serves in

the champion role. Miller Manufacturing's coordinator of training, who is Pierce's

noncredit workforce training partner, agreed with the assessment of Pierce's dean of

continuing education. These noncredit workforce training partnerships, initiated by

presidential champions, were viewed by both stakeholders and their organizational

leaders as highly successful and sustainable.

Hamilton Community College's dean of continuing education and business

outreach was the third community college study participant citing the president as a

partnership champion. However, Quickspeed Transportation's Project Management

Office manager, who is Hamilton's training partner, could not have disagreed more with

Hamilton's assessment. Quickspeed's manager cited a Workforce Investment Act (WIA)

representative as a champion for connecting Quickspeed to noncredit workforce training

opportunities. This manager also indicated that Hamilton's failure to champion a

partnership with Quickspeed, either with a president or a dean at the helm, had resulted in

Quickspeed's taking its business to other Illinois community colleges and out-of-state

institutions.

Both Richard and Gerard Community Colleges' administrators cited individuals

other than the president as champions. In the case of Richard, the institution's training

coordinator was self-identified as a champion. This position was supported by Richard's

director of corporate and community education and Otis Mechanical's training and development specialist. While Richard's training coordinator does not have the same authority a president has to authorize major capital expenditures, the training coordinator is viewed by both sides as the person who advocates for the partnership and is considered by all parties involved to be the partnership champion. Both Richard and Otis have sustained the partnership with the ongoing development of new courses, the construction of new facilities, and Otis's financial support of the Richard Community College Foundation.

Gerard Community College's administrator opined that the dean's and associate dean's positions were both champion roles. This administrator further indicated that the institution's president was too new in the position to have the "personal, cultural, and social capital" to which Amey et al. (2007, p. 11) refer. Interestingly, Kappa Construction's president, who is Gerard's noncredit workforce training partner, cited the lack of college leadership as a detriment to any long-term relationship with Kappa and stated, "A lot . . . depends on who's in what position at any given time over there [at Gerard]."

Emerging Theme 2: Significance of the *Closer*

Amey et al. (2007) suggest that a champion may be an individual other than the president. This study's findings indicate that the non-presidential champions do not initiate training partnerships at the macro-, large-scale level, where the parties are initially brought together and the champion moves on to creating the next opportunity. Instead, these non-presidential champions work at the micro-, detail-oriented level, where they coordinate training logistics with the client and provide status reports to the college

president. This micro-level of interaction is the role of a *closer:* one who brings a training partnership to fruition, rather than of a champion, who normally controls the organization's resources. Two of the five community college administrators work at the micro-level role of a closer.

In the case of Richard Community College, the training coordinator is responsible for room scheduling, training logistics, contracting with trainers, ordering curriculum, and billing the client. This is clearly not the function of a presidential champion; however, the training coordinator reports to the president and other institutional leadership on the progress of these training partnerships. This benefits the president when asking business and community leaders for financial support of the College's Foundation. The training coordinator expanded upon this approach, saying:

> [The president] knows what's going on in our companies. Calls on them. It may be to ask for money, but [the president] always calls me and says, "What are you doing with this company? What have you done for the last five years?" So [the president] really knows what we're doing. And I try to keep [the president] in touch with projects that are going on.

Otis Mechanical's training and development specialist, who is the noncredit workforce training partner of Richard, concurred with the training coordinator's logistical work, which in effect makes Richard's training coordinator more of a closer than a champion.

In the case of Evergreen Community College, the dean of corporate and continuing professional education self-identified as a champion. In addition to the position's administrative responsibilities, this dean is also called upon to serve as the subject matter expert in manufacturing curricula and had primary responsibility for coordinating the logistics of the Greening Partners training partnership. This dean also reports back to the college's president on the status of these initiatives and takes

presidential direction on the development of new partnerships. While this dean has the

support of the president to advocate as a champion for partnerships, the detailed effort to

build and sustain the partnerships also displays characteristics of a closer.

Emerging Theme 3: Importance of Database Technology to Partnership

Development

Some community college study participants commented on the use of CRM,

which is alternatively described as Client Resource Management (Klie, 2013),

Constituent Relationship Management (Fredette, 2013), or Customer Relationship

Management (Klie, 2012). Both Evergreen and Pierce Community Colleges'

administrators spoke favorably about the use of CRM software to track partnership

operations. While CRM is historically used in business, its use in higher education is

increasing in traditional areas of the college such as admissions, financial aid, and new

student recruitment. In the case of Evergreen and Pierce, the CRM software integrates

the noncredit workforce training areas of the colleges with the colleges' Foundations,

business offices, and marketing units. This allows the colleges to keep centralized

records of the contacts each department has with a prospective noncredit workforce

training partner and to limit the number of duplicative contacts those partners have with

the colleges.

Interestingly, only one community college administrator had actively

implemented client resource management recordkeeping to track partnership contacts.

Richard Community College's training coordinator, who is the noncredit workforce

training partner of Otis Mechanical, is in charge of noncredit CRM. The client resource

management data is tightly controlled by the training coordinator and is only released as

needed. This data appears to be maintained in both an e-mail list and an Access database, and there appear to be no protocols in place for cross-checking these two data sources for accuracy. The training coordinator generates mailing labels from this Access database "on request" only to college offices. Neither the training coordinator nor the director of corporate and community education could confirm whether this database is the sole, centralized location of this information or whether there are other, fragmented contact resource management lists throughout the institution.

Emerging Theme 4: Use of Noncredit Advisory Committees

Although the Illinois Community College Board only requires the use of employer advisory councils in career and technical education curricula, two community college administrators and one business and industry counterpart agreed that a comparable noncredit advisory council would be useful. These study participants cited the innovative role of noncredit workforce training and the opportunity to build bridges to credit-bearing coursework as reasons for this recommendation.

Evergreen Community College's dean of corporate and continuing professional education, who is the noncredit workforce training partner of Evergreen Partners, commented that an advisory council is a requirement of the grant being used to underwrite the training partnership. This dean spoke favorably about the use of employer-based advisory councils to the success of the partnership, stating, "Ultimately we're trying to respond to a need that they have and, you know, who can best communicate what's needed than the manufacturers themselves?"

Evergreen's dean also commended the involvement of noncredit workforce training administrators on credit-level career and technical education advisory councils.

This individual cited the importance of building bridges from business and industry training to credit-level coursework that could result in degrees or certificates. In particular, this dean sits on a fire science advisory council and has administered the fire science curriculum for noncredit and credit hours. This uncommon dual course offering was provided to accommodate individuals who do not need the college credit, but who need the classroom seat time to prepare for the state fire marshal's examination.

Richard Community College's training coordinator, who is the noncredit workforce training partner of Otis Mechanical, also sits on a career and technical education advisory council for technology and manufacturing. This seat on the advisory council is important to the training coordinator because many of Richard's noncredit workforce training clientele also participate on the council. This provides Richard's training coordinator with an opportunity to discover business and industry needs and to determine whether noncredit workforce training solutions are viable. Richard's training coordinator also commented that business and industry partners had specifically asked for a noncredit advisory council to discuss issues and concerns unique to noncredit workforce training, which will be instituted during the coming year.

While Gerard Community College does not have an advisory council for noncredit workforce training partners, Gerard's administrator noted that manufacturing roundtables were often hosted at the college to get a better sense of training needs. This dean also noted, however, that the college's focus on noncredit workforce training "kind of monopolized the effort," resulting in a decline in enrollment in credit-bearing courses. At this time, the dean anticipates no further action on establishing a noncredit advisory council.

One noncredit workforce training partner commented on the value a noncredit advisory council would add to a relationship with the local community college. Quickspeed Transportation's Project Office Manager, who is the noncredit workforce training partner of Hamilton Community College, currently sits on a career and technical education advisory council for business. Noting that a noncredit advisory council might offer Hamilton better insight to the training needs of its business and industry partners, Quickspeed's manager replied, "Yes, so there isn't an advisory board for the corporate services thing. That's a very good point. . . . Actually, I'm going to ask [name redacted] about this, if there is for corporate services, if there is an advisory board. That's just focused on that."

Summary

This chapter provided an in-depth discussion of how the data and information gathered for this study was collected and analyzed. The interview transcripts, collection of survey responses, relevant documents, and other sources of data were uploaded into NVivo10® for analysis through the one construct and two models utilized for this study's conceptual framework. Through the process of reviewing and coding the *a priori* themes found in the data and information, additional emerging themes of import were also captured, coded, and analyzed. Data, insights, perceptions, and emerging themes will provide valuable guidance to community colleges and their noncredit workforce training partners as they develop and sustain effective noncredit workforce training partnerships.

The chapter began with an analysis of the *a priori* themes found in the Entrepreneurial Orientation Construct developed by Lumpkin and Dess (1996). The data and related information were analyzed through the five dimensions of the construct, which include: (a) innovativeness; (b) risk taking; (c) proactiveness; (d) competitive

aggressiveness; and (e) autonomy. This analysis provided context to the ways in which community colleges demonstrate entrepreneurial orientation.

The Partnership Development Model, developed by Amey, Eddy, and Ozaki (2007), provided the second component of the study's conceptual framework. The data and related information were analyzed through the characteristics of this model, which include: (a) the partnership development phases of antecedents, motivation, and context; (b) the partnership sustainability phases of outcomes, sustainability, and goal satisfaction; and (c) the utilization of a champion and a feedback loop. This process provided insight into the ways study participants sought to develop and sustain their noncredit workforce training partnerships.

The Four Levels of Training Evaluation, developed by Kirkpatrick and Kirkpatrick (1993), provided the third component of the study's conceptual framework. The data and related information were analyzed through the four levels of this corporate training evaluation model, which includes (a) reaction; (b) learning; (c) behavioral changes; and (d) results. This analysis provided insight into the degree to which training evaluated is conducted and used to inform future training initiatives.

In addition to the examination of these *a priori* themes, four emerging themes were captured and coded in NVivo10® and queried using an NVivo10® custom query function. These emerging themes included: (a) the unified definition of the community college *champion* from the perspective of the college and the noncredit workforce training partner; (b) the significance of a *closer,* who attends to the micro-level details of the partnership and keeps the champion informed of partnership development and sustainability issues; (c) the importance of technology to partnership development,

specifically the integration of contact resource management software utilized by all

community college stakeholders; and (d) the use of noncredit advisory committees to

foster communication, discussion, and feedback.

Chapter 6: Conclusion

Introduction

This qualitative study of five Illinois single-campus community college

administrators and five of their business and industry partners sought to determine how

and in what ways these partners developed and sustained noncredit workforce training

partnerships. These individuals provided a depth and breadth of perspectives that

responded to the purpose of the study and offered a meaningful contribution to the

literature on this topic. This chapter discusses the following: (a) a brief summary of

Chapters 1 through 5, which provides a context for the study's findings; (b) a summary of

findings and the implications of those findings on community college practice, organized

by driving question; (c) a presentation of Condon's Noncredit Workforce Training

Partnership Model; and (d) a series of recommendations for further research.

Chapter 1 provided an introduction to the study's purpose. The background and

context of the issue and the study's significance to community colleges was addressed.

An initial discussion of the conceptual framework, methodology, and data collection and

analysis procedures was included. Definitions of terms unique to the noncredit

workforce training arena were provided to enhance understanding of the context and

findings of the study.

Chapter 2 provided a review of the relevant literature. An historical overview of

the American community college system, and specifically the role noncredit workforce

training initiatives have on the community colleges' missions, was included. Current

trends in entrepreneurial workforce education were also discussed to provide a

foundation for the study's conceptual framework. The conceptual framework was

comprised of the Entrepreneurial Orientation Construct (Lumpkin & Dess, 1996), the

Partnership Development Model (Amey, Eddy, & Ozaki, 2007), and the Four Levels of Training Evaluation (Kirkpatrick & Kirkpatrick, 1993). Gaps in the literature on the significance of noncredit workforce training to the community college were identified to underscore the importance of this research.

Chapter 3 provided a discussion of the study's methodology. This methodology utilized qualitative inquiry, specifically a case study situated within the interpretive paradigm. The case study's selection process was described in detail. Because this case study was limited to Illinois' single-campus community colleges and not the entire Illinois community college system, great care was taken to explain the process for purposefully sampling those single-campus entities. The criteria employed for both site and participant selection were explained in detail. Because both community college administrators and their business and industry partners were interviewed for this study, a sequential multi-method approach was employed as part of the contact protocol. This two-phase approach, which involved completion of a web-based demographic survey and an in-person interview, was discussed in detail. The processes for collecting and analyzing the data, and the use of NVivo® to expedite the analysis process, were addressed. An in-depth discussion of the study's ethical considerations, including trustworthiness, validity, rigor, and the researcher as a research instrument, were provided. The study's limitations were also defined and addressed.

Chapter 4 described the process of data collection from community college administrators and their noncredit workforce training counterparts utilizing the sequential multi-method approach. Detail was offered about the community college administrators whose participation was limited to the first phase of the study (the web-based

demographic survey) and those administrators who opted to participate in the second

phase of the study (an in-person interview). Similar detail was also offered about the

business and industry counterparts who participated in a comparable web-based survey

and in-person interview. The data gathered through the web-based demographic survey

were mapped to the study's conceptual framework: the Entrepreneurial Orientation

Construct (Lumpkin & Dess, 1996); the Partnership Development Model (Amey, Eddy,

& Ozaki, 2007); and/or the Four Levels of Training Evaluation (Kirkpatrick &

Kirkpatrick, 1993). The responses were ranked using a Likert scale (Likert, 1932) and

summarized in tables to illustrate the findings. In addition, a comprehensive summary of

the documents provided by both community college administrators and their noncredit

workforce training counterparts provided additional context to the *a priori* themes. A

discussion of NVivo® and its use in the data analysis process was also included.

Chapter 5 continued to provide an analysis of the data through the lens of the

conceptual framework. Rich, thick data was captured during the in-person interviews,

during which study participants had the opportunity to expand upon and clarify

comments offered during the web-based demographic survey. Illustrative quotes from all

study participants were provided when appropriate to substantiate the study's findings

and to demonstrate credibility, transferability, dependability, and confirmability as

proffered by Lincoln and Guba (1985). In addition, the data analysis process captured

four emerging themes of potential importance to community college administrators and

their noncredit workforce training partners. These themes were also analyzed and

discussed.

Purpose of the Study

The purpose of this study is to identify how and in what ways Illinois single-campus community colleges develop and sustain effective noncredit workforce training partnerships.

Driving Question 1: How do noncredit workforce training units support the community college's mission?

The study's findings strongly indicated that the innovative role and function of noncredit workforce training should be explicitly incorporated into community college mission statements, institutional identities, and strategic plans. Community college noncredit workforce training units that were given comparable positions of importance relative to their credit training counterparts were recognized as equal partners in providing context to the college's mission. The visibility of the noncredit workforce training unit and its parity with the institution's credit area enhanced the unit's ability to develop relationships and generate revenue from business and industry partners.

The study's findings also strongly indicated that noncredit workforce training partners perceived community college administrators as entrepreneurially oriented when they demonstrated innovativeness in their outreach to area businesses and industries. These business and industry leaders universally commented on noncredit workforce training administrators' abilities to seek creative training solutions and to initiate and maintain connections as evidence of entrepreneurial orientation. Community college administrators in this study who engaged in outreach and made explicit their efforts at developing these partnerships all felt their noncredit workforce training units demonstrated innovative value to the institutional mission.

In addition to innovativeness as one Lumpkin and Dess's (1996) Entrepreneurial Orientation (EO) Construct's five salient dimensions, EO also provides for the salient dimensions of *risk taking, proactiveness, competitive aggressiveness,* and *autonomy*. Interestingly, traces of those four additional dimensions were only intermittently found in community colleges, yet business and industry participants in this study expected the institutions to exhibit all five of the salient dimensions to some degree. This study found that while noncredit workforce training administrators may have been perceived as innovative, proactive, and to some degree autonomous, neither they nor their institutions were perceived as risk-takers or competitively aggressive. This perception frequently characterized the community college administrators as inattentive to noncredit workforce training partners' needs.

Business and industry partners were found to value the noncredit workforce training units' rapid response, flexibility, and reputations as designers, developers, and deliverers of customized training. These area businesses and industries sought out community college partners who could design customized training curricula, develop training materials in a timely, cost-effective manner, and deliver instruction with qualified and credible faculty and trainers. These community colleges were perceived by their noncredit workforce training counterparts as valuable providers of training to businesses, industries, and area residents employed by those organizations.

In a finding consistent with Amey et al.'s (2007) Partnership Development Model, two frequent antecedents to a partnership were training initiatives incorporated into businesses' strategic plans and opportunities to share resources with community college partners. The findings indicated that noncredit workforce training administrators

who assisted businesses with incorporating training into the businesses' strategic plans, and who subsequently shared training resources to meet the goals of these strategic plans, were viewed as innovative in their roles as developers of workforce talent.

In a related finding consistent with Van Noy et al. (2008), the study participants confirmed noncredit workforce training was often an antecedent to a credit-bearing training partnership. Community college administrators routinely cited noncredit workforce training as an antecedent to credit-bearing coursework and indicated that noncredit training often *validated a need* for continuing workforce education. Both community college administrators and their business and industry counterparts agreed on noncredit workforce training's value to employees who were reluctant to return to the classroom or who needed encouragement to bridge from noncredit training to credit-level coursework. This study found that validating a workforce training need was a powerful antecedent for a partnership and could potentially generate a positive, sustainable outcome for the training initiative, the employer, and the college.

A common theme among most of the community college administrators was that grant funding for noncredit workforce training often motivated the business and industry partner to engage in partnership development with the college, a finding first discussed in the Partnership Development Model (Amey et al., 2007). However, these findings also made clear that each partner must provide some kind of visible support (fiscal, personnel, or training logistics coordination) to sustain the partnership. These federal and state grant funding sources underwrite important noncredit and credit-level workforce training tied to the broader strategic goals and mission of the community college.

An unexpected finding from the study participants was the need for noncredit workforce advisory committees to guide administrators in the development and maintenance of noncredit training initiatives. Although all of the study's noncredit workforce training administrators participated in credit-level career and technical education (CTE) advisory committees, none of the colleges had a comparable advisory group to inform noncredit workforce training initiatives on their campuses. Both community college administrators and their training partners commonly felt that noncredit advisory committees would be invaluable and could provide vital insight on the noncredit and credit training needs of the businesses and industries the colleges serve.

Implications for community college practice. In order to maximize the potential value of noncredit workforce training units to the community college, institutional leaders must incorporate the critical, innovative role of noncredit workforce training units to the institutional mission statements, branding and marketing efforts, and strategic plans. The end result will enhance the units' reputations as valued contributors to the community and to the colleges' operational budgets. In addition, community college leaders should overtly demonstrate the innovative value of noncredit workforce training to the institutional mission by their visible attempts at outreach to prospective business and industry partners. Finally, to enhance the role the noncredit workforce training unit plays in the fiscal health of the institution, community college leaders should expand their entrepreneurial orientations beyond innovativeness to include at least calculated levels of risk taking and measured competitive aggressiveness in developing noncredit workforce training partnerships. Colleges demonstrating these business-oriented, salient dimensions of entrepreneurial orientation will enhance their reputations

as valued and credible partners with the business and industry constituents they serve, thereby laying the foundation for a sustainable relationship with those partners.

Community college leaders, from the president's office to mid-level administrators, would also benefit from close examination of the antecedents that form the basis for new noncredit workforce training partnerships. A better understanding of these antecedents can provide valuable insight to building both strong noncredit relationships and potential bridges to credit-bearing coursework. For this reason, community college noncredit workforce training units would be well served by aligning their workforce education programs with related degrees offered through the institutions' career and technical education (CTE) divisions. This would allow for seamless transfer from noncredit to credit-bearing coursework.

In addition, noncredit workforce training administrators who contribute to the development of their business counterparts' strategic plans offer a powerful antecedent for building and sustaining a training relationship. Community college administrators should make every effort to collaborate with business partners in the development of the partners' strategic plans and to share resources, such as facilities, machinery, instructional materials, or workplace supervisors who can function as subject matter experts. When the community college and the business and industry partner can share training resources and facilities to meet the goals embedded within those strategic plans, a strong foundation for partnership sustainability exists.

Community college leaders should also acknowledge the importance of grant funding to support new and existing partnerships. Grant funding should be treated as a perquisite, not a guaranteed training discount or cost writeoff. Community college

leaders must make every effort to communicate the demonstrable financial value to the quality of the training regardless of available grant funding. An effective step in communicating this demonstrable financial value is conducting a Level 4 *results* evaluation, which seeks to measure tangible, quantifiable benefits to the employer.

Finally, the development of noncredit advisory committees is an effective method of regular communication with business and industry counterparts. These committees can be utilized to perform baseline environmental scanning, conduct training needs assessments, and provide communication to the community college on workforce trends, issues, and training logistics. Providing these important stakeholders with a forum in which to share this information with community college administrators is an important step in maintaining an existing training partnership or creating a new one.

Driving Question 2: What characteristics define effective community college noncredit workforce training partnerships?

The findings revealed that sustainable noncredit workforce training partnerships were both innovative and proactive, which are two of the five salient dimensions of entrepreneurial orientation (EO) as proffered by Lumpkin and Dess (1996). However, business and industry partners believed that community college administrators generally lacked two other salient dimensions of EO: risk taking and competitive aggressiveness. The community college administrators concurred that these two salient dimensions were lacking, frequently citing stringent statutory restraints and Illinois Community College Board (ICCB) administrative regulations as reasons for the absence of these dimensions. Noncredit workforce training administrators' efforts at building and sustaining effective

partnerships were frequently hampered by these interrelated dimensions of risk aversion and a lack of competitive aggressiveness.

Business and industry partners participating in this study expressed concern and even frustration over the training administrators' inability to overcome the ICCB statutory and administrative restrictions and preferred that community college leaders demonstrate at least some level of calculated risk and some measure of competitive aggressiveness. Adding the salient dimensions of risk taking and competitive aggressiveness to a community college leader's entrepreneurial orientation could spur revenue generation for the institution and enhance and sustain training partnerships with business and industry counterparts.

In a finding consistent with Lumpkin and Dess's (1996) Entrepreneurial Orientation (EO) Construct, community college administrators were extremely conservative in their risk taking behaviors, often to the point that they inadvertently blocked opportunities for the *new entry* that is the ultimate goal of EO. Administrators who sought to make their institutions into regional noncredit workforce training providers were able to demonstrate at least a calculated measure of risk. This measure of risk was perceived by business and industry as a salient dimension of entrepreneurial orientation and an enhancement of the community college's reputation.

Study participants also universally agreed that community college administrators who invested time and effort in understanding local business were more innovative in their entrepreneurial orientations toward their noncredit workforce training partners. Business and industry partners in this study expected leaders of noncredit workforce training units to stay current with and informed of industry trends. These partners also

valued community college leaders who employed a consultative approach to building

relationships instead of adopting the *order taker* mentality to creating training

opportunities. Noncredit workforce training administrators who proactively researched

industry trends and were current on methods of training needs assessment, curriculum

development and design, and training evaluation were cited as particularly proactive.

Finally, business and industry partners considered community college administrators who

were visible to the community and involved in local workforce investment or economic

development boards to be both innovative and entrepreneurially oriented.

An interesting finding of increasing importance to community college

administrators was the growing use of client resource management (CRM) software.

This software, which is standard in business and industry, would allow for a centralized

data warehouse, prohibit duplicative data entry and recordkeeping, and provide the

business and industry partner with a singular point of contact instead of a fragmented

approach to relationship-building and maintenance. Community colleges that employed

this centralized technology strategy were found to have better interdepartmental

communication regarding conversations with business and industry counterparts. In

addition, community colleges that employed CRM software were managing their contact

databases as an entrepreneurially oriented business would manage its client rosters.

Implications for community college practice. Community college leaders must

fully utilize the wide-ranging resources provided by the Illinois Community College

Board (ICCB) to increase the levels of calculated risk and measures of competitive

aggressiveness they may take to develop a training partnership. College leaders'

overreliance on statutory or administrative regulation becomes an excuse for not taking

risk or competing aggressively to achieve new entry in previously untapped markets, and the failure to achieve that new entry results in missed revenue opportunities for the institution. Providing new and current community college administrators with professional development and leadership training on ICCB policies and procedures, and the deliberate inclusion of noncredit workforce training units in these professional development initiatives, would be an important first step in developing an entrepreneurial orientation among these leaders.

In addition, noncredit workforce training administrators, and the support staff who serve the training unit, would benefit from the investment of time and effort to research the local business and industry partners who could potentially be served by the college. Employers value the consultative approach to developing and sustaining training partnerships with community colleges; these institutional leaders who perform due diligence on their prospective training clients are demonstrating a level of proactiveness that is valued by the businesses and industries they serve. Community colleges could demonstrate a calculated measure of risk taking and competitive aggressiveness by deconstructing the historic, territorial community college district boundaries and engaging in regional noncredit workforce training initiatives. In the absence of any statutory or ICCB administrative regulation precluding this practice, the development of regional noncredit workforce training initiatives could allow community colleges to leverage human and capital resources to serve a wider range of training partners. These initiatives would demonstrate the increased level of entrepreneurial orientation expected by the colleges' business and industry counterparts.

Finally, in this age of instant communication, and with the explosion of social media, community colleges would be well advised to implement CRM software across their campuses in order to consolidate their communications with business and industry partners. This technology would more effectively track client contacts and would provide a central clearinghouse for data and information collection.

Driving Question 3: How does the community college initiate community outreach to develop noncredit workforce training partnerships?

The findings from this study's participants revealed that entrepreneurially oriented community college administrators utilize membership on local economic development and workforce boards to gather information on business and industry training needs and to offer noncredit workforce training solutions. The findings indicated that community colleges with seats on local workforce investment or economic development boards were perceived as proactive and outreach-oriented by their business and industry counterparts. Business and industry partners consistently agreed that colleges with board representation were more attuned to the needs of local employers and more inclined to be innovative in their outreach. This level of participation also provided community college administrators with the opportunity to hear directly from business and industry leaders about training issues and concerns.

Business and industry partners also valued community college administrators who could find innovative ways to build bridges between noncredit workforce training and credit-level coursework resulting in an associate degree or certificate, a position echoed by Van Noy et al. (2008). Business and industry leaders who were critical of their community college administrative counterparts were nonplussed by the stringent

statutory or regulatory guidelines these administrators often cited as impediments to building partnerships. These business and industry partners universally preferred to work with community college administrators who could be rapidly responsive, flexible, and proactive in their noncredit training solutions. Noncredit workforce training partners valued community college administrators who could cut through bureaucratic red tape to build an effective training partnership, thereby demonstrating an entrepreneurial orientation.

Amey et al.'s (2007) Partnership Development Model provides for a *champion* charged with the personal cachet and political connections to build and sustain the partnership. However, the model does not specify whether the champion must be from the community college, the noncredit workforce training partner, or both. In a finding distinguishable from the Partnership Development Model, the partnerships examined in this study had a single community college *champion*. Most community college administrators and their business and industry counterparts recognized the college president as the *champion*, who is charged with bringing both sides to the table and *initiating* the connection. However, the business and industry partners universally concurred that a lower-level community college administrator must also possess the autonomy to *sustain* the connection and function as a *closer*. This individual is responsible for the minutiae of coordinating the partnership. In this study, three community college administrators self-identified as champions, and two business and industry training partners identified lower-level administrators as champions. However, the administrators participating in this study had neither the institutional power nor the signatory authority to make major capital expenditures or other decisions that could

create a training partnership. Instead, these administrators are truly *closers*, attending to training-related partnership logistics and details and reporting on the partnership's status to the president and other high-level administrators. Three of the community college presidents provided those closers and the noncredit workforce training units themselves with the autonomy to sustain the connection with the business and industry partner. In a completely opposing perspective, the two noncredit workforce training administrators who required presidential or champion approval for even the most minute tasks were not seen as entrepreneurially oriented by their business and industry counterparts.

An interesting finding in this study involved the importance of outreach, specifically related to both the ways in which potential business partners are contacted and the ways in which internal and external impediments affect the ability to make the contact. Personal contact was found to be a critical outreach strategy in building a noncredit workforce training partnership. Community college administrators who stayed in contact with their noncredit workforce training counterparts to share new products and innovations were cited by business and industry as valued partners. In addition, internal and external impediments affected the level to which community college administrators initiated outreach. Internal impediments, such as academic politics, were found to hamper a noncredit workforce training unit's outreach to a prospective business and industry partner. The noncredit workforce training administrators who felt impeded by academic politics and who could not reach out to business counterparts without higher-level consent also found that their institutions were perceived as ineffective noncredit workforce training partners. External impediments, such as economic impacts on the business or the business's failure to properly plan or budget for training, were similarly

found to hamper a noncredit workforce training unit's outreach to a prospective business and industry partner. The community college administrators who felt impeded by economic restraints or the business's failure to plan for training also found that their colleges were perceived as ineffective training partners by their business colleagues.

Implications for community college practice. Community college leaders' participation on workforce investment or economic development boards is a highly visible method of outreach to business and industry counterparts. This participation demonstrates a proactiveness and attentiveness to business and industry training issues that is valued by noncredit workforce training partners and can generate the *new entry* to which Lumpkin and Dess (1996) refer. In addition, community college leaders should use this board participation to actively seek opportunities for building noncredit bridges to credit-bearing coursework leading to degrees and certificates. Noncredit workforce training administrators should be well-versed in Illinois Community College Board policies for creating noncredit courses for ICCB approval, thereby eliminating the layer of red tape which may drive business and industry partners to other training alternatives.

While a college president will most likely serve as the institutional *champion* to initiate outreach to a training partner, the importance of a community college *closer*, who has the president's support and who can effectively coordinate the partnership's details and logistics, is perhaps one of this study's most important findings. This closer must demonstrate the salient characteristics of entrepreneurial orientation and attend to the minutiae of delivering training, all the while keeping senior college administrators apprised of the partnership's progress.

Entrepreneurially oriented community college leaders must also make diligent efforts at outreach to the noncredit workforce training partners and never underestimate the importance of personal contact as a critical outreach strategy. These leaders must also acknowledge the existence of internal and external impediments that can lead to an untenable relationship with a business and industry partner and employ regular communication and personal contact with the noncredit workforce training counterpart to mitigate the impact of those impediments on the partnership. Active involvement with business and industry partners' strategic plans for training, invitations to on-campus workforce development activities, and periodic status checks are all ways in which those impediments can be mitigated or altogether prevented.

Driving Question 4: What characteristics or elements contribute to successfully maintaining noncredit workforce training partnerships?

The study's findings indicated that both community college administrators and their business and industry counterparts strongly felt regular feedback and meetings with the *closer* were keys to sustaining successful training partnerships. These meetings, which ranged from informal discussions to annual planning events, provided the *closer* with critical information needed to design, develop, and deliver future training programs. The meetings also provided a forum for business and industry managers to raise issues, offer suggestions, or request specific logistical accommodations.

In a surprising finding, community college leaders rarely employed the reverse engineering strategy illustrated by Kirkpatrick and Kirkpatrick (1993) to build effective training programs. The key question to business and industry partners—"What do you want success to look like?"—was only infrequently asked. Both community college

administrators and their noncredit workforce training counterparts universally agreed that when the question was asked, the answer was rarely, if ever, used to inform the design, development, or evaluation of training.

The study's findings supported Kirkpatrick and Kirkpatrick's (1993) research and demonstrated community college administrators' lack of understanding the Four Levels of Training Evaluation as a tool for measuring training effectiveness and for informing future training initiatives. While most noncredit workforce training administrators measured Level 1 *reaction* to training, they rarely, if ever, employed Level 2 *learning*, Level 3 *behavior*, or Level 4 *results* evaluation. Most Level 1 *reaction* evaluation was used for promotional or marketing purposes instead of a tool to measure the effectiveness of training. As a result of this limited use of training evaluation, community colleges missed important opportunities to close the loop on a training cycle, plan for future training initiatives, modify the existing training program, or prepare for effective Level 2 *learning* evaluation.

In addition, community college administrators participating in this study did not fully understand the use of pre- and post-testing to measure Level 2 *learning*. This lack of understanding was most notably demonstrated when these administrators classified screening assessments, such as the Test of Adult Basic Education (TABE), as pre-tests. Effective measurement of Level 2 *learning* occurs when participant pre- and post-testing is conducted using the same evaluation instrument. When pre-tests and post-tests are administered using different evaluation instruments, effective Level 2 *learning* was ineffectively measured. Community college administrators who effectively used Level 2 *learning* evaluation consistently implemented identical pre- and post-testing strategies.

They also conducted follow-up Level 2 evaluations to confirm that the new learned skills were being properly utilized.

Not surprisingly, community college administrators frequently opted not to implement Level 3 *behavior* evaluation, rationalizing that measuring behavioral change was simply too difficult to track and evaluate. When administrators decline to measure behavioral change, they miss the opportunity to retrieve valuable data contributing to the *culture of evidence* to which Kirkpatrick and Kirkpatrick (1993) refer. Community college administrators frequently defended their lack of Level 3 *behavior* evaluation, stating that measuring behavioral change was frequently inapplicable to certain kinds of training. Interestingly, though, measuring the change in employees' behavior as a result of training can document the ways in which those employees learned (Level 2) and perceived the training (Level 1). The measuring of Level 3 *behavioral* change can have a powerful impact on attitudes and perceptions in the workplace as well as perceptions of noncredit workforce training's value.

Also not surprising was the finding that community college administrators who opted out of evaluating Level 3 *behavioral* change were unable to evaluate Level 4 *results*, and so the examples of effective results-based evaluation were scant at best. The lack of results-based evaluation frequently affected future training plans and the sustainability of the noncredit workforce training partnership with all of the community colleges participating in this study. Tangible, measurable results-based metrics, such as increases in productivity, reduction in turnover and scrap rate, and improvement in interpersonal communications are all cited as effective examples of Level 4 *results* evaluation (Kirkpatrick & Kirkpatrick, 2006). This study's findings indicated that none

of these results-based metrics had been considered or implemented by any of the participating community college administrators, a fact each administrator acknowledged. The universal failure or inability of every community college participating in this study to conduct a Level 4 *results* evaluation would be discouraged in the business world, where organizational culture frequently demands return on investment. Community college administrators who acknowledged a lack of Level 4 *results* evaluation also acknowledged that their business and industry counterparts expected more intensive and thorough evaluation.

Implications for community college practice. Community college leaders need to make regular communication and feedback an integral function of the *closer*. This individual must regularly provide the business and industry partner with a forum in which issues related to the noncredit workforce training partnership can be expressed and addressed. These forums can range from formal meetings on strategic planning for training to informal conversations about new technology used in a specific curricular area. In addition, the central question—"What do you want success to look like?"— should be a regular part of the conversation, with the answer being explicitly used to inform existing and future training plans.

Noncredit workforce training administrators need to move beyond the Level 1, *reaction*-based *smile sheet* approach to course evaluation and take deliberate steps to plan for measuring *learning* (Level 2), *behavior* (Level 3), and *results* (Level 4). While gathering reaction-based information can indeed be used for promotional or marketing purposes, noncredit workforce trainers must use Level 1 *reaction* as a solid foundation for subsequent levels of evaluation. The *closer* should work closely with noncredit

workforce trainers and their business and industry counterparts to plan for these subsequent levels of training evaluation.

In a world where employers are increasingly demanding performance-based training, community college administrators need to design, develop, and deliver identical pre- and post-testing instruments in order to more accurately measure Level 2 *learning*. Follow-up Level 2 evaluations should also be built into noncredit workforce training contracts in order to confirm that newly developed skills are being utilized in the workplace.

Similarly, community college administrators should develop Level 3 *behavioral* evaluations demonstrating to the business and industry partner that employees' behaviors have changed or otherwise positively impacted the workplace. This level of evaluation will allow the noncredit workforce training unit to use the change in employees' behaviors as a basis for Level 4 *results* evaluation, whereby training can provide support for an employer's return on investment.

Introduction to Condon's Noncredit Workforce Training Partnership Model

This study's findings contribute to the research on the significance of noncredit workforce training partnerships to the community college. The analysis of the data obtained from study participants indicates that community colleges exhibit many salient dimensions of entrepreneurial orientation and further, that their administrators do not systematically attempt to build, sustain, and evaluate the effectiveness of partnerships with their noncredit workforce training counterparts. The analysis also reveals that the one concept and two models employed in the study's conceptual framework do not provide for a full, comprehensive cycle of partnership development and maintenance that is specifically noncredit-oriented. An improved process is needed that blends the salient

components of the study's conceptual framework, the study's findings, and the researcher's own experience in noncredit workforce training, thereby providing valuable guidance to community college noncredit workforce training administrators. Therefore, Condon's Noncredit Workforce Training Partnership Model is presented.

Condon's Noncredit Workforce Training Partnership Model

The purpose of Condon's Noncredit Workforce Training Partnership Model is to provide community college administrators with a comprehensive approach to develop and sustain effective noncredit workforce training partnerships. Following a discussion of the model's construction and use in noncredit workforce training units, a form checklist of tasks is presented to guide community college administrators through successfully implementing the model and tracking the partnership's progress.

Condon's Noncredit Workforce Training Partnership Model contains the following elements: (a) a central target of partnership success; (b) a process of initiating outreach by the community college; (c) a community college *champion*, who is charged with initiating the outreach; (d) a process of maintaining outreach by the community college; (e) a community college *closer,* who is charged with outreach maintenance, implementation of a feedback loop, and communication of the partnership's status to the champion; (f) a feedback loop, consisting of needs assessment, training design and development, training delivery, training evaluation, follow-up evaluation, and strategically planning with the business and industry partner for training; (g) an overlay of the community college's entrepreneurial orientation and partnership context; (h) an overlay of the community college's strategic plan; and (i) an overlay of the community college's mission statement. Figure 23 illustrates Condon's Noncredit Workforce Training Partnership Model.
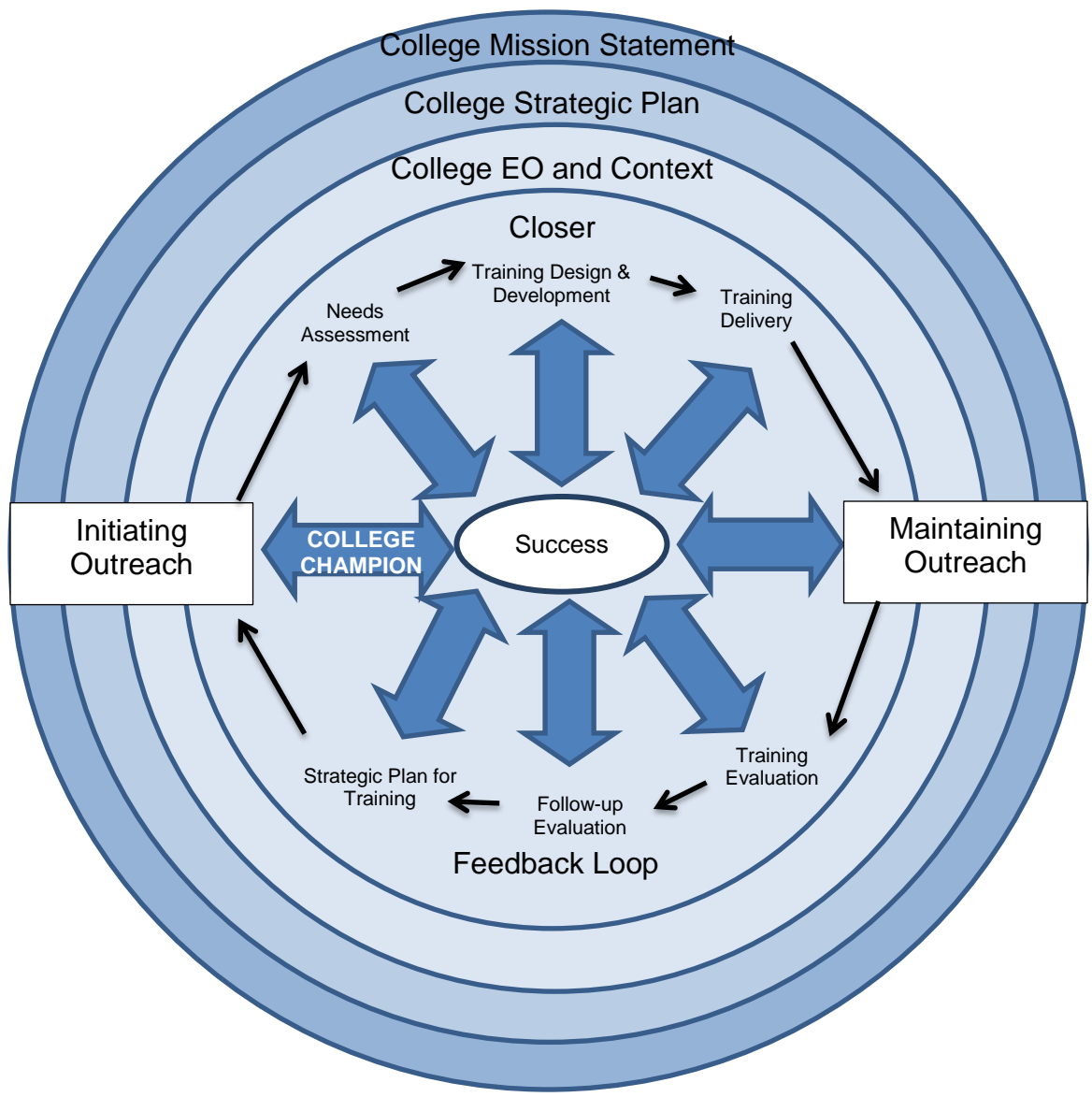
College Mission Statement

College Strategic Plan

College EO and Context

Closer

Training Design &
Development

Needs
Assessment

Training
Delivery

Initiating
Outreach

COLLEGE
CHAMPION

Success

Maintaining
Outreach

Strategic Plan for
Training

Follow-up
Evaluation

Training
Evaluation

Feedback Loop

Figure 23. Condon's Noncredit Workforce Training Partnership Model.

Central Target of Partnership Success

The oval at the nucleus of Condon's Model represents the central target of a

successful training partnership. This oval is analogous to the question, "What do you

want success to look like?" (Kirkpatrick Partners, 2011, "Kirkpatrick Foundational

Principles," para. 2). This definition of success can take many complex forms, including

increases in profit, decreases in product defects or waste, or improvements in customer

satisfaction levels. Success could also be defined on smaller, less complicated scales. An example of this smaller scale would be an employee using spreadsheet technology to track budgets instead of calculating totals manually, thereby decreasing margins for calculation errors. From that identification of success, the process of initiating and sustaining outreach to a business and industry partner can continue.

Process of Initiating Outreach

The process of initiating outreach is represented by a rectangle at the left that is fixed on top of the model's concentric circles. The community college's initial connection to a business and industry partner involves three actual and two modified salient dimensions of Lumpkin and Dess's (1996) Entrepreneurial Orientation (EO) Construct. Three of the EO Construct's salient dimensions include *autonomy, innovativeness,* and *proactiveness.* The original salient dimensions of *risk taking* and *competitive aggressiveness* were modified to involve *calculated risk taking* and *measured competitive aggressiveness.* This modification was made in response to the study's findings that community colleges do not actively demonstrate risk taking or competitive aggressiveness as salient dimensions of entrepreneurial orientation. The process of initiating outreach should also include the utilization of client resource management (CRM) software, an emerging theme which was discovered during the process of data analysis. The implementation of CRM software would provide a centralized location, accessible by various departments across the community college, to track outreach to business and industry contacts and minimize duplicative communications. The process of initiating outreach also extends across the model's concentric circles, representing that

such initiation should be tied to the community college's entrepreneurial orientation and context, its strategic plan, and its mission statement.

The Champion

The *champion* holds a particular place of import in the model. Because this study's findings indicated that the champion is a community college leader primarily responsible for initiating the outreach and bringing the partners to the table, the champion's role is attached to the initial communication with the business and industry partner. While this champion may be a lower-level administrator, the champion is traditionally the community college president or someone with the "personal, cultural, and social capital" to which Amey et al. (2007, p. 12) refer.

Process of Maintaining Outreach

The model provides for the community college's maintenance of the outreach by three of the emergent themes discovered during the data analysis process. While communication with the partners and other stakeholders is obviously critical to partnership success, specific recommended maintenance steps include the use of noncredit advisory councils, participation in area Workforce Investment Boards, and involvement with local and regional economic development agencies. The purpose of integrating these three specific emerging themes into the maintenance process is to respond to the unique and rapidly changing noncredit workforce training needs of area business and industry partners. The process of maintaining outreach extends across the model's concentric circles, similar to the process of initiating outreach. This maintenance should be tied to the community college's entrepreneurial orientation and context, its strategic plan, and its mission statement.

The Closer

  The activities for which the community college *closer* is responsible demonstrate both the entrepreneurial orientation and the context of the college's role in the partnership. Each of model's eight activities, which are represented by the double-headed arrows, falls under the purview of the *closer*. Because the study's findings revealed that a champion may also be a lower-level community college administrator who is primarily responsible for closer-related activities, the arrow representing the champion is also included in the *closer's* set of responsibilities. If the president plays the role of community college champion, the *closer* also has close contact with the champion and apprises the champion of the partnership's status. The *closer* plays a key role in the micro-level activities that define the central target of success.

Feedback Loop

  In order to successfully maintain noncredit workforce training partnerships and to provide forums for initiating new partnerships, a feedback loop is necessary. This feedback loop, which is managed by the closer, involves both *initiation* and *maintenance* of the outreach. Three processes occur during the *initiation* of outreach: (a) assessing training needs; (b) designing and developing training; and (c) delivering the training. These three processes are a direct outgrowth of initiating outreach with a prospective noncredit workforce training partner, which is why they are primarily demonstrated during the partnership development process.

  This feedback loop also includes three processes which occur during the *maintenance* of outreach to a business and industry counterpart. These processes include: (a) evaluating training; (b) conducting follow-up training evaluation; and (c) developing a

strategic plan for training with the noncredit workforce training partner. These three processes involve feedback that is gathered post-training and can be used to create a new connection or partnership cycle. The steps in this feedback loop are all critical components to training partnership success and continuous quality improvement, which is why each step is tied to the central target of success by double-headed arrows.

Concentric Circular Overlays

Three concentric circular overlays are key components of Condon's Model and are necessary to incorporate the work of the noncredit workforce training unit into the context of the institution. These overlays include: (a) the entrepreneurial orientation and partnership context; (b) the community college's strategic plan; and (c) the community college's mission statement.

Overlay of Entrepreneurial Orientation (EO) and partnership context. The role of the champion in initiating the outreach to a noncredit workforce training partner, and the related role of the closer in assisting with the initiation and maintenance of the outreach, fit into the next level of the Condon Model's concentric circles. Ideally, the entrepreneurial orientation of the community colleges should exhibit Lumpkin and Dess's (1996) salient dimensions of autonomy, innovativeness, and proactiveness. In addition, the community college should exhibit the modified salient dimensions of calculated risk-taking and measured competitive aggressiveness. The community college's partnership context should also exhibit at least one of Amey et al.'s (2007)'s motivating factors for a partnership. The most obvious of these motivators is for the noncredit workforce training unit to be a direct revenue source for the community college, although other contextual factors could apply as well.

Overlay of community college's strategic plan. Because the study's findings indicated that entrepreneurial orientation and context are directly tied to strategic planning, these components fit into the larger concentric circle representing the college's strategic plan for the role of noncredit workforce training. The most entrepreneurially oriented community colleges have noncredit workforce training explicitly included in the institutions' strategic plans. For this reason, community college leaders must ensure that noncredit workforce training units have parity with their credit-level counterparts in advancing the strategic goals of the institution.

Overlay of community college's mission statement. Because entrepreneurially oriented community colleges referenced the importance of noncredit workforce training and community partnerships in the institutions' mission statements, the largest of the model's four concentric circles represents that the institution's entrepreneurial activity is encompassed under the mission. This includes the entrepreneurial activity of the noncredit workforce training unit. The largest circle also represents the importance of a training partnership's inner workings to the advancement of the institution's mission.

Condon's Noncredit Workforce Training Partnership Task List Form

Developing and sustaining a successful noncredit workforce training partnership involves many steps, some of which are executed concurrently and some of which must be completed sequentially. To assist community college noncredit workforce training administrators with implementation of the model as they seek to develop new partnerships with business and industry, Condon's Noncredit Workforce Training Partnership Model contains a customized Task List Form. The form is organized into

sections, each of which is mapped to a specific component of the model and provides space to include field notes and the date the task was completed.

The purpose of this form is to provide a practical, results-oriented approach to logically managing the steps in Condon's Noncredit Workforce Training Partnership Model. This form also serves as an audit trail of the partnership development and maintenance processes with the community college's noncredit workforce training partners. Table 39 illustrates Condon's Noncredit Workforce Training Partnership Task List Form.

Table 39. *Condon's Noncredit Workforce Training Partnership Task List Form*

Task	Date Completed	Notes
Mission and Strategic Plan		
A. Explicit reference to noncredit workforce training should be in institutional mission statement B. Explicit reference to noncredit workforce training should be in strategic plan C. Context to building noncredit workforce training partnerships (e.g., revenue sharing or other resource sharing) should be in strategic plan		

Table 39. *Condon's Noncredit Workforce Training Partnership Task List Form*

Task	Date Completed	Notes
Community College Personnel Involved		
A. Champion identified B. Closer identified C. Additional contacts identified who need to be apprised of partnership (Foundation, Business Office, Auxiliary Services)		
Technology and Communication Plan		
A. Partner information entered into CRM software B. Closer identified and contact information provided to client C. Provisions for feedback in place and communicated to all parties		
Initiating Outreach		
A. Specific steps to demonstrate autonomy B. Specific steps to demonstrate innovativeness C. Specific steps to demonstrate proactiveness D. Specific steps to demonstrate calculated risk-taking E. Specific steps to demonstrate measured competitive aggressiveness		

Table 39. *Condon's Noncredit Workforce Training Partnership Task List Form*

Task	Date Completed	Notes
Training Design and Development, Delivery, and Evaluation		
A. Needs assessment B. Curriculum design and development C. Training delivery D. Training evaluation E. Follow-up evaluation F. Strategic plan for future training initiatives		
Maintaining Outreach		
A. Inclusion of partner in noncredit advisory council B. Community college participation in Workforce Investment Board; relevant results of participation communicated to client C. Community college participation in local or regional economic development organization; relevant results of participation communicated to client		

Condon's Noncredit Workforce Training Partnership Model is meant to provide a

holistic and comprehensive guide for noncredit workforce training administrators seeking

to forge new entrepreneurially oriented training partnerships with business and industry

counterparts. Condon's Model should also guide seasoned community college leaders

seeking to refine and enhance existing training partnerships with area employers. The

goals of such a model are to provide a community college-oriented, uniquely non-credit

approach to workforce training partnerships and to contribute to the fiscal health and the mission of the institution.

Conclusion

As community colleges continue to evolve during this second decade of the 21st century, their roles as workforce training contractors have taken on increasing importance to the institutions and to the business and industry partners the institutions serve. Far from the original role of post-secondary general education provider, community colleges have expanded their outreach to the larger business arena, consulting with employers on workforce training needs, building custom credit-level curricula, and being responsive to the constituents served by the college. This spirit of entrepreneurialism has is also found in the increasingly important role noncredit workforce training units play in advancing the institution's mission. Successful noncredit workforce training units have demonstrated this entrepreneurial spirit with a focus on entrepreneurial orientation, demonstrating innovativeness, autonomy, proactiveness, calculated levels of risk taking, and measured levels of competitive aggressiveness to respond to business and industry training needs. These units have demonstrated these salient dimensions of entrepreneurial orientation to capitalize on their unique positions within the community colleges' organizational structures. The result has been noncredit workforce training units that have provided rapidly responsive, customized noncredit training programs; built bridges to credit-level coursework; and created the *new entry* which is the goal of Lumpkin and Dess's (1996) Entrepreneurial Orientation Construct.

The challenge for community college noncredit workforce training units is to maintain this spirit of entrepreneurial orientation and to hurdle the barriers that hamper the ability to function as a revenue-generating business unit. Such functionality is

expected of community colleges by their business and industry counterparts, as it demonstrates true entrepreneurial orientation in the eyes of those stakeholders. While noncredit workforce training administrators must continue to implement the traditional tools of the trade in developing training curricula, such as needs assessments, program design, and program evaluation, they must also view the partnership through the lens of the business and industry partner. These partners anticipate a champion to bring the appropriate means and levels of capital to initiate the partnership. These partners also expect a process of *beginning with the end in mind*, or reverse engineering, to plan strategically for the steps required to reach the central target of success. Condon's Noncredit Workforce Training Partnership Model implements these best practices of entrepreneurially oriented community colleges and is the first step on the road to reaching that central target of success.

Recommendations for Future Research

The very lack of research and the gap in the literature on the important topic of community college noncredit workforce training partnerships underscores the need for additional inquiry. The myriad of challenges encountered in this study, from the confusing monikers describing colleges' noncredit workforce training units to the administrators' own lack of clarity on generating reimbursable ICCB credit hours through noncredit training, only demonstrates the need for deeper reflection on this issue. For these reasons, community college leaders would benefit from further study in three key areas.

First, because many noncredit workforce training administrators have not tracked the revenues they have lost when they do not claim the training for reimbursable ICCB credit hours, additional research could clarify the process for claiming this reimbursement

and demonstrate the value added to their operational budgets. In addition, ICCB leadership should be involved with this research process to help generate and disseminate standardized policies and procedures for consistently claiming this coursework for reimbursable hours. This could result in an update to the Management Information Systems manual (ICCB, 2009), which is the definitive reference guide for Illinois community college administrators.

In addition, study participants universally indicated that neither community college credit units nor businesses and industries fully understand the role and function noncredit workforce training plays in the greater mission of the community college. This may have something to do with the wildly divergent set of labels used by the participating institutions to describe noncredit workforce training units. This lack of understanding was evidenced by the researcher's documented difficulty in locating the noncredit workforce training administrators in each of Illinois' single-campus community colleges. If this lack of clarity confounds those in the profession, then it is even more confounding to potential business and industry partners. For this reason, additional research into the means by which community college noncredit workforce training units communicate their products, services, and abilities to their internal and external stakeholders could provide a more coordinated, cohesive approach to the units' importance.

Finally, this study's focus was limited to selected Illinois single-campus community colleges and those institutions' business and industry partners in order to establish parameters for the research methodology. By design, Illinois' two community college systems (City Colleges of Chicago and Illinois Eastern Community Colleges)

were excluded from this study. With the 2011 election of Chicago Mayor Rahm

Emanuel, City Colleges of Chicago embarked upon an ambitious initiative to reinvent the

system as the premier provider of workforce and career education. The latest phase of

this initiative, known as Reinvention[7] (City Colleges of Chicago, 2013), provides for the

system's community colleges to develop business and industry partnerships in curricula

and workforce training, facilities design, and college to career industries. Interestingly,

though, Reinvention[7] makes no explicit reference to noncredit workforce training

partnerships, nor does it provide a mechanism for noncredit training to build bridges to

these business and industry relationships. Because this study's findings confirm Van

Noy et al.'s (2008) findings that noncredit workforce training partnerships can build

essential bridges to credit-bearing coursework, an expansion of this study to include

Illinois' two community college systems could provide a broader perspective on how the

pursuit and the maintenance of these partnerships might differ.

References

American Association of Community Colleges. (2011, June 28). DOL official urges credit for short-term training. *Community College Times*. Retrieved from http://www.communitycollegetimes.com/Pages/Workforce-Development/DOL%E2%80%99s-Oates-urges-credit-for-workforce-training-.aspx

American Association of Community Colleges. (2012). [Graph illustration, Community College Growth Over the Past 100 Years]. Retrieved from http://www.aacc.nche.edu/AboutCC/history/Pages/ccgrowth.aspx

American Society for Training and Development. (2011). *2011 State of the industry report* (Report). Retrieved from http://www.astd.org/Professional-Resources/State-of-the-Industry-Report

American Society for Training and Development. (2013). *Anthony Carnevale.* Retrieved from http://www.astd.org/Publications/Magazines/TD/TD-Archive/2011/03/Anthony-Carnevale

Amey, M. J. (2010). Leading partnerships: Competencies for collaboration. *New Directions for Community Colleges, 149,* 13-23. doi: 10.1002/cc.391

Amey, M. J., Eddy, P. L., & Ozaki, C. C. (2007). Demands for partnership and collaboration in higher education: A model. *New Directions for Community Colleges, 139*, 5-14. doi: 10.1002/cc.288

Baird, I. S., & Thomas, H. (1985). Toward a contingency model of strategic risk taking. *Academy of Management Review, 10,* 230-243.

Berrett, D. (2012, December 5). Carnegie, the founder of the credit-hour, seeks its makeover. *Chronicle of Higher Education.* Retrieved from http://chronicle.com/article/carnegie-the-founder-of-the/136137

Brigham, C., & Klein-Collins, R. (2010, July). *Availability, use and value of prior learning assessment within community colleges* (Report). Retrieved from http://www.cael.org/pdf/ PLA_CommunityColleges.pdf

Business Roundtable. (2009). *Counting the hidden assets: First steps in assessing the impact of community college noncredit education programs on the workforce and local economies* (Report). Retrieved from http://www.businessroundtable.org/initiatives/education/community_college

Business Roundtable. (2012). About us. Retrieved from http://businessroundtable.org/about-us/

Carnegie Foundation for the Advancement of Teaching. (2012a). Basic classification description. Retrieved from http://classifications.carnegiefoundation.org/ descriptions/basic.php

Carnegie Foundation for the Advancement of Teaching. (2012b). The Carnegie classification of institutions of higher education™ . Retrieved from http://classifications.carnegiefoundation.org

Carnegie Foundation for the Advancement of Teaching. (2012c). Classification methodology. Retrieved from http://classifications.carnegiefoundation.org/ methodology/basic.php

Carnegie Foundation for the Advancement of Teaching. (2012d). *Custom listings* [Data file]. Retrieved from http://classifications.carnegiefoundation.org/ lookup_listings/custom.php

Carnegie Foundation for the Advancement of Teaching. (2012e). Size and setting classification description. Retrieved from http://classifications.carnegiefoundation.org/descriptions/size_setting.php

Certiport Corporation. (2012). Instructor directory list. Retrieved from http://www.certiport.com/portal/Pages/InstructorDirectoryList.aspx?cid=13

City Colleges of Chicago. (2013). Reinvention. Retrieved from http://www.ccc.edu/menu/pages/reinvention.aspx

CNNMoney. (2011, August 1). Community colleges step in to fill "skills gap." *CNN*. Retrieved from http://money.cnn.com/2011/08/01/news/economy/ community_colleges/index.htm?hpt=hp_t2

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

Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology, 94,* S95-S120.

Collier, D. J. (1978). *NCHEMS Program Classification Structure (PCS).* (2nd ed.). (Report). Boulder, CO: National Center for Higher Education Management Systems. Retrieved from http://www.nchems.org/pubs/chess/ DD2_Documentation.pdf

Commercial News. (2012, April 29). Otis Mechanical donates $20,000 for scholarships. Copy in possession of researcher.

Covin, J. G., & Slevin, D. P. (1989). Strategic management of small firms in hostile and benign environments. *Strategic Management Journal, 10*(1), 75-87. Retrieved from http://www.jstor.org/stable/2486395

Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five approaches*. (2nd ed.). Thousand Oaks, CA: SAGE Publications, Inc.

Croes, S. (2012). Kirkpatrick's four levels of evaluation. Retrieved from http://www.masterminds-ink.com/Evaluation.pdf

Dougherty, K. J., & Bakia, M. F. (2000). Community colleges and contract training: Content, origins, and impact. *Teachers College Record, 102*(1), 197-243.

Economic Development Foundation (pseudonym). (2010, March 16). Gerard Community College moves ahead with new Workforce Development Center. Copy in possession of researcher.

Evergreen Community College (pseudonym). (2013). Evergreen Community College strategic initiatives. Copy in possession of researcher.

Flynn, W. J., & Bernstein, L. T. (2007). *Profit is not a dirty word: What community colleges must do for a sustainable future* (Executive brief). Des Moines, IA: National Council for Continuing Education and Training. Retrieved from http://www.nccet.org/resource/resmgr/Publications/Profit_Is_Not_a_Dirty_Word.pdf

Folse, D., Wojnowska, T., Halperin, D., Jontry, M., Hill, K., Taylor, G., Cheatham, W., Chapman, M., Binning, E., Deason, S., Fransler, G., Leopold, G., Moore, C., Pyne, S., Illinois State University, Shirano, J., & Vanags, M. (2009). *A forum for business growth and workforce development: Findings and recommendations.* (Projects. Paper 4.). Retrieved from http://digitalcommons.iwu.edu/arc_projects/4

Franco, R. W. (2002, January). The civic role of community colleges: Preparing students for democracy [Supplemental material]. *Journal of Public Affairs, 6,* 119-130. Retrieved from http://www.compact.org/wp-content/uploads/resources/downloads/CCivic_role-final.pdf

Fredette, M. (2013, February). Seven secrets of lasting relationships. *Campus Technology,26*(6), 35-38. Retrieved from http://online.qmags.com/CPT0213?pg=18&mode=1#pg1&mode1

Frentzos, D. (2005, Spring). Credit and non-credit community college enrollment and the economy. *The Community College Enterprise, 11*(1), 93-103. Retrieved from http://www.schoolcraft.edu/pdfs/cce/11.1.93-103.pdf

Georgetown University Center on Education and the Workforce. (2013). About us. Retrieved from http://cew.georgetown.edu/about/about/

Granovetter, M. (1983). The strength of weak ties: A network theory revisited. *Sociology Theory, 1,* 201-233.

Greening Partners (pseudonym). (2011). Greening Partners Manufacturing Partnership Overview Flyer. Copy in possession of researcher.

Grubb, W. N., Badway, N., Bell, D., Bragg, D., & Russman, M. (1997). Workforce, economic, and community development: The changing landscape of the entrepreneurial community college. Washington, D.C.: Office of Vocational and Adult Education (ED). Retrieved from http://www.eric.ed.gov/PDFS/ED413033.pdf

Grubb, W. N., Badway, N., & Bell, D. (2002, April). Community colleges and the equity agenda: The potential of non-credit education. Retrieved from http://www.jff.org/sites/default/files/CCEquity.pdf

Hamilton Community College (pseudonym). College plan 2012-2013 (Report). Copy in possession of researcher.

Hutcheson, P. A. (2007, Fall). The Truman Commission's vision of the future. *Thought & Action,* 107-115. Retrieved from http://www.nea.org/assets/img/PubThoughtAndAction/TAA_07_11.pdf

Illinois Board of Higher Education (IBHE). (2010). *The basics of state funding for higher education in Illinois* (Report). Retrieved from http://www.ibhe.state.il.us/SJR88/Materials/100727/IHEFundingMechanism.pdf

Illinois Community College Board. (2001). Promise for Illinois: A strategic plan for the Illinois Community College System. Retrieved from http://www.iccb.org/pdf/promise.pdf

Illinois Community College Board. (2006). Promise for Illinois revisited: A strategic plan for the Illinois Community College Board. Retrieved from http://www.iccb.org/pdf/PromiseRevisited2006.pdf

Illinois Community College Board. (2009). *Management Information Systems manual.* Springfield, IL: Author.

Illinois Community College Board. (2012a). Administrators-workforce development. Retrieved from http://www.iccb.org/workforcedevelopment.html

Illinois Community College Board. (2012b). Businesses-human resource development: Contract/customized training. Retrieved from http://www.iccb.org/businesses.html

Illinois Community College Board. (2012c). *Workforce development grant report: Business and industry services, fiscal year 2011* (Report). Retrieved from http://www.iccb.org/pdf/reports/BIGrant_rpt11.pdf

Illinois Community College Board. (2013a). Course classification and funding. Retrieved from http://iccbdbsrv.iccb.org/generic/classfund.cfm

Illinois Community College Board. (2013b). Fiscal Year 2013 Operating budget appropriation and supporting technical data (Report). Retrieved from http://www.iccb.org/pdf/fiscal_manuals/FY13TECHAPDX.pdf

Illinois Community College Board. (2013c). ICCB funding categories by PCS and CIP. Retrieved from http://iccbdbsrv.iccb.org/generic/fundcategories.cfm

Illinois Community College Board. (2013d). The system. Retrieved from http://www.iccb.org/thesystem.html

Illinois Council for Continuing Education and Training. (2012a). A brief history of Illinois Council for Continuing Education and Training. Retrieved from http://www.iccet.com/aboutMiHi.html

Illinois Council for Continuing Education and Training. (2012b). Illinois Community College Board liaison. Retrieved from http://www.iccet.com/aboutICCB.html

Illinois Department of Commerce and Economic Opportunity. (2013). Employer Training Investment Program (ETIP): Competitive Component. Retrieved from http://www.ildceo.net/dceo/Bureaus/Business_Development/Grants/ETIP.htm

Illinois Public Community College Act, 110 ILCS 805/1-1 et seq. (West 2013).

International Association of Continuing Education and Training (IACET). (2012). Continuing education units. Retrieved from http://69.167.143.189/ceus/about-the-ceu

Johnson, B., & Christensen, L. (2004). *Educational research: Quantitative, qualitative, and mixed approaches*. (2nd ed.). Boston: Pearson Education.

Johnson, B., & Christensen, L. (2012a). *Educational research: Quantitative, qualitative, and mixed approaches*. (4th ed.). Thousand Oaks, CA: SAGE Publications, Inc.

Johnson, B., & Christensen, L. (2012b). *Educational research lectures.* Retrieved from http://www.southalabama.edu/coe/bset/johnson/2lectures.htm

Kankakee Community College, Office of Continuing Education and Career Services. (2013). *Cost of instruction report, Continuing Education* [Data file]. Kankakee, IL: Author.

Katsinas, S., D'Amico, M. M., & Friedel, J. N. (2012, September). *Workforce training in a recovering economy: Perceptions of state community college leaders* (Issue brief). Tuscaloosa, AL: University of Alabama Education Policy Center. Retrieved from http://education.ua.edu/centers/education-policy-center

Katsinas, S., & Lacey, V. A. (1989). *Community colleges and economic development: Models of institutional effectiveness.* Washington, D.C.: American Association of Community and Junior Colleges.

Kim, D., & Rury, J. L. (2007, August). The changing profile of college access: The Truman Commission and enrollment patterns in the Postwar Era. *History of Education Quarterly, 47*(3), 302-327.

Kirkpatrick, D. (2010, January). 50 years of evaluation. *T + D Magazine.* Retrieved from http://www.astd.org/Publications/Magazines/TD/TD-Archive/2010/01/50-Years-of-Evaluation

Kirkpatrick, D. (2010, September 20). The four levels are still relevant. *T + D Magazine*. Retrieved from http://www.astd.org/Publications/Magazines/TD/TD-Archive/2010/09/The-Four-Levels-Are-Still-Relevant

Kirkpatrick, D. L. (2006, August). Seven keys to unlock the four levels of evaluation. *Performance Improvement, 45*(7), 5-8. Retrieved from http://www.ispi.org

Kirkpatrick, D. L., & Kirkpatrick, J. D. (1993). *Evaluating training programs: The four levels.* (1st ed.). San Francisco: Berrett-Koehler Publishers, Inc.

Kirkpatrick, D. L., & Kirkpatrick, J. D. (2006). *Evaluating training programs: The four levels.* (3rd ed.). San Francisco: Berrett-Koehler Publishers, Inc.

Kirkpatrick Partners. (2009). There is more to Kirkpatrick than training evaluation. Retrieved from http://www.kirkpatrickpartners.com/Portals/0/Storage/There%20is%20More%2010%2026%2009%20revised%20_1_.pdf

Kirkpatrick Partners. (2011). Our philosophy: Return on expectations. Retrieved from http://www.kirkpatrickpartners.com/OurPhilosophy/tabid/66/Default.aspx

Klie, L. (2012, August). CRM comes to campus at a frantic pace. *Customer Relationship Management, 16*(8), n.p. Retrieved from http://www.destinationcrm.com/Articles/Editorial/Magazine-Features/The-2012-CRM-Elite-83864.aspx

Klie, L. (2013, September). Schools need to rethink their CRM approaches. *Customer Relationship Management, 17*(9), 29-32. Retrieved from http://www.destinationcrm.com/Issue/4059-September-2013.htm

Lehrer, J. (Interviewer) & Beschloss, M. (Interviewee). (2000, July 4). *Remembering the GI Bill* [Interview transcript]. Retrieved from http://www.pbs.org/newshour/ bb/military/july-dec00/gibill_7-4.html

Levin, J. S. (2001). *Globalizing the community college: Strategies for change in the twenty-first century.* New York: Palgrave.

Liberty Fund, Inc. (2012). *The concise encyclopedia of economics: Joseph Alois Schumpeter (1883-1950).* Retrieved from http://www.econlib.org/ library/Enc/bios/Schumpeter.html

Likert, R. (1932). A technique for the measurement of attitudes. *Archives of Psychology, 22*(140), 55.

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry.* Newbury Park, CA: SAGE Publications, Inc.

Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Review, 21*(1), 135-172.

Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation.* San Francisco: Jossey-Bass.

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook.* (2nd ed.). Thousand Oaks, CA: SAGE Publications, Inc.

Miller, D. (1983, July). The correlates of entrepreneurship in three types of firms. *Management Science, 29*(7), 770-791.

Morgan, G. (1998). *Images of organization.* Thousand Oaks, CA: SAGE Publications, Inc.

National Council of State Directors of Community Colleges (NCSDCC). (2012a). State directors. Retrieved from http://www.statedirectors.org/copy_of_statedirectors/ directors/ncsdcc.htm

National Council of State Directors of Community Colleges (NCSDCC). (2012b). Home page. Retrieved from http://www.statedirectors.org

Carl D. Perkins Career and Technical Education Improvement Act of 2006 (20 U.S.C. § 2301 et seq. (West 2012)).

Pinnegar, S., & Daynes, J. G. (2006). Locating narrative inquiry historically: Thematics in the turn to narrative. In D. J. Clandinin (Ed.), *Handbook of narrative inquiry.* Thousand Oaks, CA: SAGE Publications, Inc.

President's Commission on Higher Education. (1947). *Higher Education for American Democracy, 1,* 69-70.

Purinton, T., & Mangan, M. T. (2010, March/April). Creating an evidence-based funding model for schools. *Illinois School Board Journal.* Retrieved from http://www.iasb.com/journal/j030410_07.cfm

QSR International. (2012). NVivo10® feature list. Retrieved from http://download.qsrinternational.com/Resource/NVivo10/NVivo10-feature-list.pdf

Richard Community College (pseudonym). (2010). Richard Community College program review. Copy in possession of researcher.

Roehm, C. (2012, August 19). Richard CC tailors class to help. Copy in possession of researcher.

Roueche, J. E., & Jones, B. R. (Eds.). (2005). *The entrepreneurial community college.* Washington, D.C.: Community College Press.

Schumpeter, J. (2002, April). Theory of economic development (M. C. Becker and T. Knudsen, Trans.). *American Journal of Economics and Sociology, 61*(2), 405-437. (Original work published 1911)

Schumpeter, J. A. (1934). *The theory of economic development.* Cambridge, MA: Harvard University Press.

Stake, R. E. (1995). *The art of case study research.* Thousand Oaks, CA: SAGE Publications, Inc.

SurveyMonkey. (2011). *SurveyMonkey: Smart survey design.* Retrieved from http://help.surveymonkey.com/euf/assets/docs/pdf/SmartSurvey.pdf

United States Department of Education, National Center for Education Statistics (NCES). (2013). Classification of Instructional Programs (CIP). Retrieved from http://nces.ed.gov/ipeds/cipcode/Default.aspx?y=55

Van Noy, M., Jacobs, J., Korey, S., Bailey, T., and Hughes, K. L. (2008). *Noncredit enrollment in workforce education: State policies and community college practices* (Report). Washington, D.C.: American Association of Community Colleges and Community College Research Center. Retrieved from http://www.aacc.nche.edu/noncreditenroll

Venkatraman, N. (1989). Strategic orientation of business enterprises: The construct, dimensionality, and measurement. *Management Science, 35,* 942-962.

weTRaIN Illinois (2012a). About us. Retrieved from http://wetrainillinois.com/about-us/

weTRaIN Illinois (2012b). Core services. Retrieved from http://wetrainillinois.com/core-services/

The White House. (2011, June). *The White House summit on community colleges summit report* (Report). Retrieved from http://www.whitehouse.gov/sites/default/files/uploads/community_college_summit_report.pdf

Workforce Investment Act of 1998 (20 U.S.C. § 9201 et seq. (West 2012)).

Yin, R. K. (2009). *Case study research: Design and methods.* (4th ed.). Thousand Oaks, CA: SAGE Publications, Inc.

Appendices

Appendix A: Community College Participant Survey

Date: _____

Participant's Name: _____

Name of Community College: _____

Please complete demographic questionnaire below for this dissertation research.

1. Gender: ☐ Male   ☐ Female

2. Age Group:

☐ under 40 years

☐ 40-44 years

☐ 45-49 years

☐ 50-54 years

☐ 55-59 years

☐ 60-64 years

☐ 65 years or older

3. Ethnicity:

☐ Asian or Pacific Islander

☐ American Indian or Alaskan

☐ Black, non-Hispanic

☐ Hispanic

☐ White, non-Hispanic

4. **Education:**

☐ Doctorate (Ph.D., Ed.D., etc.)

☐ Master's Degree

☐ J.D. or other professional degree

☐ Other

5. **Current Position:**

Institution: _____

Title: _____

City/State: _____

How long have you been in this position?

From _____ to date
        month/year

Annual Student FTE: _____

6. **Do you have prior experience in business and industry?**

☐ Yes   ☐ No

7. **If the answer to Question #6 is YES, please briefly explain your business and industry background and number of years in that area.**

_____

8. **Does your community college have a representative on your county's economic development board or alliance?**

☐ Yes   ☐ No

9. **If the answer to Question # 8 is YES, please provide the name of the economic development board or alliance.**

_____

10. Is your noncredit workforce training unit tax-exempt under the provisions of Section 501(c)(3) of the Internal Revenue Code?

☐ Yes   ☐ No

11. Number of noncredit workforce training contracts your community college completed and revenue generated over the last three fiscal years:

Fiscal Year	Number of Noncredit Workforce Training Contracts Completed	Total Revenue Generated from Noncredit Workforce Training Contracts
FY 12 (July 2011-June 2012)		
FY 11 (July 2010-June 2011)		
FY 10 (July 2009-June 2010)		

12. Where is the revenue generated from the contracts specified in #11 above allocated?

☐   Community college's general operating or education fund

☐   Noncredit workforce training unit's general operating fund

☐   Other (please specify)

_____

13. Is your noncredit workforce training unit:

☐   Embedded in the institution (funded by the community college's budget)

☐   A freestanding unit (funding itself by the revenues generated)

☐   Other (please specify)

_____

14. How are your noncredit workforce training faculty recruited?

_____

15. Do your noncredit workforce training faculty also teach credit-generating courses at your community college or at any other college?

☐ Yes ☐ No

16. Can your students transfer noncredit-generating coursework to credit-generating coursework?

☐ Yes ☐ No

17. If the answer to Question #16 is YES, please explain how this process works.

18. Would you be willing to be interviewed further in person about your noncredit workforce training partnerships?

☐ Yes ☐ No

19. If the answer to Question #18 is YES, one of your business and industry partners will also need to be interviewed about your noncredit workforce training partnership for this study. This will assist in developing a more complete picture of the dynamic partnerships between community colleges' noncredit workforce training units and their business and industry partners.

Please provide the contact information for business and industry partners in **two** separate occupational areas (e.g., manufacturing, health care, retail). Only **one** of those **two** partners will be selected for a personal interview.

If the answer to Question #18 is **NO**, then your participation in this survey is complete; thank you for your valuable feedback.

BUSINESS & INDUSTRY PARTNER #1
Contact Name

Company Name

Address (Include City, State, and Zip)

Phone Number

E-mail

BUSINESS & INDUSTRY PARTNER #2

Contact Name

Company Name

Address (Include City, State, and Zip)

Phone Number

E-mail

If you wish to participate in an interview and you have provided the contact information on a business and industry partner, please continue to the next section of the survey.

20. **Would you say that your community college is *entrepreneurial* in its pursuit of noncredit workforce training contracts with business and industry?**

    ☐ Yes   ☐ No

21. **Please explain:**

22. **Please rate the degree to which you agree with the following statements about the entrepreneurial nature of your relationships with business and industry. Please use the following rankings:**

    SA = I strongly agree with this statement.
    A = I agree with this statement.
    N = I neither agree nor disagree with this statement.
    D = I disagree with this statement.
    SD = I strongly disagree with this statement.

Statement	SA	A	N	D	SD
A. **My noncredit workforce training unit has the freedom and creativity to champion new ideas when developing a partnership.**					
B. **My noncredit workforce training unit has the ability to be innovative and come up with new practices and processes to serve our partners.**					
C. **My noncredit workforce training unit has the ability to take risks, including borrowing or committing resources or capital, in exchange for a high rate of return on the partnership.**					

Statement	SA	A	N	D	SD
D. My noncredit workforce training unit has the ability to be proactive to seek new opportunities for partnerships and to strategically introduce or eliminate practices in response to the partners' needs.					
E. My noncredit workforce training unit is competitively aggressive, meaning it meets our consumers' demand and responds aggressively to our competition.					
F. There are issues (or antecedents) that prompt a noncredit workforce training partnership, such as past relationships with the partner.					
G. We find that both our institution and the business have unique motivators for pursuing a partnership.					
H. Within our noncredit workforce training unit, we have a "champion" who possesses the social capital, trustworthiness, and respect to forge and sustain a partnership.					
I. When we enter into a partnership, it is often for a contextual reason, such as declining enrollment or revenue, funding, or lack of instructional support.					
J. As we work with a business and industry partner, the strengths that each side brings to the partnership become clearer.					
K. In the past, we have terminated or concluded a partnership when we determined the partnership's objectives had been met.					
L. In the past, we have terminated or concluded a partnership when we determined the partnership had failed.					
M. In the past, a partner has terminated or concluded a partnership when the partner determined the partnership had failed.					

Statement	SA	A	N	D	SD
N. **We routinely solicit feedback from a partner on the effectiveness of the partnership DURING the process of developing the partnership.**					
O. **We routinely solicit feedback from a partner on the effectiveness of the partnership AFTER the partnership has been developed.**					
P. **When we evaluate the effectiveness of our training, we measure what the participants' reactions were (e.g., did they like the training).**					
Q. **When we evaluate the effectiveness of our training, we measure what the participants learned (e.g., we pre-test and post-test the participants).**					
R. **When we evaluate the effectiveness of our training, we measure how the participants' behaviors have changed as a result of training (e.g., do they perform a task differently or better as a result of the training).**					
S. **When we evaluate the effectiveness of our training, we measure whether the training has achieved quantifiable results (e.g., has production increased; has error decreased; has quality improved).**					
T. **If we evaluate quantifiable results of training, we use a control group.**					

Thank you for taking time from your busy schedule to complete this questionnaire. Your careful responses will provide substantive depth and clarity to this study and will aid in providing necessary context.

Kristine M. Condon
Doctoral Student
Community College Leadership Program
National Louis University
kmcondon@msn.com
(708) 957-9364

Appendix B: Business and Industry Partner Survey

Date: _____

Participant's Name: _____

Please complete demographic questionnaire below for this dissertation research.

1. **Gender:** ☐ Male   ☐ Female

2. **Age Group:**

   ☐ under 40 years

   ☐ 40-44 years

   ☐ 45-49 years

   ☐ 50-54 years

   ☐ 55-59 years

   ☐ 60-64 years

   ☐ 65 years or older

3. **Ethnicity:**

   ☐ Asian or Pacific Islander

   ☐ American Indian or Alaskan

   ☐ Black, non-Hispanic

   ☐ Hispanic

   ☐ White, non-Hispanic

4. Education:

☐ Doctorate (Ph.D., Ed.D., etc.)

☐ Master's Degree

☐ J.D. or other professional degree

☐ Bachelor's Degree

☐ Other Professional or Technical Credential (please specify below)

☐ Other

5. Current Position:

Company Name: _____

Title: _____

City/State: _____

How long have you been in this position?

From _____ to date
            month/year

6. Nature of your business or industry:

_____

7. Does your company have a representative on your county's economic development board or alliance?

☐ Yes   ☐ No

8. If the answer to Question # 7 is YES, please provide the name of the economic development board or alliance.

_____

9. **What is/are the name(s) of the community college(s) conducting your noncredit workforce training?**

_____

10. **Number of noncredit workforce training contracts your company has completed with a community college and training costs over the last three fiscal years:**

Fiscal Year Please identify by dates (January-December, July-June, etc.)	Number of Noncredit Workforce Training Contracts Completed	Total Cost of Noncredit Workforce Training
FY 12 (July 2011-June 2012)		
FY 11 (July 2010-June 2011)		
FY 10 (July 2009-June 2010)		

11. **What is your budget source for the contracts specified in #10 above?**

☐   Training money is provided for in our annual budget

☐   Training money is offered by the community college (grants, etc.)

☐   Other (please specify)

_____

12. **Would you be willing to be interviewed further in person about your noncredit workforce training partnerships?**

☐ Yes   ☐ No

13. If the answer to Question #12 is **NO**, then your participation in this survey is complete; thank you for your valuable feedback.

If you wish to participate in a personal interview, please continue to the next section of the survey.

14. **Would you say that your local community college is *entrepreneurial* in its pursuit of noncredit workforce training contracts with you?**

☐ Yes   ☐ No

15. **Please explain:** _____

16. Please rate the degree to which you agree with the following statements about the entrepreneurial nature of your relationship with your local community college. Please use the following rankings:

SA = I strongly agree with this statement.
A = I agree with this statement.
N = I neither agree nor disagree with this statement.
D = I disagree with this statement.
SD = I strongly disagree with this statement.

Statement	SA	A	N	D	SD
A. Our community college partner has the freedom and creativity to champion new ideas when developing a partnership with us.					
B. Our community college partner has the ability to be innovative and come up with new practices and processes to serve us.					
C. Our community college partner has the ability to take risks, including borrowing or committing resources or capital, in exchange for a high rate of return on their partnership with us.					
D. Our community college partner has the ability to be proactive to seek new opportunities for partnerships and to strategically introduce or eliminate practices in response to our needs.					
E. Our community college partner is competitively aggressive, meaning it meets our demand and responds aggressively if there is competition for our business.					
F. There are issues (or antecedents) that prompt a noncredit workforce training partnership, such as past relationships with the community college.					
G. We find that both our business and the community college have unique motivators for pursuing a partnership.					

Statement	SA	A	N	D	SD
H. Our community college has a "champion" who possesses the social capital, trustworthiness, and respect to forge and sustain a partnership with us.					
I. When we enter into a partnership, it is often for a contextual reason, such as a decrease in productivity, a need for technical support, or a lack of skill.					
J. As we work with a community college, the strengths that each side brings to the partnership become clearer.					
K. In the past, we have terminated or concluded a partnership with a community college when we determined the partnership's objectives had been met.					
L. In the past, we have terminated or concluded a partnership with a community college when we determined the partnership had failed.					
M. In the past, the community college has terminated or concluded a partnership with us when they determined the partnership had failed.					
N. The community college routinely solicits feedback from us on the effectiveness of the partnership DURING the process of developing the partnership.					
O. The community college routinely solicits feedback from us on the effectiveness of the partnership AFTER the partnership has been developed.					
P. When the community college evaluates the effectiveness of their training, they measure what the participants' reactions were (e.g., did our employees like the training).					

Statement	SA	A	N	D	SD
Q. When the community college evaluates the effectiveness of their training, they measure what the participants learned (e.g., they pre-test and post-test our employees).					
R. When the community college evaluates the effectiveness of their training, they measure how our employees' behaviors have changed as a result of training (e.g., do our employees perform a task differently or better as a result of the training).					
S. When the community college evaluates the effectiveness of their training, they measure whether the training has achieved quantifiable results (e.g., has our production increased; has our error decreased; has our quality improved).					
T. If the community college evaluates quantifiable results of training, they use a control group.					

Thank you for taking time from your busy schedule to complete this questionnaire. Your careful responses will provide substantive depth and clarity to this study and will aid in providing necessary context.

Kristine M. Condon
Doctoral Student
Community College Leadership Program
National Louis University
kmcondon@msn.com
(708) 957-9364

Appendix C: Participant Consent Form

Thank you for agreeing to participate in this study that will take place from September 2012 through September 2013. This form outlines the purposes of the study and provides a description of your involvement and rights as a participant.

I consent to participate in a research project conducted by Kristine M. Condon, a doctoral student at National Louis University, located in Chicago, Illinois.

I understand the study is entitled The Community College as Entrepreneur: Developing and Sustaining Effective Noncredit Workforce Training Partnerships. The purpose of this study is to identify how and in what ways Illinois single-campus community colleges develop and sustain effective noncredit workforce training partnerships.

I understand that my participation will consist of audio recorded interviews lasting 60 to 90 minutes with a possible second, follow-up interview lasting 60 to 90 minutes. I understand that I will receive a copy of my transcribed interview at which time I may clarify information.

I understand that my participation is voluntary and can be discontinued at any time until the completion of the dissertation.

I understand that my anonymity will be maintained and the information I provide confidential. I understand that only the researcher, Kristine M. Condon, will have access to a secured file cabinet in which will be kept all transcripts, audio recordings, documents and field notes from the interview(s) in which I participated.

I understand there are no anticipated risks or benefits to me, no greater than that encountered in daily life. Further, the information gained from this study could be used to assist in the identification of strategies for community colleges to build and sustain effective noncredit workforce training partnerships with business and industry clients.

I understand that in the event I have questions or require additional information I may contact the researcher: Kristine M. Condon, 1830 Evergreen Road, Homewood, IL 60430; (708) 957-9364, or by e-mail: kmcondon@msn.com.

If you have any concerns or questions before or during participation that you feel have not been addressed by the researcher, you may contact my Primary Advisor and Dissertation Chair: Dr. Rebecca S. Lake, National Louis University (Chicago Campus), 122 S. Michigan Avenue, Chicago, IL 60603; (312) 261-3534 or by e-mail: rebecca.lake@nl.edu

Participant's Signature:_____ **Date:**_____

Researcher's Signature:_____ **Date:**_____

Appendix D: Interview Questions Mapped to Driving Questions

Driving Questions	Interview Questions
1. **How do noncredit workforce training units support the community college's mission?**	1. How do noncredit workforce training units support the community college's mission?
	2. If your institution has a champion who initiates and sustains noncredit workforce training partnerships, how and in what ways does that person initiate and sustain these partnerships?
2. **What characteristics define effective community college noncredit workforce training partnerships?**	3. Describe the characteristics of an effective noncredit workforce training partnership your community college has had with a local business or industry.
3. **How does the community college initiate community outreach to develop noncredit workforce training partnerships?**	4a. What is the impetus for business or industry to pursue a noncredit workforce training partnership with your college?
	4b. What is the impetus for a community college to pursue a noncredit workforce training partnership with your local business or industry?
	5. Describe the process you followed to reach out to a noncredit workforce training partner.
	6. How and in what ways does staying current with industry trends help to initiate outreach with a noncredit workforce training partner?
	7. Have you found that there are external or internal impediments to initiating a noncredit workforce training partnership?

Driving Questions	Interview Questions
4. **What characteristics or elements contribute to sustaining noncredit workforce training partnerships?**	8. Describe the steps you follow to evaluate the effectiveness of a noncredit workforce training partnership.
	9. Explain the processes or mechanisms you utilize to sustain a successful relationship with a noncredit workforce training partner.

Appendix E: Transcriptionist Confidentiality Agreement

This confidentiality form articulates the agreement made between Kristine M. Condon, the researcher, and [NAME OF INDIVIDUAL AND COMPANY OF A PROFESSIONAL TRANSCRIBER].

I understand and acknowledge that by transcribing the audiotapes provided to me by Kristine M. Condon, I will be exposed to confidential information about the research study and the research participants. In providing transcription services, at no time will I reveal or discuss any of the information to which I have been exposed.

In addition, at no time will I maintain copies of the electronic or paper documents generated. Further, upon completing each transcription, I agree to provide the electronic and paper documents to the researcher:

Kristine M. Condon

1830 Evergreen Road

Homewood, IL 60430

(708) 957-9364

kmcondon@msn.com

I understand that breach of this agreement as described above could result in personal and professional harm to the research participants for which I will be held legally responsible.

**Transcriptionist's
Signature:**_____**Date:**_____

**Researcher's
Signature:**_____**Date:**_____