

EXPLORING PERCEIVED BENEFITS OF COLLABORATION:  
A STUDY OF EMPLOYER ADVISORY BOARDS IN WORKFORCE DEVELOPMENT AND CAREER &  
TECHNICAL EDUCATION PROGRAMS IN COMMUNITY COLLEGES

by

Mark A. Dunneback

This dissertation is submitted in partial fulfillment of the  
requirements for the degree of

Doctor of Education

Ferris State University

August 2018

© 2018 Mark A. Dunneback  
All Rights Reserved

EXPLORING PERCEIVED BENEFITS OF COLLABORATION:  
A STUDY OF EMPLOYER ADVISORY BOARDS IN WORKFORCE DEVELOPMENT AND CAREER &  
TECHNICAL EDUCATION PROGRAMS IN COMMUNITY COLLEGES

by

Mark A. Dunneback

Has been approved

August 2018

APPROVED:

Rebecca Nickoli, EdD

Committee Chair

Fiona Hert, EdD

Committee Member

Ken Warden, EdD

Committee Member

Dissertation Committee

ACCEPTED:

Roberta C. Teahen, PhD, Director

Community College Leadership Program

## ABSTRACT

Employer engagement is a critical component of success in fulfilling the community college mission. The contemporary community college, charged with creating, providing, and sustaining relevant workforce training to the middle skills sector, needs to regularly interact with employers to understand their training needs. That interaction should be collaborative in nature, providing benefits for all parties involved. The employer-college training relationship should provide a transformational opportunity for both the business and the college program, not merely a transaction between vendor and client.

This mixed methods multi-case study uses a sequential explanatory design to identify any perceived benefits and best practices of utilizing employer advisory boards in workforce development and career and technical education programs in community colleges. The interactions of three factors – collaboration, resource dependency, and human capital – are proposed as a framework for determining perceived value of employer advisory boards in this study. The study was conducted through the lens of community college participants in the state of Michigan.

Four guiding themes – relevance, relationships, partnerships, and accountability – emerged from the findings in this study. Five conclusions and implications of this study were presented, the conclusions summarized here:

- Relevance, Relationships, Partnerships, and Accountability are critical to the development and sustainment of successful collaboration.

- Little is done currently to formally control and document processes for employer recruitment, employer acceptance criteria, or employer service term limits on employer advisory boards.
- Some alumni participation on employer advisory boards could prove beneficial with respect to hiring of future graduates. However, no alumni presence, or over-saturation of alumni on the advisory board may have detrimental effects.
- Meeting membership, structure, and operation greatly influence the value produced by employer advisory boards.
- When seeking to create a collaborative environment, recognize advisory board ownership and advisory board leadership are not the same thing.

A summary table of proposed best practices derived from the research was presented, outlining guidelines for advisory board recruitment, composition, meeting structure, and operation. The proposed best practices create and sustain an employer advisory board that encourages collaboration through effective workforce development partnerships between colleges and employers.

**KEY WORDS:** Employer Advisory Boards, Employer Engagement, Collaboration, Career and Technical Education, Workforce Development, Community Colleges

## DEDICATION

This effort is dedicated to my father, for teaching me the value of completing hard work.

## ACKNOWLEDGMENTS

First and foremost, I wish to thank Dr. Rebecca Nickoli, for taking on this challenge (aka me) sight unseen. Her guidance and patience through the past three years has been the fundamental force driving this project to completion. I also wish to thank my committee members, Dr. Fiona Hert, and Dr. Ken Warden, for walking into the game in progress, and stepping up immediately to help hit my aggressive timeline. Without these three individuals guiding me, I would certainly still be drafting chapter one.

I also thank DCCL Cohort 6 for taking me along on the journey, the DCCL staff (Sandy, Megan, Dan, and Sidney) and the many wonderful DCCL instructors for making sure we all stayed on the path toward success.

Lastly, I wish to thank Dr. Roberta Teahen, who took the original chance on me when others might not. I entered this program for the experience, and I certainly received a great one.

This project would not have happened without the support of my children, Racquel, Tyler, Lindsey, and Justin and my wonderfully patient wife, Wendy, to keep me on task. Thank you all for your continued support.

## TABLE OF CONTENTS

	Page
LIST OF TABLES .....	viii
LIST OF FIGURES .....	ix
LIST OF ACRONYMS .....	x
CHAPTER ONE: INTRODUCTION .....	1
Introduction to the Study .....	1
The Need for Workforce Development Today .....	2
Recovery from the Great Recession and Current Labor Projections.....	4
Relationships between Employers and Community College CTE and WFD Programs.....	8
Justification for the Study.....	10
Historical Context and Importance of Workforce Development Programs.....	10
The Community College’s Growing Role in Workforce Development.....	13
Community Colleges and the Contemporary Employer Relationship .....	15
The Benefits and Challenges of Collaboration .....	17
Problem Statement.....	18
Purpose of the Study.....	19
Research Questions.....	20
Significance of the Study .....	21
Definition of Terms .....	21
Assumptions .....	23
Delimitations and Limitations.....	23
Organization of Dissertation.....	24
Summary.....	25
CHAPTER TWO: LITERATURE REVIEW.....	26
Introduction .....	26
Benefits of Engagement .....	27
Benefits to Students.....	28
Benefits to Colleges.....	29
Benefits to Employers .....	30
Benefits to Community .....	32
Challenges With Engagement.....	33
Frameworks for Engagement .....	35



Resource Dependency Theory (RDT) .....	36
Human Capital Theory (HCT) .....	37
Collaborative Partnerships .....	38
Proposed Interactive Model for Collaboration, RDT, and HCT .....	40
Summary.....	42
CHAPTER THREE: METHODOLOGY .....	44
Introduction .....	44
Statement of Purpose .....	44
Research Design.....	45
Sampling Method.....	49
Ethical Considerations.....	50
Content Validity .....	51
Data Analysis.....	52
Research Bias .....	53
Limitations .....	54
Summary.....	55
CHAPTER FOUR: RESULTS AND ANALYSIS.....	56
Introduction .....	56
Description of Phase 1: Survey Sample.....	58
Survey Participant Demographics.....	58
Description of Phase 2: Interview Sample .....	61
Interview Participant Demographics .....	61
Employer Advisory Boards — General Findings .....	63
Employer Advisory Board Composition — General.....	63
Employer Advisory Board Composition — Program Alumni.....	66
Employer Advisory Board Structure and Function — General.....	69
Perceptions on Engaging Employers to Participate on Advisory Boards.....	72
Summary of General Findings.....	74
Findings Supporting Research Questions.....	76
Coding and Analytics Guiding In-Depth Analysis of the Research Questions .....	76
Four Emergent Themes Supporting Collaboration and Engagement .....	77
Relevance.....	78
Relationships .....	78
Partnerships .....	79
Accountability .....	80
Summary of Emergent Themes.....	80
Research Question 1: Benefits Received.....	81
Benefits to Curriculum, Pedagogy, or Course Design .....	81
Monetary and In-Kind Benefits .....	82
Other Benefits .....	84
Summary of Benefits Received .....	88
Research Question 2: Benefits Provided.....	89

Effect upon Employer Satisfaction .....	89
Responsiveness to Employer Needs.....	90
Other Ways Support is Reciprocated .....	92
Summary of Benefits Provided .....	92
Research Question 3: Characteristics of Collaboration .....	93
Composition of Collaborative Advisory Boards .....	93
How Collaborative Advisory Boards are Operationalized .....	96
Metrics or Outcomes to Determine Collaborative Value.....	100
Summary of Collaborative Characteristics .....	101
Research Question 4: Potential Best Practices.....	102
Summary.....	104
CHAPTER FIVE: FINDINGS, RECOMMENDATIONS, AND CONCLUSIONS.....	105
Introduction .....	105
Summary Review of the Study.....	105
Major Findings and Recommendations .....	108
Research Question 1: Benefits Colleges Receive.....	108
Research Question 2: Benefits Colleges Provide.....	112
Research Question 3: Characteristics of Collaboration .....	113
Research Question 4: Potential Best Practices.....	117
Summary of Proposed Best Practices — Collaborative Employer Advisory Boards.....	117
General Conclusions and Implications .....	119
Relationship to Literature.....	123
Revised Model for Interaction of Key Factors of Collaboration.....	124
Suggestions for Future Study .....	126
Limitations of the Study .....	127
Conclusions.....	128
REFERENCES .....	130
APPENDIX A: IRB APPROVAL LETTER .....	140
APPENDIX B: PHASE 1 SURVEY QUESTIONS.....	142
APPENDIX C: PHASE 2 SEMI-STRUCTURED INTERVIEW QUESTIONS.....	152
APPENDIX D: PHASE 1 SURVEY INVITATION .....	155

## LIST OF TABLES

	Page
Table 1: <i>Current Job Position and Number of Years in Current Role</i> .....	60
Table 2: <i>Composition of Phase 2 Interview Participants</i> .....	61
Table 3: <i>Coding and Analytics Guiding In-Depth Analysis of the Research Questions</i> .....	77
Table 4: <i>Perceptions on Composition of Collaborative Advisory Boards</i> .....	94
Table 5: <i>Perceptions on Operation of Collaborative Advisory Boards</i> .....	97
Table 6: <i>Proposed Best Practices — Collaborative Employer Advisory Boards</i> .....	103
Table 7: <i>Summary of Proposed Best Practices — Collaborative Employer Advisory Boards</i> .....	118

## LIST OF FIGURES

	Page
Figure 1. Percentage of Workforce by Educational Attainment: 1973, 2007, 2018 .....	12
Figure 2. Phases of Strategic Alliances across a Continuum of Integration .....	39
Figure 3. Proposed Model for Interaction of Key Factors – Collaboration, RDT, & HCT .....	41
Figure 4. Ordered Process Steps of a Mixed Method Sequential Explanatory Design .....	46
Figure 5. College Demographic Classification by Geographical Location.....	59
Figure 6. College Demographic Classification by College Setting .....	59
Figure 7. Regarding Definition and Documentation for Advisory Board Member Selection .....	64
Figure 8. Alumni Composition of Advisory Board Employer Members.....	67
Figure 9. Hiring Practices of Advisory Board Employer Members .....	67
Figure 10. Overlay of Percent Alumni Serving on Advisory Board and Hiring Practices .....	68
Figure 11. Perception: Ease of Identifying Employers for Participation on Advisory Boards.....	72
Figure 12. Perception: Ease of Getting Employers to Actively Participate on Advisory Boards...	73
Figure 13. Comparative Analysis of Emergent Themes Supporting Collaboration.....	78
Figure 14. Proposed Model for Interaction of Key Factors (revisited).....	109
Figure 15. Revised Model for Interaction of Key Factors of Collaboration .....	125

## LIST OF ACRONYMS

Accreditation Board for Engineering and Technology.....	ABET
Accreditation Commission for Education in Nursing.....	ACEN
American Association of Community Colleges.....	AACC
Bureau of Labor Statistics.....	BLS
Career and Technical Education .....	CTE
Department of Labor.....	DOL
Employer Advisory Board .....	EAB
Human Capital Theory.....	HCT
Resource Dependency Theory.....	RDT
Science, Technology, Engineering, Mathematics .....	STEM
Workforce Development.....	WFD
Workforce Innovation and Opportunity Act .....	WIOA

## CHAPTER ONE: INTRODUCTION

“The American Dream is at risk. Because a highly educated population is fundamental to economic growth and a vibrant democracy, community colleges can help reclaim that dream” (American Association of Community Colleges (AACC), 2012, p. vii).

“Skill mismatches are growing. Just two generations ago, a high school diploma provided the skills for life-long success. Today, skills must be enhanced on a continuous basis... The rewards for greater skills are increasing and for lesser skills, shrinking” (Hoke, Abernathy, & Doron, 2014, p. 7).

“The simplest case for it is this: neither employers nor educators can accomplish their goals in the labor market alone” (Wilson, 2015, p. 2).

### **INTRODUCTION TO THE STUDY**

The prosperity and well-being of the United States depends upon the successful development of its workforce — the powerhouse of a flourishing economy. The threat of an underprepared, underperforming workforce continues to be a significant dynamic in contemporary political, socio-economic, and educational policy decision-making (AACC, 2012; Hoke, Abernathy, & Doron, 2014; Wilson, 2015). Therefore, pressure to increase the performance and competitive advantage of national and regional economies while minimizing labor and resource costs is a common strategic challenge shared by higher education, policy makers, and business leaders. A major factor of those labor and resource costs is realized in career and technical education (CTE) and workforce development (WFD) training.

## The Need for Workforce Development Today

Several factors influence CTE and WFD educational training needs, including employee skills, employer needs, economic demands, wage fluctuations, and changes in technology (Bray, Painter, & Rosin, 2011; Hoffman, 2011; Sullivan, 2015; Wilson, 2015). Today's technology driven workforce requires workers possess a continuing education beyond the scope of a traditional high school diploma (AACC, 2012; Carnevale, Strohl, Cheah, & Ridley, 2017; Hoke, Abernathy, & Doron, 2014). However, the cost of keeping new and existing employees technologically current is beyond the reach of most corporate training funding models (Baller, Dutta & Lanvin, 2016; Deloitte Development & The Manufacturing Institute, 2015).

It is rare that contemporary employees stay with one company or within one job role for their entire working lives (Bray, Painter, & Rosin, 2011). Data provided through the Bureau of Labor Statistics (2016) shows that contemporary workers remain at the same job or in the same job role for an average of less than 4.2 years. Over 45% of employers expect recent college graduates to remain in their initial position or job role less than two years (Grasz, 2014). Recent estimates suggest it takes a new employee almost 6 months to reach full productivity (Sullivan, 2015). This seemingly everlasting flux of job change makes employee training a constant need.

As workplace technology continues to advance and labor skills appear to stagnate, fear of a "middle skills gap" has begun to propagate in CTE education and WFD training research (AACC, 2012; Carnevale, Smith & Strohl, 2010; Holzer & Lerman, 2009; Soares, 2010; Unruh, 2011). The costs associated with recurrently creating and updating workforce training to match the pace of technological change made many companies reluctant to develop and invest in long-term in-house training programs to combat the skills gap (Chronicle of Higher Education,

2012; HR Policy Association, 2010). However, research has shown employers will invest in workplace-specific skills provided by other resources that provide a marketable return on their training investments (HR Policy Association, 2010; Sullivan, 2015; Wilson, 2015).

The most cost-efficient and responsive method of providing training and education for the perpetually changing demands of the workforce remains the contemporary community college (AACC, 2012; Cohen, Brawer & Kisker, 2014; Hoke, Abernathy, & Doron, 2014; Jacobs & Dougherty, 2006; Soares, 2010; Wilson, 2015). Originally thought of as a gateway to one's first job in the private career-oriented sector, community colleges have become the answer to many of the political and societal demands placed upon contemporary CTE and WFD education programs challenged with addressing the skills gap (Hoffman, 2011; Johnson, 2011; Jacobs, 2009; Soares, 2010).

Many of the people currently employed in the workforce will still be working or employable for the next twenty years (Blair, Bransberger, & Conway, 2007; National Center on Education and the Economy, 2007) — they will possibly work in as many as ten different job positions in the course of their career (Hoke, Abernathy, & Doron, 2014). These entrenched individuals will not benefit from new Science, Technology, Engineering, Math (STEM) programs currently being introduced at K-12 or traditional four-year university programs (Baller, Dutta & Lanvin, 2016; Badolato, 2014; Hoke, Abernathy, & Doron, 2014). The community college has become the best option for those already present in the workforce, who need additional education or advanced training to secure the skills requisite for new or sustainable work (AACC, 2012; Badolato, 2014; Cummins, 2013; Davis, 2013).



This “new” or sustainable work might require retraining or upgrading of current skills, or it might require full transition into an entirely new career. Many advocates see the CTE and WFD efforts of community colleges as a key strategy to retrain laid off or underemployed workers left behind by the Great Recession of 2007-10 and help them gain requisite skills to get back on the job (Baller, Dutta & Lanvin, 2016; Davis, 2013). Whether one is a traditional aged student new to the workforce, or a displaced working adult in need of retraining, the community colleges’ methods of developing students and employees for the changes of the contemporary workforce are taking center stage as the United States and the world strives to move out of a recession economy (Business Roundtable, 2009; Johnson, 2011; Stoll, 2010; Toossi, 2012).

#### Recovery from the Great Recession and Current Labor Projections

The “trough” of the Great Recession occurred in June 2009, but any significant recovery visible in the U.S. labor market was delayed for at least another two to four years (Bureau of Labor Statistics, 2016). This economic stall caused a hesitation in educational preparedness that is still influencing today’s economic recovery (Baller, Dutta & Lanvin, 2016; Sullivan, 2015). In early 2010, during the initial recovery of the Great Recession, the Center on Education and the Workforce predicted that by 2018, nearly 63% of all jobs would require at least some level of education beyond a traditional high school diploma, a 4% increase on post-secondary educational demands in the workforce from prior to the recession. The Center also forecasted that America was on track to fall short of the necessary 22 million educated workers required by at least three million (Carnevale, Smith & Strohl, 2010). During this same timeframe — 2008 through 2015 — monies spent per student on higher education by the states fell back to below

pre-recession levels: 47 of the 50 states provided public funding of nearly 20% less per student in 2014-15 than in 2007-08 (Mitchell & Leachman, 2015). The state of Michigan, one of the manufacturing-dependent states hit hardest by the recession, averaged a negative change of 23%, or nearly \$1,360 less per student in state educational aid (Mitchell & Leachman, 2015, p. 4). Concerns over unemployment and the economy caused states to quash educational funding in order to support other public and welfare services at a time when education was needed most, further exacerbating the financial strain on educators, businesses, and ultimately, the students and workforce (AACC, 2012; Davis, 2013; Steinberg, 2013).

Yet jobs in the middle skills range — those requiring at least some additional education or training beyond high school, but not necessarily a four-year degree — continued to grow immediately following the recession (AACC, 2012; Carnevale, Smith & Strohl, 2010; Holzer & Lerman, 2009; Soares, 2010; Unruh, 2011). Holzer and Lerman, Senior Research Fellows at the Urban Institute in 2009, agreed with other experts' workforce projections, and speculated that,

The demand for middle-skill workers will remain quite robust relative to its supply, especially in key sectors of the economy. Accordingly, accommodating these demands will require increased U.S. investment in high-quality education and training in the middle as well as the top of the skill distribution. Many current and future low-income workers are likely to take advantage of the added training for middle-skill jobs and thereby raise their earnings and their family's living standards. (p. 1)

Because of seminal research by The American Association of Community Colleges (2000, 2009, 2012), The Center on Education and the Workforce (2010), The Urban Institute (2007), Aspen Institute (2007, 2013), Jobs for the Future (2012), and others, policy makers began to recognize the positive economic impacts provided by community college CTE and WFD training. When President Obama outlined his plans for the American Graduation Initiative in 2009, he emphasized the critical role of community colleges in educating and training students and

adults for the jobs needed to keep the United States economically competitive. The Obama administration (2009) proposed billions of dollars in competitive grants to reach the 2020 goal of America having the highest proportion of college graduates in the world (Fry, 2017). In 2010, the White House hosted the Summit on Community Colleges, chaired by Dr. Jill Biden, wife of the vice president and a community college educator by profession, to reemphasize the critical role of community colleges and workforce education on the nation's future economy (Jacobson, Focarazzo, Sacchetti, & Benus, 2011). Congressional hearings targeted the "middle skills gap" and a "broken workforce development system" as the main malefactors to labor market improvement remaining from the Great Recession (Subcommittee on Higher Education and Workforce Training, 2013). These discussions motivated the signing of the Workforce Innovation and Opportunity Act (WIOA) (Pub. L. 113-128) into law in 2014, described as the "first major reform to federal job training programs in more than 15 years" (Committee on Education and the Workforce, 2015). A central tenet of WIOA was "To increase, for individuals in the United States, particularly those individuals with barriers to employment, access to and opportunities for the employment, education, training, and support services they need to succeed in the labor market" (128 Stat. 1429).

Proponents of these initiatives hoped these, and other reform efforts, would improve the access, education, and skills of the nation's workers, pull the United States further out of recession and create a basis for future economic growth (Toossi, 2012; Holzer & Lerman, 2009; Jacobson, Focarazzo, Sacchetti, & Benus, 2011). In 2009, less than 41% of 25- to 34-year old Americans had completed at least an associate degree; in 2016, that number climbed to over 48% (Fry, 2017).

However, while some progress on post-secondary educational attainment is being made, it is not enough to satisfy employer demands in career-oriented middle-skill jobs sectors (AACC, 2017; Baller, Dutta, & Lanvin, 2016; Davis, 2013; Spaulding & Martin-Caughey, 2015). A 2011 National Skills Coalition report stated, “The truth is that middle-skill jobs, which require more than a high school education but not a four-year degree, currently make up the largest segment of jobs in the U.S. economy (nearly half) and will continue to do so for many years to come” (Unruh, 2011, p. 3).

Numbers released by the Bureau of Labor Statistics for May 2018 estimated national unemployment to be less than 4%, yet 6.6 million job positions remained unfilled in the United States. Revised (2017) forecasts still support that by 2020, two of every three existing American jobs will require workers possess some form of post-secondary degree or credential (AACC, 2017; Carnevale, Strohl, Cheah, & Ridley, 2017). Because of this perceived middle-skills gap and its impact upon the economy, training, workforce development, and vocational education at community colleges is taking a more prominent role than ever before in history (Badolato, 2014; Blair, Bransberger, & Conway, 2007; Cummins, 2013; Davis, 2013). A community college degree or certification provides access and completion at a lower opportunity cost and lesser financial burden than a four-year institution (Carnevale, Strohl, Cheah, & Ridley, 2017). A community college CTE credential or WFD training is the key to finding a sustainable, higher-paying job in the 21st century (Blair, Bransberger, & Conway, 2007; Business Roundtable, 2009; Carnevale, Strohl, Cheah, & Ridley, 2017; Davis, 2013; Soliz, 2016; Wilson, 2015).

## Relationships between Employers and Community College CTE and WFD Programs

The long-term success of workforce and vocational education systems at any community college is incumbent upon the involvement of the employers and the community that college supports (Amey, Eddy, & Ozaki, 2007; Badolato, 2014; Cooper, Mackinnon, & Garside, 2008). The mission of the college requires community support in many forms: employment, finance, infrastructure, and equipment (Mann, 2017; Wyner, 2014). Not least of these is engagement with community employers, to provide relevance and challenge innovation at the college (Soliz, 2016; Wilson, 2015). Engagement between college and community employers provides opportunity to share ideas, share resources, and create employment opportunities for students, training opportunities for employees, and growth opportunities for the community and economy (Amey, 20120; Bragg & Ruud, 2007).

Federal, state, and local governments recognize the impact that positive relationships between colleges and employers have on the economy (Soares, 2010; Spaulding & Martin-Caughey, 2015). These political entities encourage relationships through monetary funding. Engagement with employers through advisory committees is required in order for community college CTE programs to access federal funding provided through the Carl D. Perkins Career and Technical Education Act (Perkins IV) reauthorized in 2006 (Pub. L. 109-270). Engagement with local employers and businesses is also a required component of state workforce strategy plans as a prerequisite for accessing monetary benefits of the Workforce Innovation and Opportunity Act (WIOA) of 2014 (Pub. L. 113-128). Local governments have supported tuition funding for students who work part-time while attending college (Soares, 2010). Additionally, several accreditation bodies, such as the Accreditation Commission for Education in Nursing (ACEN),

and the Accreditation Board for Engineering and Technology (ABET), require that college programs engage employers through advisory committees as a means of program validation.

Engagement between employers and colleges serves to confirm that federal funding from programs such as Perkins and WIOA is utilized “to prepare the workforce for relevant careers, whether through education, training, apprenticeships, or other methods” (National Conference of State Legislatures, 2017, p. 5). Aside from federal grants, Perkins and WIOA currently serve as the primary federal funding sources for many community college CTE and WFD programs (Conference of State Legislatures, 2017).

However, perfunctory engagement designed to satisfy accreditation or federal funding models is not enough to improve the perceived skills gap (Campbell, 2014). Supply and demand, vendor-client, “check-the-box” transactional relationships do not signify meaningful engagement. Community college CTE and WFD programs need a symbiotic relationship with community employers to sustain their significance and usefulness to the greater community, to help close the perceived skill gap decried by community employers, and to help strengthen the regional and national economy (Spaulding & Martin-Caughey, 2015; Wilson, 2015). In speaking on the subject of WFD and employer engagement, Campbell and contributors (2014) shared this vantage point:

The important thing to remember is that the “system” we’re looking for has to be organic and market-driven. Many of the current complement of workforce development practitioners have long complained about the essential schizophrenia of federal policy. It seems that government can never seem to decide if their investment in workforce programs is intended to produce and maintain the most skilled and competitive labor force we can possibly produce to give us an advantage in global markets or to ameliorate the perceived disadvantage of certain segments of our population whether defined by employment status, income level, or other demographic markers. That vision can be clarified by frank discussions, led and facilitated by employer-driven but broad-based advisory boards who see their task as defining a real strategic position

that both puts all the current available assets together and advocates for positions that could close all remaining gaps.

The workforce system needs to look at what's needed for a whole variety of customers—for younger people entering the labor market or trying to move ahead in it; for dislocated workers looking to reenter the labor force; for companies still struggling with skill gaps; for career and technology schools, community colleges, or proprietary schools trying to put in place the quality programs that they can honestly market as the means to a brighter future. (p. 45-46)

## **JUSTIFICATION FOR THE STUDY**

This study examines the role of employer advisory boards as a method for encouraging mutual collaborative engagement between college and the employer community. Emphasis is given to advisory boards that support workforce development and vocational education programs in community colleges. A brief description of the historical connections between workforce development, community colleges, and employers follows, and builds the foundation for the importance of continued collaboration between community college and community employers.

### Historical Context and Importance of Workforce Development Programs

The post-World War II economy of the 1950s, which virtually guaranteed a job for anyone who graduated from high school, created the foundations for the growth and expansion of the modern community college (Cohen, Brawer & Kisker, 2014). The socioeconomic impacts of that flourishing post-war economy and federal GI Bill tuition funding helped expand the community college in both numbers and capability beyond its prior role as a junior college (Coughlin, 2012; Wyner, 2014). The universal mission of these re-imagined “community”

colleges was comprised of several core components- principal among them providing occupational education (Carnevale & Desrochers, 2002; Cohen, Brawer & Kisker, 2014).

Occupational education was originally meant to bridge the learning gap between high school and four-year programs, for those students seeking “middle-skill” technical employment (Davis, 2013). At that time, (circa 1950–1970), the focus of workforce development programs involved providing additional resources and opportunity to those who wanted to move upward in socio-economic classes, but could not afford the opportunity costs associated with the baccalaureate pathway (Coughlin, 2012; Jacobs & Dougherty, 2006). During that era, attending a liberal arts two-year college or four-year university was more about prestige or circumstance, and less about workplace survival. Some recent research still suggests (Carnevale, Strohl, Cheah, & Ridley, 2017; Coughlin, 2012; Davis, 2013; Hoffman, 2011) a four-year university does not support the educational demands of the current working-class economy and does not meet the needs for a better technologically trained worker in the middle skills jobs sector.

Today, obtaining at least some level of higher education beyond high school is no longer considered a luxury, but rather a requirement for most American job seekers (Carnevale, Strohl, Cheah, & Ridley, 2017). Today’s post-recession recovery replaces that post-War boom, bringing with it a much larger and more diverse demographic of displaced workers struggling to find sustained employment in the aftermath of a disheveled economy (Business Roundtable, 2009; Campbell, 2014; Steinberg, 2013). Between 1973 and 2008, the number of jobs in the U.S. economy that required postsecondary education increased from approximately one-third to nearly two-thirds (Blair, Bransberger, & Conway, 2007; Carnevale, Smith & Strohl, 2010). Over three million of those formerly high school diploma jobs transitioned to associate degree



required jobs from 1991 to 2017 — even after accounting for losses in manufacturing jobs due to offshoring or automation (Strohl, Cheah, & Ridley, 2017). As illustrated in Figure 1 below, that trend is expected to continue beyond 2018. When controlling for other factors (age, marital status, geographic location, etc.) someone who only secures a high school diploma has approximately half the chance of securing a job in today’s middle-class workforce, versus their parents’ pre-recession generation (AACC, 2017; Carnevale, Strohl, Cheah, & Ridley, 2017; Deloitte Development, 2015). The greatest growth is seen in associate degrees, followed by bachelor’s degrees, in areas related to career-oriented job sectors.

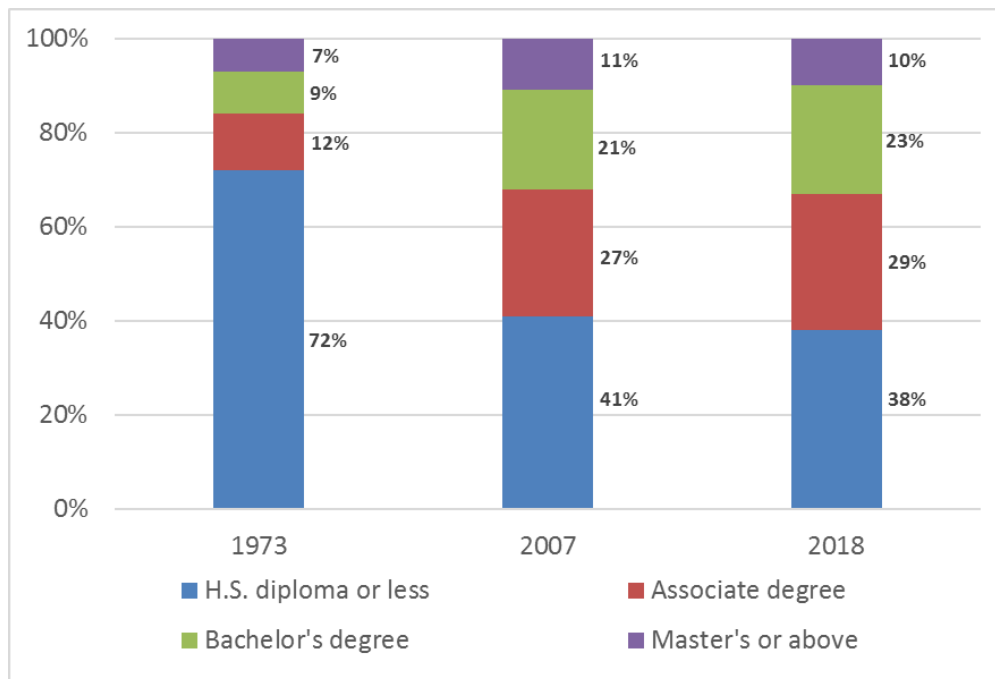


Figure 1. Percentage of Workforce by Educational Attainment: 1973, 2007, 2018

Globalization and automation have increased the need for further educating the human element currently in the workforce (Soliz, 2016; Wilson, 2015). Learned skills are becoming obsolete more rapidly, increasing the need for occupational training of new emerging skills (Cummins, 2013; Spaulding & Martin-Caughey, 2015). The economic downturn brought about

by the Great Recession resulted in many workers realizing that not only are their skills obsolete, their occupations may be obsolete as well. For example, many manufacturing job functions have been replaced or augmented by automation, forcing workers to seek training in an entirely new occupation (Badolato, 2014; Deloitte Development, 2015). Existing jobs that remain untouched by automation have expanded in scope, and now require more complex cognitive skills, reasoning abilities, professionalism, and technical expertise (Davis, 2013; Hitchcock, 2016). As the current economy recovers, many Americans find themselves displaced from the middle class, working in lower-wage jobs because their existing skills do not match employers' new baseline requirements (AACC, 2017; Carnevale, Smith & Strohl, 2010; Davis 2013).

#### The Community College's Growing Role in Workforce Development

Employees must continually learn new skills and adapt to remain relevant and employable in the contemporary job market (Blair, Bransberger, & Conway, 2007; Hoffman, 2011; Jacobs, 2009). A paradigm shift has occurred, where some amount of college or workforce training has become requisite to everyone's employability. All indications show this educational need will continue (AACC, 2017; Davis, 2013). As local employer workforce needs and economic landscapes change, community colleges must increasingly shift their focus to include innovative strategies for workforce development, economic development, and community development. Businesses, communities and policymakers are looking to community colleges to help develop the workforce of tomorrow (Badolato, 2014; Carnevale, Smith & Strohl, 2010; Johnson, 2011).

Recent data on the earnings potential of degrees and credentials reveal that community colleges provide good return on investment (Carnevale, Smith, & Stohl, 2010; Hoke, Abernathy, & Doron, 2014; Jacobs, 2009). Researchers have consistently found positive financial benefits from obtaining a credential through a community college (Cummins, 2013). Students who complete coursework toward an applied associate degree or skills certificate at a community college are much more likely to earn more than individuals who take no college courses and have no certifications (Carnevale, Smith, & Stohl, 2010; Jacobs & Dougherty, 2006). Short-course training certificates and occupationally focused workforce development programs are the fastest growing credential, outpacing both associate and bachelor's degrees (Badolato, 2014). Associate degrees hold strong earning potential; however, noncredit contract training and stackable certificates are rapidly gaining value (Davis, 2013; Johnson, 2011). In all cases, actual earnings potential depends on the field and focus of the program, as it relates to economic demand. Since the 1990s, technical and career-focused certificates and degrees (e.g., engineering, nursing) have seen a large increase over general education degrees (e.g., humanities, history) (Badolato, 2014; Carnevale, Smith, & Stohl, 2010; Cummins, 2013; Davis, 2013; Spaulding & Martin-Caughey, 2015).

A major advantage of WFD and CTE programs offered through community colleges is the flexibility and timing of courses. This greater flexibility of the community college derives from the very way its mission originated. Four-year universities are often defined by more restrictive charters, making it harder to pursue contract training or occupational education, especially if it involves deviating from traditional teaching methods (Dougherty & Bakia, 1999; Jacobs & Dougherty, 2006). The community college operating framework is much more

diversified and responsive than rigid four-year universities (Hoke, Abernathy, & Doron, 2014; Johnson, 2011). These differences in governance make community colleges appear relevant and agile, while universities appear slower to adapt to socioeconomic change (Davis, 2013). Many community college courses are offered at times that complement nontraditional and working students' schedules — the largest consumers of workforce training programs (Cummins, 2013). While traditional college students might partake of higher education to gain initial entry into the private sector, many nontraditional students already operate within it (Eyster & Briggs, 2016). Working full- or part-time, nontraditional students often have more clearly defined career goals and pursue credit and training programs that fulfill their professional needs (Davis, 2013). They need the flexibility afforded by community college programs to meet their goals on time at the lowest opportunity costs (Cohen, Brawer, & Kisker, 2014; Coughlin, 2012; Cummins, 2013).

#### Community Colleges and the Contemporary Employer Relationship

One clear reason for having a competent workforce is competitive advantage in an increasingly globalized economy (Campbell, 2014; Davis, 2013; Eyster & Briggs, 2016; Hoffman, 2011; Orr, 2001). As community colleges collaborate with business and industry to develop a relevant skilled workforce, they work together to advance the skills of existing employees as well as enabling new hires with specialized technical skills that yield returns on investment for both employers and the community at large (Spaulding & Martin-Caughey, 2015). Collectively, schools and employers can combine resources to search for strategies to enhance their growth and development in the turbulent economy and find solutions to meet the rapidly shifting

needs of the workforce community (Campbell, 2014; Davis, 2013; Holm & Vollman, 21012; Wilson, 2015).

Two other reasons stand out as to why employers have sought more training from colleges in the last two decades. First, increasing skill demands from rapidly changing technology have required an upgrading of the training of both current and prospective workers. Driving the skills demand for increased training is the massive investment in new machinery and new production processes across a wide variety of industries. In manufacturing, competition continues to push higher performance and leaner organizations. Employees must be cross-trained in a wide range of skillsets — not just technical skills but also "soft skills" such as teamwork and group problem solving (Davis, 2013; Dougherty & Bakia, 1999). Second, a wave of retirements has hit many industries particularly hard and has left a massive shortage of trained workers ready to backfill open positions (Davis, 2013; Johnson, 2011). Inherent or tribal knowledge is not passed down efficiently across the outgoing “paper” and incoming “digital” generations. Companies are no longer able to afford to wait for employees to come up to speed; they need entrants with the requisite skills upon arrival, ready to fill open positions (Toossi, 2012). Employers and communities that cannot respond to these modern challenges of training and replacing employees in skilled positions lose out to those regions that have embraced workforce training, as companies are more mobile and less loyal in the post-recession economy (Davis, 2013).

The private sector and community both play an important role in the funding and development of academic programs specifically tailored to meet their needs. Employers have come to rely on community colleges as their education and training partners; however, this

relationship should be one of mutual benefit (Jacobson, Focarazzo, Sacchetti, & Benus, 2011; Lavendar, 2007). The entire community benefits when colleges and employers find collaborative ways to support and strengthen the economy (Bernhardt & Osterman, 2017; Hoke, Abernathy, & Doron, 2014).

### The Benefits and Challenges of Collaboration

Community college graduates become part of a skilled labor pool in the communities they serve; they produce more income, spend more money, and pay more taxes as participants in the local economy. What is the best way to ensure college students are productive once they have obtained workforce development training? One answer is collaborative workforce development partnerships (Coughlin, 2012; Orr, 2001; Spaulding & Martin-Caughey, 2015). By entering students into programs where jobs are already waiting, the probability of trained talent staying in the community increases.

Research on collaborative workforce development partnerships suggests that the greatest success in educating the current workforce occurs in the communities that have existing partnerships with schools and local businesses (Campbell, 2014; Spaulding & Martin-Caughey, 2015; Wilson, 2015). Community colleges are capable of significantly modifying the curriculum or training to specific employer needs, of offering courses lasting less than a semester, of teaching at nontraditional hours (such as evenings and weekends), and of conducting courses onsite or through distance learning (Coughlin, 2012; Johnson, 2011). This flexibility is important because workers tend to become more committed to occupations where they secure further training and perceive future value (Cummins, 2012; Davis, 2013).

Colleges and companies recognize they should collaborate. Collaboration leads to better alignment between employer needs and college curricula (Hoffman, 2011). Ironically, one of the greatest difficulties identified in the literature is gauging employer satisfaction (Campbell, 2014; Cohen, Brawer & Kisker, 2014; Coughlin, 2012; Cummins, 2013; Davis, 2013; Dougherty & Bakia, 1999; Jacobs, 2009; Van Noy, Jacobs, Korey, Bailey, & Hughes, 2008). What the employer deems as success does not always have a quantitative component but often a qualitative one, making it hard to qualify and compare across multiple environments (Coughlin, 2012; Spaulding & Martin-Caughey, 2015; Wilson, 2015). Therefore, while recognizing the value of having business and community involvement is appreciated by many, finding methods to engage employers effectively to solicit useful feedback for the college remains a challenge of successful collaboration (Business Roundtable, 2009; Cummins, 2013; Wilson, 2015). Ensuring that collaborative initiatives are flexible and accommodating to changing economic conditions and market demands is necessary if one hopes to keep employers and industry actively engaged (Campbell, 2014; Eyster & Briggs, 2016; Hughes, 2003; Spaulding & Martin-Caughey, 2015; Wilson, 2015).

## **PROBLEM STATEMENT**

A successful modern and evolving economy demands alignment between employers and educators: relevance and efficiency of the workforce can only be achieved through collaborative effort between consumer and producer.

It is essential that communication between academia and community remain robust to ensure college efforts are relevant and sufficient. Colleges and employers each need access to information the other group possesses. Colleges must rely on community employers to guide

the formation and direction of their programs and course offerings. Employers need a method for sharing knowledge about industry trends and innovation with the college — to ensure their main source of viable employees is reflective of their needs. Both groups need to understand enrollment trends, graduation rates, and wage trends for the region to maintain competitive advantage — specifically in fields considered “middle skills” (Campbell, 2014; Spaulding & Martin-Caughey, 2015; Wilson, 2015). Middle skill jobs, those requiring at least some level of training or education above a high school diploma, are vastly understaffed, creating a strain on economic growth and increasing the gap between lower and upper classes of working adults (Carnevale, Strohl, Cheah, & Ridley, 2017; Campbell, 2014; Hoke, Abernathy, & Doron, 2014).

#### **PURPOSE OF THE STUDY**

Community colleges provide existing infrastructure, utilities, functional technology, and educational support (Mann, 2017; Wyner, 2014). Therefore, it may seem community college-based programs are the most convenient means of training a skilled work force of a large population versus corporate individualized on the job training. However, community colleges cannot, nor should they be expected to, define the future of workforce development and vocational education programs in isolation (AACC, 2017; Jacobson, Focarazzo, Sacchetti, & Benus, 2011; Wilson, 2015). It is incumbent upon the employer community to provide guidance and direction for the best success and sustainability of the local economy.

The community college needs employer advisement, and solicitation of an advisory board is often a requirement of many workforce development and vocational education programs. However, the existing literature supporting the need for greater engagement does not quantify the value of these employer advisory boards. The literature provides few details on



how to establish and operate an effective and engaged employer advisory board, or how to evaluate the added value of collaborative employer advisory boards to those parties involved. Therefore, the purpose of this study is to describe, analyze, and interpret perceived and actual best practices utilizing advisory boards as a method of collaborative engagement between college and community employers.

## **RESEARCH QUESTIONS**

This research study examines the following questions, through the vantage point of the community college participant:

1. What benefit(s) (perceived and actual) does the college receive from engaging employers through program advisory boards?
  - a. What, if any, are the benefits to curriculum, pedagogy or course design?
  - b. What are monetary benefits, if any?
  - c. What other benefits are realized?
2. What benefit(s) (perceived and actual) does the college provide employers from engaging through program advisory boards?
  - a. What effect does engagement on advisory boards have upon employer satisfaction with the program? The college?
  - b. How responsive is an engaged program to employer needs?
  - c. In what other ways is the employer's support reciprocated?
3. What are the characteristics of a mutually beneficial or "collaborative" advisory board?
  - a. What is the composition of its membership?
  - b. How is such an advisory board operationalized?
  - c. What metrics or outcomes are used to measure or determine value for all parties involved?

4. What best practices can be transferred from this research?

### **SIGNIFICANCE OF THE STUDY**

Several studies have explored the larger context of employer engagement within higher education (Coughlin, 2012; Davis, 2013; Foy, 2015; Hoffman, 2011; Lavendar, 2007). Often, these studies have focused upon the financial implications and resource dependency between policy makers, the colleges, and the community, emphasizing the importance of human capital and resource expenditures over meaningful collaboration and partnerships. Within these studies, advisory boards are identified as a possible method for engaging the employer. However, very little research has been done to explore what benefits or added value, if any, these collaborative advisory boards provide the college and the employer community outside of satisfying funding or accreditation requirements. This study seeks to understand how employer advisory boards provide inherent value, how participants of employer advisory boards measure or perceive success, and how advisory boards mutually benefit all stakeholders in the community college and community. By better understanding the added value of collaboration, community colleges can structure advisory boards in a more meaningful way, utilizing workforce development and vocational education resources fully for the greatest benefit to the local employer community, and the larger national economy.

### **DEFINITION OF TERMS**

The following terms are defined as they relate to this study:

**Advisory board.** A group of working professionals and community stakeholders that provides non-binding strategic advice to the faculty and leadership of a program or college. Unlike the board of directors or board of trustees, the advisory board does not have authority

to vote on academic or programmatic matters or bear legal fiduciary responsibilities. A well-selected board will align around common interests in active participation, shared mission, and direct collaboration with students, faculty, and other board members (McElroy & Dove, 2017).

**Career and technical education.** The Carl D. Perkins Career and Technical Education Improvement Act of 2006 defines career and technical educations (CTE) as

Organized educational activities that offer a sequence of courses that provides individuals with coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in current or emerging professions; provides technical skills proficiency, an industry-recognized credential, a certificate, or an associate degree; and may include prerequisite courses that meet the requirements of this subparagraph; and include competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of an industry, including entrepreneurship, of an individual. (Section 3, p. 4).

**Collaboration.** A non-legal or non-binding commitment between two organizations, involving the sharing of risks, responsibilities, resources, and rewards (Polenske, 2010).

**Employer engagement.** A process through which employers directly participate in activities facilitated by another group or organization in pursuit of shared goals or objectives (Payne, 2008). Employer engagement can also be considered an outcome, where one achieves a higher level of engagement by encouraging businesses to invest in training and to get involved with the design and delivery of vocational training (Cooper, Mackinnon & Garside, 2008).

**Workforce development.** A component of economic development, defined as the technical and soft skills training — both credit and noncredit — that provide individuals with job-specific skills to enter (or reenter) the workplace (Davis, 2013; Grubb & Lazerson, 2005).

**Workforce development partnerships.** Partnerships between employers and community colleges that offer industry-specific training or certifications to employees of those companies

that have contracted the services of the community college for workforce training (Coughlin, 2012). Eddy and Amey (2014) define such partnerships as “the existence of shared norms, shared beliefs, and networking that align processes among individual collaborators” (pg. 14).

## **ASSUMPTIONS**

The following assumptions were made when developing and conducting this research:

1. Some workforce or vocational education programs currently exist that utilize employer advisory boards recognized by peers and community college leaders as examples of beneficial or value-added activities, to serve as a benchmark for developing this study.
2. The individuals interviewed for purposes of this research possess the authority and the necessary information to support this study and felt comfortable under the guidelines of research provided by the Institutional Review Board (IRB) found in Appendix A to share this information for the identification of perceived best practices.
3. A mixed methods sequential explanatory design is an appropriate methodology for determining perceived benefits and best practices as related to the research questions proposed by this study.
4. Understanding best practices for advisory board utilization in community colleges provides a meaningful contribution to the body of literature and the educational community.

## **DELIMITATIONS AND LIMITATIONS**

The research data was collected predominately from workforce-centric community colleges in Michigan, as these entities were purposefully selected in the research sample. It is recognized that these colleges also have other regular means of employer and community engagement outside of workforce or vocational education employer advisory boards that could not be encompassed within this study’s parameters. Quantitative survey data and qualitative follow-up interviews were collected from representatives in community college leadership from

different regions of the state to improve generalizability to and transferability within Michigan; however, the economic composition of Michigan at the time of this study could limit generalizing any conclusions outside the state's system of community colleges. The researcher works in higher education outside the community college system, which introduced some bias for advisory boards from personal experience within a CTE program at a four-year university.

## **ORGANIZATION OF DISSERTATION**

This study is organized into five chapters. The first chapter provided an introduction to the study, justified the need for study, outlined the context and history of workforce development programs and the community college, examined the significance of the research study proposed herein, and presented the research questions under study. The second chapter provides a comprehensive literature review of benefits and challenges in community college workforce and vocational education programs; the perceived benefits and added value, if any, to colleges and the employer community from participating collaboratively in workforce development partnerships; and, evaluates relationships between known theories prevailing in existing research of college-employer engagement. The concepts reviewed in Chapter Two collectively establish the basis for researching employer advisory boards in this study. The third chapter provides the research methodology exercised for this sequential mixed methods study, including the description of the quantitative survey sample and subsequent qualitative follow-up interviews. Chapter Four presents the results and emergent themes generated by the mixed methods multi-case study research. Chapter Five provides reasonable conclusions and suggested applications for the utilization of any perceived best practices of employer advisory

boards in community colleges as a result of the findings analyzed in this study.

Recommendations for further study on the subject are also suggested.

## **SUMMARY**

According to AACC (2012), “Our network of community colleges provides America with a capacity that few other industrial economies enjoy: the ability to rebuild the workforce, reinforce connections between education and the economy, and reverse the decline of the middle class” (p. 5). Community colleges attract students from all backgrounds and educational levels with the main mission of providing open access and affordability to those seeking a post-secondary credential. That credential might be in the form of transfer credits toward a bachelor’s degree, certification or some other short-term credential, or workforce skills-specific training. Institutional leadership must find ways to keep all parties aligned on the core mission of providing students with the ability to become productive members of society, whatever the pathway. Doing so requires a careful balance of resources and human capital.

The literature cited throughout Chapter One of this study suggests that the increasingly competitive environments of the post-recession economy have driven employers to turn to community colleges for guidance on creating, providing, and sustaining relevant workforce and vocational training (Business Roundtable, 2009; Campbell, 2014; Hoffman, 2011). However, there are potential consequences to having a one-institution-fits-all solution to teaching and training a workforce (Coughlin, 2012; Johnson, 2011). Successful WFD and CTE programs in community colleges require input from the employer community to stay relevant. Employers and colleges must collaborate on the best path forward. This study evaluates the value of advisory boards in that process of collaboration.

## CHAPTER TWO: LITERATURE REVIEW

### INTRODUCTION

The purpose of this study is to describe, analyze, and interpret perceived best practices utilizing advisory boards as a method of collaborative engagement between community colleges and their respective community employers. Many workforce development and vocational education programs require employer advisory boards, as do several federal funding programs and higher education accreditation bodies. One can find several references throughout contemporary scholarly and practitioner literature citing a need for further employer engagement in areas of curriculum development, economic development, and resource development (Coughlin, 2012; Davis, 2013; Foy, 2015; Hoffman, 2011; Lavendar, 2007). Often, these studies focused upon the financial implications and resource dependency between policy makers, the colleges, and the community, emphasizing the importance of human capital and resource expenditures over meaningful collaboration and partnerships. However, the existing literature supporting the need for greater engagement does not quantify the inherent value of these college-employer advisory boards. The literature provides few details on how to establish and operate an effective collaborative employer advisory board, or how to evaluate the perceived added value of collaborative advisory boards to those parties involved. Therefore, the goal of this study will be determining the perceived value, if any, of

these advisory board activities. The focus of this study is through the lens of the community college participant.

Previous researchers suggest the greatest benefits derived from employer engagement follow existing theoretical frameworks, among those resource dependency theory (RDT) (Foy, 2015; Lavendar, 2007), and human capital theory (HCT) (Davis, 2013; Hoffman, 2011). The existing literature supporting these two theories in the context of higher education is reviewed in this chapter. Additionally, the concept of collaboration is introduced, as is existing literature recommending use of college–employer advisory boards as a step toward greater involvement and inclusiveness through collaboration. The interactions of these three factors — collaboration, resource dependency, and human capital — are proposed as the framework for determining any perceived value and best practices of advisory boards in this study. A theoretical model illustrating how these three factors might interact is examined, for use as a basis in this study’s research and analysis formulations in Chapters Three, Four, and Five.

## **BENEFITS OF ENGAGEMENT**

Successful engagement in workforce development partnerships (as defined by Coughlin, 2012; Eddy & Amey, 2014) between colleges and employers benefits all parties involved — students, college, employers, and community (Hoffman, 2011; Holm & Vollman, 2012; Powell & Rey, 2015; Spaulding & Martin-Caughey, 2015). Several scholarly and practitioner literary sources agree upon the existence of these benefits, as highlighted in the following sections.



## Benefits to Students

Put simply, students of successful CTE and WFD programs get jobs (AACC, 2017; Campbell, 2014; Carnevale, Strohl, Cheah, & Ridley, 2017; Spaulding & Martin-Caughey, 2015; Wilson, 2015). Students in well-connected, well-maintained CTE and WFD programs are exposed to skills and technology that are both highly desired and decidedly relevant to the contemporary job market (Soliz, 2016; Spaulding & Martin-Caughey, 2015; Wilson, 2015). Successful students at nearly all levels of completion within CTE and WFD programs engaged in workforce development partnerships with local employers often receive employment and both paid and unpaid internship opportunities in highly sought-after career-oriented job markets in their existing communities (Campbell, 2014; Coughlin, 2012; Hoke, Abernathy, & Doron, 2014; Spaulding & Martin-Caughey, 2015).

Through apprenticeships, work-studies, and internships, CTE and WFD students get exposure to corporate cultures and workplace norms and begin to understand the dynamics between meaningful learning and gainful employment (Hoke, Abernathy, & Doron, 2014; Holm & Vollman, 2012). Aside from practicing their specific skillsets, these students also gain valuable exposure to interviewing and workplace policy and develop a greater appreciation for soft skills such as problem solving, teamwork, cooperation, and communication (Amey, Eddy, & Ozaki, 2007; Badolato, 2014; Bragg & Ruud, 2007).

College leaders recognize the best method of retaining students in college is to clearly demonstrate the end result of their educational journey (Cohen, Brawer & Kisker, 2014) — this is done best by relevant CTE and WFD programs that clearly align to desirable jobs waiting in the students' surrounding environment (Deloitte Development & The Manufacturing Institute,

2015). Students with clear pathways to success after college have the greatest chance of success in college (Aspen Institute, 2013; Badolato, 2014; Cummins, 2013), yielding the greatest return on investment for community taxpayers (Hoke, Abernathy, & Doron, 2014).

### Benefits to Colleges

Colleges can gain many direct benefits from successful collaborative engagement with employers. Considering the student and the college mission first, college career services and faculty members use their connections with employers to place graduates in desirable occupations (Hoke, Abernathy, & Doron, 2014; Hoffman, 2011; Wilson, 2015). Secondly, colleges are able to offset losses of state and federal funding by solicitation of money and in-kind donations from accommodating employers (AACC, 2017; Holm & Vollman, 2012; Soliz, 2016). Lastly, colleges are able to remain relevant. Successful CTE and WFD programs utilize industry and employer partners during both curriculum development and curriculum maintenance (Holm & Vollman, 2012; Soliz, 2016). Having regular engagement with employers means these college programs are able to update and improve existing curriculum, identify opportunities for new curriculum and programs of study, and interface with new and emerging technology or process innovations from the very stakeholders that want to hire their students (Holm & Vollman, 2012; Wilson, 2015).

There is a growing effort to bridge the credit and noncredit CTE and WFD programs into a credit-bearing pathway for degree completers, using prior learning credit and articulation agreements (AACC, 2017; Klein-Collins, Sherman, & Soares, 2010). Doing so will benefit other areas of the college not normally associated with CTE and WFD programs — for example, general education (Cohen, Brawer & Kisker, 2014). The ability to secure training or a certificate

quickly, begin working, and later return to college to complete a full degree alleviates some of the burden and opportunity costs nontraditional students face when trying to return to school (Badolato, 2014; Cummins, 2013; Davis, 2013; Klein-Collins, Sherman, & Soares, 2010).

Colleges also gain other direct and indirect benefits, in the form of access to employer experts who serve as adjunct faculty or subject matter experts (Holm & Vollman, 2012; Institute for Learning, 2013). Responsiveness to community outreach programs, and town–gown relationships are improved when employers and colleges share mutual interests in the community (Hoke, Abernathy, & Doron, 2014; Wyner, 2014; Wilson, 2015).

College CTE and WFD leaders must recognize that employers are not invited to campus strictly to provide accolades or support for their programs. If treated as true partners, employers should also have the ability to critique and question program direction and strategy (AACC, 2000; Amey, 2010; Bailey & Koney, 2000; Gajda, 2004). In his recent book *What Excellent Community Colleges Do: Preparing All Students for Success*, Wyner (2014) offers the following vantage point on the relationship between colleges and employers, and the critical function of advisory boards:

The Exceptional colleges use advisory board members, and anyone else they can get in touch with, as a weekly (if not daily) resource to learn about trends in the industry, hear about how graduates are doing, connect students with field experiences, and provide materials and equipment so that students can walk out with their diplomas ready to work on day one. These boards work best when they serve not just as trusted partners but also as constructive critics. (p. 105)

### Benefits to Employers

Employers that successfully engage in workforce development partnerships with local colleges benefit most when able to hire employees trained with requisite relevant skills (Deloitte Development & The Manufacturing Institute, 2015; Holm & Vollman, 2012; Mann &

Glover, 2011). Having local employers involved in the design and maintenance of the education planning process can ensure curriculum and technology meets employers' current needs (Deloitte Development & The Manufacturing Institute, 2015; Hoke, Abernathy, & Doron, 2014; Spaulding & Martin-Caughey, 2015; Wilson, 2015).

The contemporary post-recession economy places an emphasis on employability, placing goals of the employer at the center of the argument for educational and public policy reform (Eddy & Amey, 2014; Van Noy, Jacobs, Korey, Bailey, & Hughes, 2008). Employers need to utilize their current favorable position to drive progressive change in education (Stoll, 2010) — doing so requires knowledge and involvement at the program level (Soares, 2010). Being involved with the college on a regular basis gives employers early and frequent access to requisite information, increasing their strategic value to both college and community (Orr, 2001; Payne, 2008).

Being present on campus also gives employers access to the best students — those students most motivated, most skilled, and most experienced with relevant technology. Active participation with higher education allows employers to preview or “test-drive” students through apprenticeships, internships or company-sponsored projects (Holm & Vollman, 2012; Wilson, 2015). Being active on campus during job fairs and career expositions also improves visibility of the company on college campus and in the greater community (Holm & Vollman, 2012; Mann & Glover, 2011). Presence does bring challenges — having employers too early on campus can lead to poaching of students before they complete programs (Holm & Vollman, 2012).

## Benefits to Community

The larger community also benefits from positive interactions between colleges and employers (Holm & Vollman, 2012; Mann, 2017; Spaulding & Martin-Caughey, 2015; Wyner, 2014). Aside from obvious benefits to existing wages and tax base, workforce development partnerships between employers and colleges can incite job growth and industry expansion (Holm & Vollman, 2012; Spaulding & Martin-Caughey, 2015). Growth of existing industry can also attract new or technologically advanced employers to a region and confirm for entrepreneurs and start-up companies that the region is industrially viable (Hoke, Abernathy, & Doron, 2014; Holm & Vollman, 2012). Industry growth expands into commercial growth in supporting companies such as restaurants, service and support industries, improving the overall socioeconomic welfare of the community (Bailey & Koney, 2000; Holm & Vollman, 2012; Wilson, 2015). A highly skilled, highly educated workforce offers more than just economic growth — it significantly improves the entire community's quality of life by increasing the social welfare, competencies, and life skills of the individuals who are retained to live and work there (Amey, Eddy, & Ozaki, 2007; Blair, Bransberger, & Conway, 2007; Syms & Metzger, 2012).

Many high schools still promote four-year universities as the preferred pathway to career success (Deloitte Development & The Manufacturing Institute, 2015). This pathway often takes highly valued members of society out of the local community and transplants them to other regions (Davis, 2013). It also diminishes or discredits the community college pathway (Carnevale & Desrochers, 2002; Chronicle of Higher Education, 2012; Cohen, Brawer, & Kisker, 2014). Effective career planning should provide multiple options and recognize multiple educational pathways for success (Hoke, Abernathy, & Doron, 2014; Payne, 2008; Soares,

2010). Community college CTE and WFD programs are often geared toward helping the students, and by extension the community, improve near-term employment status, while still providing long-term opportunities for advancement (AACC, 2017; Soliz, 2016; Spaulding & Martin-Caughey, 2015) — all within reach of the local community. The community college pathway for continued success remains open for multiple reentries, often at a lower opportunity cost than traditional four-year education (Orr, 2001; Mitchell & Leachman, 2015).

### **CHALLENGES WITH ENGAGEMENT**

The greatest challenges with successful engagement in workforce development partnerships are overcoming the risks perceived by employers — specifically the risks of expending resources of time and money against uncertain returns (Eddy & Amey, 2014; Holm & Vollman, 2012; Lavendar, 2007; Spaulding & Martin-Caughey, 2015). Existing college curriculum is not always a fit with current employer needs (Holm & Vollman, 2012; Wilson, 2015; Soliz, 2016). Employers are often less concerned with the course pedagogy and are more focused upon student skills outcomes (Hoke, Abernathy, & Doron, 2014). Fear of divulging proprietary processes or cultural systems to the college for public use makes employers hesitant to get involved until they understand the potential benefits (Holm & Vollman, 2012; Van Noy, Jacobs, Korey, Bailey, & Hughes, 2008).

The college also incurs several resource challenges supporting engagement, and so at times, the employers' role in engagement is not well prescribed or not well supported by the college or the program, leading to apathy or disengagement borne out of mistrust (Holm & Vollman, 2012; Spaulding & Martin-Caughey, 2015). Therefore, it is important that the college actively manage any potential collaborative partners' expectations (Mann, 2017). Costs of

equipment and infrastructure to support diverse employer needs must be communicated clearly (Holm & Vollman, 2012). Training of faculty and support staff to accommodate changing demands of employers must be funded, and requisite professional development time must be provided (Holm & Vollman, 2012; Hughes, 2003).

Many CTE and WFD programs fall between two temporal extremes, ranging in duration from a couple of weeks to a couple of years (Jacobson, Focarazzo, Sacchetti, & Benus, 2011). Students in CTE and WFD programs often achieve their educational goals without fully completing a degree or certificate (AACC, 2017; Wyner, 2014), greatly affecting college accountability measures and resource efficiencies. Many of the public policy changes in higher education accountability have placed CTE and WFD programs in a position where some of the skills being measured do not adapt or relate to the changing demands of the workplace (Hoke, Abernathy, & Doron, 2014).

Faculty tenure, academic freedom, and faculty control over program curriculum are also challenges (Lavendar, 2007). Wilson (2010) found that faculty become concerned when workforce development curriculum is “threatened by corporations that dictate course material for training programs... feeling pressure to make students satisfied purchasers of their [the company’s] educational product” (p. 2). Lack of faculty release time to strategically engage employers leads to burnout and false starts (Eyster & Briggs, 2016; Hughes, 2003).

Allocation of resources and funding to entice employers is an opportunity cost (Holm & Vollman, 2012), and must be realized in ever-tightening budgets. Economic downturns can place strains on colleges’ ability to engage others if too involved with only specific employers or specific industries (Holm & Vollman, 2012; Hughes, 2003). Many grants and supplemental

funding are temporally based and fall back upon college resources when time expires, or money runs out (Hoke, Abernathy, & Doron, 2014).

College personnel working outside the purview of CTE and WFD programs are also a resource that potentially bolsters or diminishes relationships with employers, and therefore engagement activities with employers by these individuals must be responsible and meaningful (Lavendar, 2007). Marketing and advancement officers, other college-wide administrators, and the president all regularly engage with employers outside of advisory board functions. Well-intentioned actions or comments by these individuals can be detrimental if perceived wrongly by employers. Likewise, these individuals can provide significant insight and support of advisory board actions if managed correctly (Eyster & Briggs, 2016; Lavendar, 2007; Mann, 2017).

Businesses are adept at reacting and making decisions immediately (Mann, 2017); however, the complexity of management and oversight of employer projects with short-term goals does not always align well with long-term strategy of college programs (Eyster & Briggs, 2016; Jacobs & Dougherty, 2006). Some agreed-upon structure and order must exist to find common ground for workforce development partnerships to thrive (Eddy & Amey, 2014).

## **FRAMEWORKS FOR ENGAGEMENT**

Two theoretical frameworks are prevalent in the existing literature on employer engagement within higher education: resource dependency theory (RDT) and human capital theory (HCT). Each theory provides a different element of engagement and opportunity for collaboration between college and employer.



## Resource Dependency Theory (RDT)

Supporters of RDT propose that, under this model, the college has much to gain from interacting with employers, in the form of obtaining scarce resources: capital funding, in-kind donations and adjunct faculty (Askin, 2007; Foy, 2015; Hillman, Withers, & Collins, 2009; Pfeffer & Salancik, 2003; Powell & Rey, 2015). There is a growing body of knowledge on RDT relationships in higher education; however, the literature is largely focused on the relational dependence associated with funding or tangible monetary contributions (Askin, 2007; Foy, 2015; Hillman, Withers, & Collins, 2009; Lavendar, 2007; Mullin & Honeyman, 2008; Pfeffer & Salancik, 2003; Powell & Rey, 2015; U.S. Department of Education, Office of Vocational and Adult Education [OVAE], 2012; Wilson, 2015). Often, community college faculty and the primary engagers from the employer do not have exclusive control over the budgets or funding. Instead, faculty are often concerned that they are allowed to only do the minimum to satisfy employer needs, as they are competing against other interests amid scarce resources (Askin, 2007; Foy, 2015; Wilson, 2015).

Colleges and companies alike recognize that colleges are beholden to the controller of their finances. Colleges funded primarily by tuition, property taxes, and state revenues are most responsive to those stakeholders (students, property owners, and government). Colleges receiving financial support from corporate partners were often more responsive to corporate priorities (Lavendar, 2007; Mullin & Honeyman, 2008; Pfeffer & Salancik, 2003; OVAE, 2012). The challenge is one of balance: workforce development partnerships between employers and colleges must remain meaningful enough that they produce transformational changes and are

not strictly transactions on the budget ledger (Askin, 2007; Dougherty & Bakia, 2000; Mullin & Honeyman, 2008; OVAE, 2012; Wilson, 2015).

### Human Capital Theory (HCT)

HCT is based upon the premise that increased education and training yield greater personal productivity, which translates into greater societal and economic value for the whole (Davis, 2013; Hitchcock, 2016). In terms of CTE and WFD training, HCT purports that the greater the use or need of advanced technologies to perform one's job, or the greater the shortage of skilled labor, the more likely an organization will invest in job-skills training (Bills, 2003). Human capital theory suggests employers will not pay for or provide training "useful to other firms" if they perceive the training as a threat to retaining their investment, namely, their employees (Becker, 1993, p. 33). However, employers readily will invest in workplace-specific skills that assure them a greater return on their training investments (Becker, 1993, p. 40). Stated another way, HCT implies that employers are more likely to pursue education or training for employees that improves their productivity and value to the company but does not create a risk they will leave the company or job role for another position (Becker, 1993; Bills, 2003).

A strong workforce supports all aspects of the community: well-educated, well-paid workers support other businesses as consumers, which also leads to more jobs and a stronger economy (Eide & Showalter, 2010; Soliz, 2016). The community must be capable of supporting and retaining corporate partners by fulfilling their training and workforce needs — a task largely accomplished by CTE and WFD programs in community colleges (Bray, Painter, & Rosin, 2011). This is important because it not only allows a community to replenish its human capital from within; it also attracts other prospective corporations from outside the region (Hitchcock,

2016). A major strength of HCT, like RDT, is that it translates into tangible inputs (education) and outputs (socioeconomic benefits); unfortunately, this strength makes education an easy target for policymakers when the economy falters (Davis, 2013; Eide & Showalter, 2010; Soliz, 2016).

Shifts in how work is done post-recession — caused largely by technology and innovation — has greatly influenced the knowledge base of the middle skills workforce (Davis, 2013; Unruh, 2011). HCT research suggests existing training and education have failed to keep up with the new knowledge based economy, and contemporary workers are not prepared for the new challenges (Carnevale & Desrochers, 2002; Davis, 2013; Eide & Showalter, 2010; Soliz, 2016).

## **COLLABORATIVE PARTNERSHIPS**

Organizations often enter into collaborative partnerships or strategic alliances to “exploit resource complementarity” (Orr, 2001, p. 41) in order to create an economic value greater than their respective individual values (Connor & Hirsh, 2008; Gajda, 2004; Jacobson, Focarazzo, Sacchetti, & Benus, 2011; Orr, 2001; Powell & Rey, 2015). Gajda (2004) argued, “In an age of scarce resources, competition, and complex community issues... the need for organizational collaboration through strategic alliances has become imperative” (p. 76). Collaborative partnerships between educators and employers could serve as a means to develop innovative solutions to complex problems that each individual enterprise might not be capable of completing alone. However, to remain collaborative, these partnerships must be recognized and exercised as symbiotic, living systems, meant to benefit all stakeholders (Amey, Eddy, & Ozaki, 2007; Jacobson, Focarazzo, Sacchetti, & Benus, 2011).

Figure 2 below illustrates the different phases of strategic alliance (Gajda, 2004; Bailey & Koney, 2000) enterprises work through on the pathway to effective collaboration. Effective workforce development partnerships between colleges and employers support transformation from initial cooperation towards coordination and higher levels of collaboration.

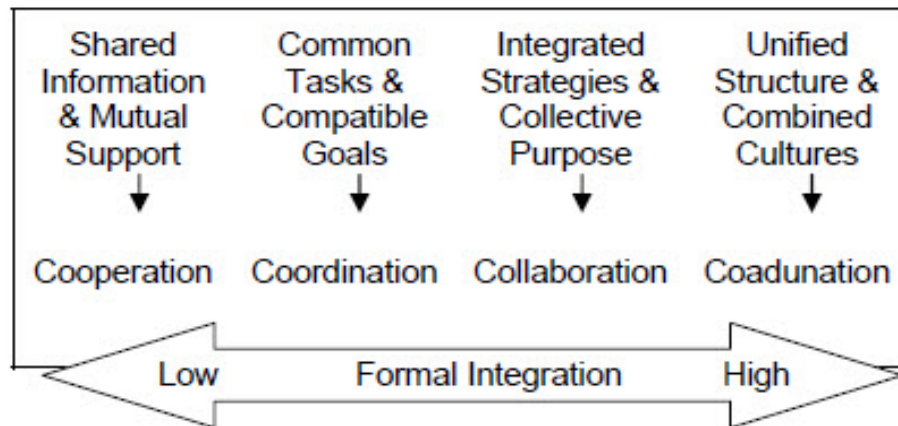


Figure 2. Phases of Strategic Alliances across a Continuum of Integration

In 2000, the American Association of Community Colleges (AACC) released a comprehensive report stating, “Community colleges must find strategies for staying responsive to community needs as the pace of change quickens” (AACC, 2000, p. 33). The report also stated, “Community colleges should expand collaborations with the business community” (p.9) suggesting community colleges increase their collaborative partnerships with industry and community employers as a primary means of developing a better-prepared workforce (AACC, 2000, 2009, 2012; Orr, 2001; OVAE, 2012; Powell & Rey, 2015). Soares (2010) went even further to define these collaborative workforce development partnerships as:

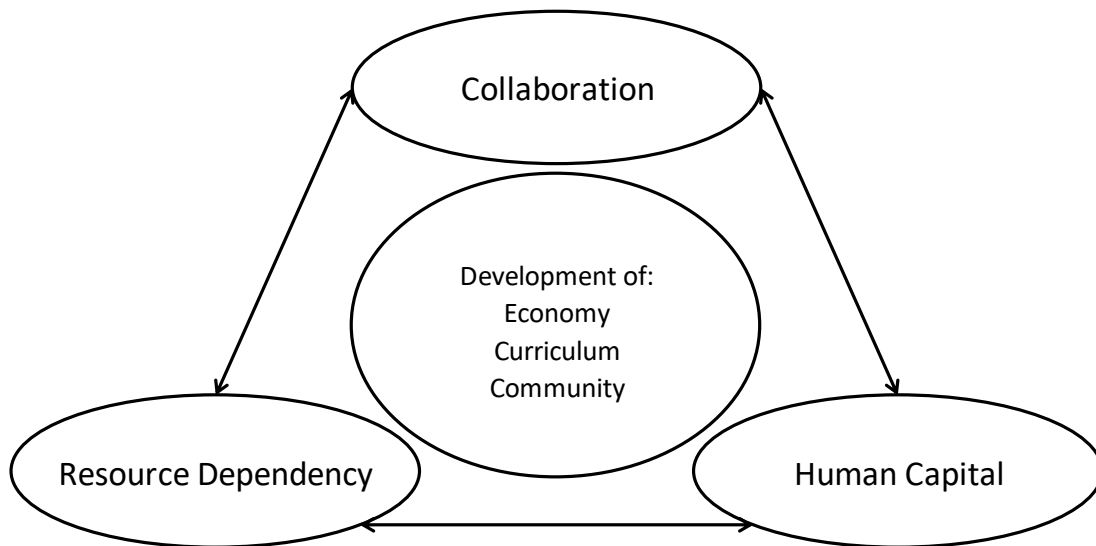
A collaboration between a community college and an individual business, group of firms, chamber of commerce, industry association, or sector partnership with the purpose of using the combined resources to create alternative college education programs that are tightly linked to regional economic development and labor force needs for non- and traditional students – both younger workforce entrants and older ones in need of skills and education upgrades. (p. 4)

Successful collaboration between college and employer in workforce development partnerships faces significant external and internal challenges. Competing agendas within the college mission can mitigate the value of collaborating with employers (Connor & Hirsh, 2008; Voorhees & Harvey, 2005). Many constraints at the macro level (e.g., institutional or governmental policy) are difficult to change; however, much can be accomplished through collaborative partnerships between employers and colleges at the localized program level (Aspen Institute, 2013; Institute for Learning, 2013). Relationships between colleges and industry are most valuable when they allow for mutual exchange of constructive criticism and free sharing of ideas (Connor & Hirsh, 2008; Wyner, 2014). The result of a good collaborative partnership is transformational, based upon shared meaning and strategic alignment, not just the transactional exchange of resources or capital (Eddy & Amey, 2014; Mann & Glover, 2011; Powell & Rey, 2015; Wilson, 2015). A plausible method for sustaining this collaborative relationship in CTE and WFD programs is the employer advisory board.

#### **PROPOSED INTERACTIVE MODEL FOR COLLABORATION, RDT, AND HCT**

The literature reviewed above highlights the importance of collaborative workforce development partnerships, citing the perceived benefits and challenges associated with engaging colleges and employers. The interactions of three key factors — collaboration, resource dependency, and human capital — are suggested as a framework for a successful collaborative relationship. Very few researchers collectively consider community colleges, motivation, resource dependency or human capital, and the formation of formal collaborative partnerships in their research (Amey, 2010; Amey, Eddy, & Ozaki, 2007; Eddy & Amey, 2014).

Figure 3 shown below is a proposed model illustrating how these factors might interact in such a relationship:



*Figure 3. Proposed Model for Interaction of Key Factors – Collaboration, RDT, & HCT*

The proposed interaction model is a variant of the Iron Triangle prevalent in business and project management theory (Atkinson, 1999). The model illustrates the symbiotic relationship that exists between the three key factors and emphasizes that a change or effect on one leg or factor of the model has an impact upon the overall structure or system. Captured within the middle of these three factors' interactions are the development of the economy, curriculum, and community. The model implies that a successful collaboration in workforce development partnerships will expand the model, pulling up or improving the influence of resource dependency and human capital for those involved. A successful collaboration will also create more room or opportunity for development of curriculum for new programs, development of the economy, and resultant development of the community. A contraction or failure to collaborate will have the opposite effect, suppressing curriculum and economic

development. Trying to remove one of the legs or factors from the model will cause the model to implode, potentially spiraling curriculum or economic development in the wrong direction.

The premise that these three factors — collaboration, resource dependency, and human capital — are symbiotic and interactive is the basis for the research conducted herein. RDT suggests educators and employers alike depend upon the fluctuation of resources in the changing economy (Askin, 2007; Hillman, Withers, & Collins, 2009; Mullin & Honeyman, 2008; Pfeffer & Salancik, 2003; Powell & Rey, 2015; Wilson, 2015). HCT suggests improving the quality and relevance of education improves the economy (Carnevale & Desrochers, 2002; Davis, 2013; Eide & Showalter, 2010; Soliz, 2016). The perceived future needs of the employer (or employee) must be met by balancing college expectations (curriculum, equipment, in-kind donations) with corporate expectations (employee qualifications, job knowledge, soft skills) — this can only be achieved in a collaborative environment (Connor & Hirsh, 2008; Orr, 2001; Wilson, 2015).

## **SUMMARY**

The belief that community colleges must form alliances with business and industry is not a new idea (AACC, 2000; Connor & Hirsh, 2008; Lavendar, 2007; Orr, 2001; Powell & Rey, 2015; Wismer, 1994). Pressures to create partnerships are growing, largely due to uncertainty in economy and public policy (Eddy & Amey, 2014; Lavendar, 2007). Public officials, college administrators, and private companies are all increasingly challenged to find additional resources and are expecting more benefit for less cost (Hoke, Abernathy, & Doron, 2014). The very value of a college education is being questioned (Mitchell & Leachman, 2015).

By working collaboratively, both colleges and employers stand to gain the many positive benefits cited within the literature. However, these alliances must not be strictly transactional

(Aspen Institute, 2013; Hughes, 2003; Wilson, 2015). Nor can the alliances be exploitive, used by one party to gain additional funding at the cost of resources or human capital (Hughes, 2003; Mann & Glover, 2011; Orr, 2001). Successful workforce development partnerships are only achievable if both parties perceive value in the results of their collaborative efforts (Orr, 2001; Soares, 2010; Wilson, 2015). Building the proper relationships needed to sustain collaboration across workforce and educational programs takes considerable time, communication and mutual trust (Aspen Institute, 2013; Connor & Hirsh, 2008; Eddy & Amey, 2014; Eyster & Briggs, 2016; Hughes, 2003).

Framing the above reasoning for collaboration and providing adequate resources are critical to successful partnerships (Eddy & Amey, 2014). Employers want to help solve problems — to do so, they must be aware of what problems face the college (Hoke, Abernathy, & Doron, 2014). There must be opportunities to work together, and a way to balance responsibility with limited authority. The partnerships must be linked to strategic objectives for all stakeholders involved (Connor & Hirsh, 2008; Eddy & Amey, 2014).

This chapter reviewed the existing literature on employer advisory boards and established an argument for collaborative practices. A theoretical model illustrating the interactions between resource dependency, human capital, and collaboration was proposed. The following chapter explains the methodology used to research whether successful collaborations in workforce development partnerships are benefited by participation in employer advisory boards.



## CHAPTER THREE: METHODOLOGY

### **INTRODUCTION**

This chapter describes the research methodology utilized to conduct and validate this sequential, mixed methods multi-case study (as defined by Bloomberg & Volpe, 2012; Creswell, 2009; Merriam, 2009; Yin, 2009; Meyer, 2001). A sequential, mixed method explanatory design provided the researcher an opportunity to capture both quantitative and qualitative data from multiple sources in order to support the subsequent themes and recommendations derived from participants of the multi-case study. The multi-case study was bounded to include the 28 community colleges operating within the state of Michigan at the time of the study. Contained within this chapter is a restatement of the purpose of this case study research, explanation of the sequential mixed methods explanatory design and methodology, discussion of the sampling method and participant selection, introduction to the data collection instruments, discussion of validity and limitations, and explanation of the data analysis conducted.

### **STATEMENT OF PURPOSE**

The purpose of this study is to identify whether employer advisory boards actually provide colleges and employers the collaborative benefits identified in the existing literature reviewed in Chapter Two of this study. The goal of the study is to help educational leaders identify what aspects, if any, of employer advisory boards add value to the creation and sustainment of collaborative workforce development partnerships. This research goal was

operationalized using a sequential mixed methods explanatory design to describe, analyze, and interpret perceived and actual best practices utilizing advisory boards as a method of collaborative engagement between college and community employers.

This study analyzed the following questions:

1. What benefit(s) (perceived and actual) does the college receive from engaging employers through program advisory boards?
  - a. What, if any, are the benefits to curriculum, pedagogy or course design?
  - b. What are monetary benefits, if any?
  - c. What other benefits are realized?
2. What benefit(s) (perceived and actual) does the college provide employers from engaging through program advisory boards?
  - a. What effect does engagement on advisory boards have upon employer satisfaction with the program? The college?
  - b. How responsive is an engaged program to employer needs?
  - c. In what other ways is the employer's support reciprocated?
3. What are the characteristics of a mutually beneficial advisory board?
  - a. What is the composition of its membership?
  - b. How is such an advisory board operationalized?
  - c. What metrics or outcomes are used to measure or determine value for all parties involved?
4. What best practices can be replicated from this research?

## **RESEARCH DESIGN**

Case study research is a descriptive analysis of a bounded social phenomena, process, institution, or system (Bloomberg & Volpe, 2012; Creswell, 2009; Merriam, 2009; Yin, 2009; Meyer, 2001). In a bounded multi-case study, the researcher explores the bounded system

using in-depth data collection methods from multiple sources: surveys, interviews, and artifact document reviews (Bloomberg & Volpe, 2012; Creswell, 2009). In a sequential explanatory design, the researcher first collects quantitative survey data, then uses qualitative semi-structured interview data to reach deeper and richer insight into the survey findings (Creswell, 2009). Analysis of these multiple elements of the multi-case study is less for generalizing theory beyond the bounds of the case and more for gaining a deeper understanding of the intricacy and complexity of the system under study (Merriam, 2009; Meyer, 2001). Therefore, the analytical focus is often on transferability of application in context versus strict generalizability of outcomes to specific variables (Bloomberg & Volpe, 2012; Merriam, 2009; Meyer, 2001). Merriam (2009, p. 50-51) outlines the benefits of the case study design below as a particularly useful approach for understanding processes and best practices:

The case study offers a means of investigating complex social units consisting of multiple variables of potential importance in understanding the phenomenon. Anchored in real-life situations, the case study results in a rich and holistic account of a phenomenon. It offers insights and illuminates meanings that expand its readers' experiences. These insights can be constructed as tentative hypotheses that help structure further research; hence, case study plays an important role in advancing a field's knowledge base. Because of its strengths, case study is a particularly appealing design for applied fields of study such as education, social work, administration, health, and so on. An applied field's processes, problems, and programs can be examined to bring about understanding that in turn can affect and perhaps even improve practice. (p. 50-51)

The illustration shown below in Figure 4 walks through the ordered process steps of a sequential explanatory design (Creswell, 2009):

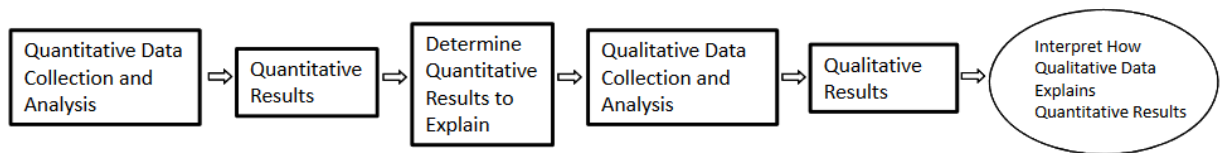


Figure 4. Ordered Process Steps of a Mixed Method Sequential Explanatory Design

The sequential mixed methods explanatory design utilizes both open- and closed-ended questions (Creswell, 2009), providing the researcher with both quantitative and qualitative data, creating an opportunity for a more comprehensive examination of the research questions (Creswell, 2009; Merriam, 2009; Yin, 2009). The closed-ended questions provided the basis for initial quantitative surveys of multiple participants within the study population and could be analyzed for correlations and statistical evidence of recurring themes or trends. However, it was the researcher's position that strictly quantitative questions would not produce the data necessary to clearly address the research questions of perception nor would it capture all plausible best practices. The open-ended questions allowed for re-statement of themes and trends in follow-up semi-structured interviews of select participants, which could be analyzed for greater depth and significance. Semi-structured interviews (Yin, 2009) were determined to be the best method of data collection for these follow-up participants because the interview questions followed a standard interview agenda but allowed for the flexibility necessary when discussing specific subjects in detail. Using both methods in tandem in a sequential explanatory design allowed the researcher to identify and possibly counteract the inherent biases of a singular method (Creswell, 2002), while maintaining best use of resources and available time.

The sequential mixed methods explanatory design for this multi-case study was conducted in two main phases. "Phase 1" of the mixed methods approach utilized an electronically delivered quantitative survey to identify potential themes or correlations among members of the bound multi-case study. This Phase 1 survey was a non-experimental design; therefore, only themes or attributes of possible explanatory variables were sought, and no independent variables needed to be controlled or manipulated (Creswell, 2009; Merriam, 2009;

Meyer, 2001). The Phase 1 survey responses were coded by theme or attribute and quantified based upon count or response frequency. The survey was meant to be a broad cross section of possible explanatory variables identified during the literature review. The explanatory variables measured by the Phase 1 survey tool represented quantitative data collected in various formats: nominal, ordinal, interval, and ratio. Example explanatory variables included: number of years involved with an advisory board, number of alumni employed (past and present) by employers on advisory board, and number or type of donations received from employers. A full listing of the Phase 1 survey questions as delivered electronically in the software package Google Forms is found in Appendix B.

“Phase 2” of the sequential mixed methods explanatory design utilized qualitative follow-up semi-structured interviews to further identify and refine possible thematic connections to the Phase 1 survey and existing literature reviewed in Chapter Two regarding perceived benefits of employer advisory boards among and between participants of the multi-case. The follow-up semi-structured interviews were meant to examine thematic connections much deeper and richer than the Phase 1 survey (Creswell, 2009; Yin, 2009). Example possible themes previously identified in the literature review in Chapter Two include ownership and responsibility, contributions and accountability. A full listing of the Phase 2 semi-structured interview questions is found in Appendix C. A subset of the Phase 2 follow-up interviews included review of records and artifacts representative of best practices as perceived and shared by those interviewed. Example artifacts might include meeting notes, equipment donations, and files or documents reflecting curriculum activities.

## **SAMPLING METHOD**

Phase 1 sampling was purposeful to the bounds of the multi-case study, designed to include equitable representation from the 28 community colleges located in the state of Michigan. Purposeful sampling is a nonprobability sampling method commonly used with surveys in multi-case studies to maximize the reliability and validity of the data collected (Bloomberg & Volpe, 2012; Creswell, 2009; Merriam, 2009). Purposeful nonprobability sampling is also suggested when trying to connect or identify members of a unique group or classification (Vogt, 2007; Yin, 2009). The respondents to Phase 1 were the purposeful source of participants for Phase 2: willing participants of the Phase 1 survey self-identified to participate in the follow-up semi-structured interviews.

A sample of 140 individuals representing 28 different community colleges was invited to participate in the Phase 1 survey. For each of the 28 colleges included in the survey, a typical invitation to participate in the survey was sent to between four to six people within the college: two to three full time faculty, one to three members of mid-level administration, and a member of senior administration — if a senior administrator could be identified through cursory review of the college website as potentially active with the WFD or CTE programs. The names and email addresses for the Phase 1 sample participants were obtained from publicly accessible documents and webpages on the college websites. Prospective participants of each college were invited to the study electronically by means of an introductory email (Appendix D). The email contained a link to access the Phase 1 study electronically through the Google Forms platform. Two weeks after initial contact, a second reminder email was sent to the pool of 140

potential respondents. The Phase 1 survey was open in Google Forms for a total of four weeks, during the month of April 2018.

A purposeful sample of ten individuals who represented a cross section mirroring the demographics and job classifications of the Phase 1 survey completers were interviewed for execution of Phase 2. Justification for participant selection in the Phase 2 interview process began by comparing college demographics, job descriptions, and relevant work experience of participants who had self-identified an interview interest in the Phase 1 survey. Possible interview candidates were then validated through member checks to ensure those interviewed would likely reflect the beliefs and experiences of the Phase 1 sample (Merriam, 2009; Yin, 2009). Ultimately, a group of ten individuals were purposefully chosen as a convenience sample, based upon the above criteria and their accessibility during the study timeframe. The semi-structured Phase 2 interview responses were coded and analyzed using pseudonyms to protect the confidentiality of the ten interview participants.

## **ETHICAL CONSIDERATIONS**

Approval to conduct this mixed-methods explanatory study was obtained from the Institutional Review Board (IRB) of Ferris State University in Big Rapids, Michigan (Appendix A). The intent of this study was to discover and describe perceptions of value of employer engagement by the program or college, rather than discern behaviors or decisions of individuals; therefore, IRB determined the study classified as a quality improvement project, not placing any human subjects at undue risk. Although not explicitly required in a quality improvement study, informed consent and confidentiality were still maintained with participants to ensure the integrity of the research design.

Study participants were allowed to make an informed decision about participating in either or both phases of the study. The Phase 1 survey (Appendix B) included informed consent language at the opening, including the scope and purpose of the study, approximate timing to complete the study, and acknowledgement that any and all participation was voluntary and confidential. Participants of the Phase 2 follow-up interviews were provided the same information regarding scope, timing, and confidentiality, as found at the opening paragraph of the follow-up interview questionnaire template (Appendix C).

To encourage participants to respond freely during the survey and semi-structured interview process, the researcher protected the confidentiality of participants using descriptive categories based upon college geography and demographics, not personally identifiable information. The survey instrument used for Phase 1 did not capture IP addresses or emails of participants and did not require personal identification or the name of the institution. The single exception worthy of note was the last question of the Phase 1 survey: it allowed willing participants to self-identify by including a method of contact if the individual was interested in participating in the follow-up Phase 2 interviews. Only the researcher reviewed the raw survey data from Phase 1 or listened to or transcribed the Phase 2 interview materials, and only the researcher accessed all records and artifacts reviewed in this study unless the participant granted permission to share the records and artifacts as a relevant example of best practices.

## **CONTENT VALIDITY**

Content validity was addressed by conducting peer reviews and several member checks throughout the creation and execution of the study. The researcher currently works at a career-oriented university; therefore, university leadership with Career and Technical Education (CTE)



and Workforce Development (WFD) knowledge and previous experience working with employer advisory boards supported a regularly occurring peer review process. Three independent member checks were conducted post-execution with participants of the Phase 1 survey and Phase 2 follow-up interviews to ensure emerging results reflected the beliefs and experiences of those embedded within the study sample (Merriam, 2009). Lastly, concurrent triangulation of the three main sources of data — the quantitative survey, the qualitative follow-up interviews, and any records and artifacts reviewed — was analyzed both separately and in combination to cross-validate and corroborate emerging themes (Creswell, 2009; Yin, 2009).

## **DATA ANALYSIS**

The closed-ended quantitative Phase 1 survey data was analyzed statistically for correlations and descriptive trends using count analysis of the nominal data by category. Open-ended questions in the Phase 1 survey were coded and sorted thematically into categories, then subjected to count analysis for generation of further descriptive statistics of the Phase 1 sample space. The Phase 1 quantitative survey data was nonprobability and purposefully sampled; therefore, no rigorous statistical analysis appropriately applied to the dataset. Microsoft Excel was sufficient for depicting graphical analysis and generating descriptive statistics.

The open-ended Phase 1 survey data was also later reviewed concurrently with the follow-up Phase 2 interview data for emerging themes using open coding in a constant comparative analysis (Merriam, 2009; Strauss and Corbin, 1990; Glaser and Strauss, 1967). During this step in the analysis, the researcher remained open to discovery of all possible

outcomes that emerged from reviewing the data. Once open codes were established, the relationships between the open coded categories were reviewed continually against data already examined for possible connections to the research questions. These connections led to emerging themes and best practices that reflect broadly held perspectives on benefits of engaging employers in advisory boards. The coding was conducted by two mutually exclusive methods: an inductive process consisting of repetitive review and immersion in the data by the researcher, and software analysis of the transcribed responses.

## **RESEARCH BIAS**

Several biases were recognized as potential threats to the validity of this mixed methods research, most notably having the researcher serve as primary data collector and analyst. To reduce the effects of researcher bias, controlled and consistent questions were asked in the Phase 1 survey and Phase 2 follow-up interviews. The researcher did not provide any directives, personal beliefs, or opinions during the semi-structured Phase 2 interview process. Only preliminary findings of the quantitative data from the Phase 1 survey were shared with Phase 2 interview participants — the beliefs and opinions captured during semi-structured interviews were those of the individual at the time of the study. Each Phase 2 follow-up interview was inherently intrinsic — the subject of advisory boards was the primary interest throughout the sequential explanatory design (Merriam, 2009). Therefore, the researcher waited to analyze all Phase 2 interview results until after completion of all ten interviews, so that the results of one interview did not influence or bias the questions or outcomes of subsequent interviews.

## LIMITATIONS

This sequential mixed methods study was limited to community colleges in the state of Michigan. The original sample was principally focused upon career and technical education programs in those colleges, and the participants for the Phase 2 follow-up interviews were chosen purposely from the original Phase 1 survey sample. As with any voluntary research, it is not anticipated that all invited members will choose to participate fully. Therefore, the results of this study may not be generalizable to all programs nor all community colleges (Merriam, 2009; Meyer, 2001).

The quantitative data collected was non-experimental, limiting the analysis to descriptive statistics and illustrative correlations: the data should not be used to draw inferences or imply predictive analytics. The qualitative data was coded by the researcher and member checked by participants in the bounded study: themes and connections to this data are bounded to place and time of the study. However, use of a sequential mixed method explanatory design did allow for a deeper, richer understanding of important thematic elements (Creswell, 2009; Yin, 2009).

This study was also limited by reliance upon self-reporting — the data only represent one side of the employer-college relationship, through the view of the community college. While this limitation challenges generalizing of the data, any identified best practices and themes correlating with success or benefit are potentially transferrable to other colleges or programs working to develop or improve engagement with employers through inclusion and increased collaboration on advisory boards.

## **SUMMARY**

This chapter provided the rationale for choosing a sequential mixed methods case study to conduct the research necessary to identify whether employer advisory boards provide colleges and employers any of the benefits as perceived by the existing literature reviewed in Chapter Two. The use of quantitative and qualitative data in a sequential explanatory design provided the researcher multiple vantage points for identifying and understanding these perceptions. Despite limitations in sample size and reliance upon self-reporting, the study structure permitted the researcher access into the cultural beliefs and practices that perpetuate the current practices of employer advisory boards in the sample population. The following chapter will demonstrate the execution of this research design and analyze the results of the data collected.

## CHAPTER FOUR: RESULTS AND ANALYSIS

### INTRODUCTION

This chapter presents the results and analysis of this sequential mixed methods multi-case study. The purpose of the study was to identify whether employer advisory boards actually provide colleges and employers the collaborative benefits identified in the existing literature reviewed in Chapter Two of this study. The goal of the study is to help educational leaders identify what aspects, if any, of employer advisory boards add value to the creation and sustainment of collaborative workforce development partnerships. This research goal was operationalized using a sequential mixed method explanatory design defined in Chapter Three to describe, analyze, and interpret perceived and actual best practices utilizing advisory boards as a method of collaborative engagement between college and community employers. The following research questions were examined through the vantage point of a community college participant:

1. What benefit(s) (perceived and actual) does the college receive from engaging employers through program advisory boards?
  - a. What, if any, are the benefits to curriculum, pedagogy or course design?
  - b. What are monetary benefits, if any?
  - c. What other benefits are realized?
2. What benefit(s) (perceived and actual) does the college provide employers from engaging through program advisory boards?

- a. What effect does engagement on advisory boards have upon employer satisfaction with the program? The college?
  - b. How responsive is an engaged program to employer needs?
  - c. In what other ways is the employer's support reciprocated?
3. What are the characteristics of a mutually beneficial or "collaborative" advisory board?
    - a. What is the composition of its membership?
    - b. How is such an advisory board operationalized?
    - c. What metrics or outcomes are used to measure or determine value for all parties involved?
  4. What best practices can be transferred from this research?

The data and results were collected in two sequential phases. Phase 1 represents results and analysis collected from the quantitative survey conducted through electronic submission using Google Forms. Phase 2 contains qualitative data collected during follow-up semi-structured interviews with Phase 1 survey participants who self-identified and agreed to speak further with the researcher. Ten Phase 2 interview participants were purposefully chosen for the study based upon their equitable representation of the Phase 1 survey sample space, so that they might provide deeper context and understanding to the Phase 1 survey data.

In the following sections, the sample demographics of each phase are described in further detail, followed by a brief summary of the data and general findings regarding advisory board composition, function, and operation produced by the sample space of this research design. Where appropriate, excerpts from the Phase 2 interview responses are utilized to provide substance and rationale to the Phase 1 survey data.

The findings and summary results pertinent to each of the research questions are then provided. The methodology behind coding and analytics of the sequential Phase 1 and 2 datasets is briefly explained, followed by deeper description of the major findings of the study.

### **DESCRIPTION OF PHASE 1: SURVEY SAMPLE**

The study focused upon CTE and WFD programs operating in community colleges in the state of Michigan. A sample group of 62 of the 140 individuals invited to participate in Phase 1 entered the electronic survey. Of the 62 attempting, 60 actually completed the survey, representing a 43% response rate. Based upon validations of participants conducted at the close of the survey, at least 25 of the 28 community colleges in Michigan were represented by at least one respondent in the Phase 1 survey data.

#### Survey Participant Demographics

Figure 5 below is a graphical representation of survey responses for college location by geographical region within the state of Michigan. The five categories shown were the regional classifications provided in the survey. The results illustrate the balanced composition of the responses collected throughout the geographical regions within the state of Michigan, when weighed against the actual number of community colleges located in each region.

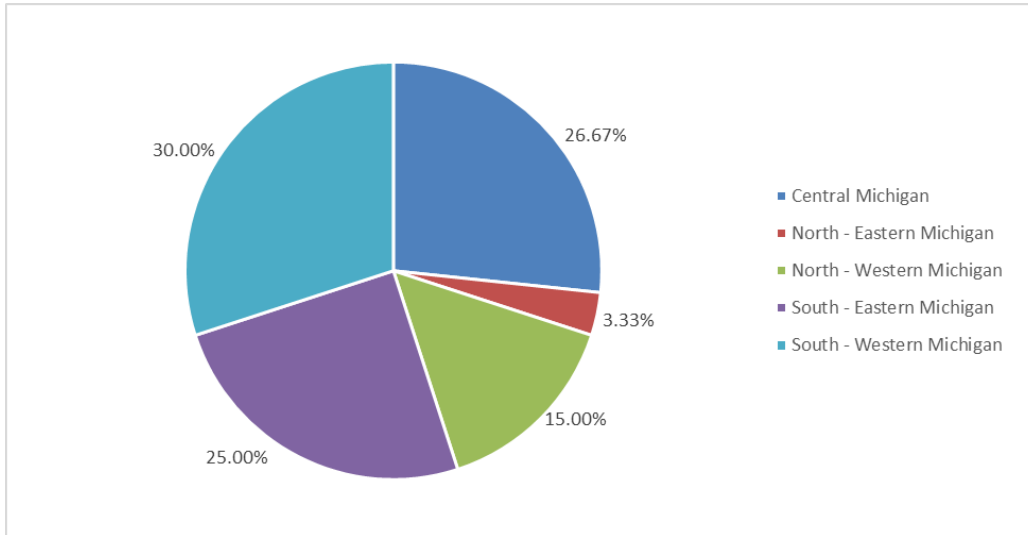


Figure 5. College Demographic Classification by Geographical Location

The survey participants were also asked to self-identify the perceived demographics of their college setting — i.e., rural, urban, suburban, or other. These results also show a balanced composition among responses. Of the respondents, 35% reported as rural, 30% as urban, 30% as suburban, and the remaining 5% offered clarifying comments such as “urban, near industrial park” or “suburban with medium population” with their selection, as illustrated in Figure 6 below.

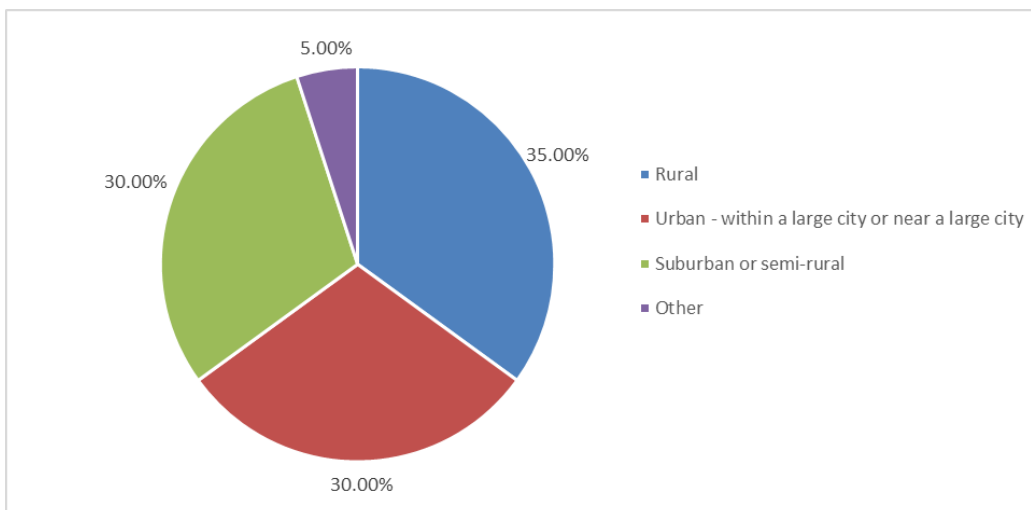


Figure 6. College Demographic Classification by College Setting



Phase 1 survey participants were asked to identify their current job position, as well as number of years of work experience in their current role. Table 1 below provides a summary of represented job positions and work experience by survey classification.

Table 1: *Current Job Position and Number of Years in Current Role*

CURRENT JOB POSITION AND NUMBER OF YEARS IN CURRENT ROLE	PERCENTAGE OF RESPONDERS
<b>Faculty Member</b>	<b>55%</b>
0 to less than 1 year	1.7%
1 up to 4 years	8.3%
5 up to 9 years	16.7%
10 or more years	28.3%
<b>Mid-Level Administration (Dean, Assoc. or Asst. Dean, Director)</b>	<b>28.3%</b>
0 to less than 1 year	-
1 up to 4 years	8.3%
5 up to 9 years	16.7%
10 or more years	3.3%
<b>Senior Administration (President, Vice, Assoc. or Asst. President)</b>	<b>10.0%</b>
0 to less than 1 year	-
1 up to 4 years	3.3%
5 up to 9 years	1.7%
10 or more years	5.0%
<b>Staff Member (Support, Other than above)</b>	<b>6.7%</b>
0 to less than 1 year	-
1 up to 4 years	5.0%
5 up to 9 years	-
10 or more years	1.7%

The composition of job positions of Phase 1 survey participants in Table 1 aligns with the study expectations prescribed in Chapter Three. The study demographics reported in Table 1 suggest the survey responders have work experience in their roles within the community college. They represent a cross-section of professionals from different positions within the

community college institution and therefore different vantage points on the advisory board process.

**DESCRIPTION OF PHASE 2: INTERVIEW SAMPLE**

Of the 60 individuals that completed the Phase 1 quantitative survey, 41 acknowledged a willingness to discuss the research topic in a follow-up interview. Of this group, a convenience sample of ten individuals that represented a configuration matching the demographics and job classifications of the Phase 1 survey were interviewed for Phase 2 of the study. Justification for participant selection in the Phase 2 interview process began by comparing college demographics, job description, and work experience as done in the Phase 1 quantitative survey. Participant availability during the study timeframe also factored into the convenience selection.

Interview Participant Demographics

Table 2 below summarizes the composition of the ten Phase 2 interview participants. Although listed by a sequential participant code and college code here, the numbering scheme illustrated below in Table 2 is not used when depicting the research findings in this study to protect the anonymity and confidentiality of the interview participants and their respective community colleges.

Table 2: *Composition of Phase 2 Interview Participants*

PARTICIPANT CODE	COLLEGE CODE	COMMUNITY COLLEGE LOCATION	COLLEGE SETTING	JOB POSITION BY CATEGORY	WORK EXPERIENCE
Participant 1	1	Central MI	Suburban	Other, Staff	5-9 years
Participant 2	2	Central MI	Rural	Mid-Level Admin	5-9 years
Participant 3	2	Central MI	Rural	Other, Staff	5-9 years
Participant 4	3	NE MI	Rural	Mid-Level Admin	≥ 10 years

PARTICIPANT CODE	COLLEGE CODE	COMMUNITY COLLEGE LOCATION	COLLEGE SETTING	JOB POSITION BY CATEGORY	WORK EXPERIENCE
Participant 5	4	NW MI	Suburban	Faculty	5-9 years
Participant 6	5	SE MI	Suburban	Faculty	5-9 years
Participant 7	6	SE MI	Urban	Mid-Level Admin	≥ 10 years
Participant 8	7	SW MI	Urban	Faculty	≥ 10 years
Participant 9	7	SW MI	Urban	Mid-Level Admin	1-4 years
Participant 10	7	SW MI	Urban	Senior Admin	5-9 years

The ten participants of Phase 2 represent seven different community colleges. In two instances, more than one person was purposefully selected from the same community college. This configuration allowed crosschecking and validating of interview responses to show alignment within different positional strata within the same community college – for example, whether faculty and administration held similar beliefs about the college’s role in collaboration on employer advisory boards. The Phase 2 participants’ locations (e.g., Central MI) and college setting (e.g., Suburban) match the percentage composition of the Phase 1 survey participants. The job position by category (e.g., Mid-Level Administration) of Phase 2 participants matches the percentage composition of the Phase 1 survey participants. Phase 2 interview participants with at least five years of current position work experience were chosen to match the Phase 1 survey sample demographics and to ensure interview responses were not based upon singular events. Only one Phase 2 participant (identified as participant 9 above) possessed less than five or more years of work experience in a current job role. This person transitioned into administration after ten or more years as faculty in a CTE program.

The participant demographics reported in Table 2 suggest the follow-up interview responders are experienced in their roles within the community college. As was seen in the

Phase 1 survey, these ten participants represent a similar cross-section of individuals from different positions within the community college institution and therefore different vantage points of the advisory board process. The participating individuals also represent a similar composition of the varying geographic and socioeconomic regions within the state of Michigan seen in the survey. Therefore, the Phase 2 participants and resultant interview data can be used to examine and investigate the Phase 1 survey responses, and provide a richer, deeper understanding of the community college's vantage point of collaboration on employer advisory boards for evaluation in this study.

## **EMPLOYER ADVISORY BOARDS — GENERAL FINDINGS**

### **Employer Advisory Board Composition — General**

Over 93% of Phase 1 survey responses confirmed that their CTE or WFD programs are required to include community employers on program advisory boards. Of the remaining seven percent, only one individual responded to the survey as not currently including an employer on their program advisory board; whereas the remaining individuals added that although they were not required, they did include employers “because it is a good idea.”

The advisory boards also included other external stakeholders from the community; however, this condition was observed at a lesser frequency versus that of employer members. Only 50% of responses confirm that their CTE or WFD programs are required to include other external stakeholders than just employers on advisory boards; another 38% responded they were not required to include anyone other than employers but did so anyway. Common

“other” external stakeholders included current and former students, community leaders, faculty from other colleges, and economic development staff.

When asked about the composition of their specific advisory boards, the ten Phase 2 interview participants indicated the configuration of employer advisory boards was a function of location and resources. Workforce boards, economic development staff, and community leaders participated formally in program advisory boards within urban communities. However, in rural community colleges, resources dictated a smaller sized advisory board, and rural Phase 2 participants stated the aforementioned external stakeholders were engaged by other means.

While employer members were shown to be the clear majority faction of external stakeholders participating in advisory boards, identifying how to select or manage these employer members was not clear. Figure 7 below provides a graphical representation of Phase 1 survey responses regarding the existence of defined and documented guidelines for selecting advisory board employer members.

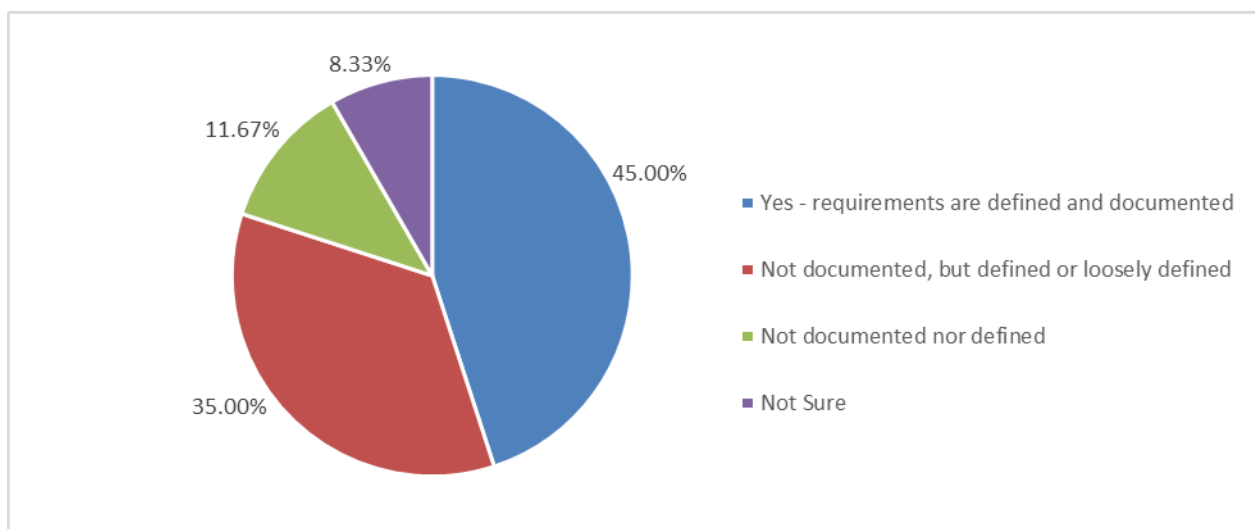


Figure 7. Regarding Definition and Documentation for Advisory Board Member Selection

Only 45% of survey responses confirmed having documented and defined requirements for selecting advisory board members. An additional 35% believed that although their selection process was not formally documented, it was at least loosely defined. Nearly 12% of those remaining acknowledged that their selection process was not documented or defined.

Similarly, over 73% of responders stated the service term of an advisory board employer member was not defined — that employer members could serve “as long as they choose to.” Less than 16% of Phase 1 respondents provided defined service terms, with 10.5% defining an employers’ term as 1 to 3 years, followed by 5.2% defining an employers’ term as 3 to 5 years. In a corresponding write-in response question, the number of times an employer could renew this service term was not defined clearly by any of the 60 Phase 1 survey respondents, nor were clear criteria established for accepting or rejecting service term renewals. The most common response to the question of whether criteria existed for accepting or rejecting service term renewals for advisory board members was “not sure” (83%), followed by “none” (10%).

Phase 2 interview participants provided reasons why they believe the Phase 1 survey found more than half of surveyed programs do not have a documented process for selecting advisory board members, and why the term limits of employer advisory board members are not defined. The top three reasons are summarized as follows:

1. Who selects members — 60% of Phase 2 participants were adamant in their view that those closest to the program, i.e., faculty or staff, should select and identify employers for advisory boards. However, it was acknowledged this group (faculty) has limited existing resources to recruit new employers and possesses the least control over budgeting of additional financial resources.
2. Establishing flexible criteria — 30% felt concern over excluding or deterring “good” candidates from participation based upon a technicality has prevented participants from writing or “proceduralizing,” a process for recruiting members or imposing term limits. However, “good” is recognized as a subjective measure.

3. How to enforce criteria — while concern over creating a flexible procedure is an acknowledged undertaking, equitably enforcing a procedure was recognized as a separate but equal challenge by 50% of Phase 2 participants.

One Phase 2 interview participant added this comment to their position on advisory board member recruitment, stating:

My President might meet someone on the sidewalk or at a convention, or some public community function, and say, “you should get involved in our program” .... Sometimes the business owner tells my President “I should be involved in your program.” The next thing we know, we have a new advisory board member. In an environment where we cannot turn away resources or opportunities, it becomes the faculty’s problem to find a place for this person, but we can’t tell our President “no.” Would a procedure stop this?

Another Phase 2 participant commented on the feasibility of applying service term limits to advisory board members, if such limits existed:

We have considered term limits for our employer members — especially as a way to move some of our older or retired members off the board. The question is one of proving relevance versus resources — just because someone retires, he still knows people in the community, and can still tell our story, still make connections for us. And what will I replace him with? You also mentioned recruitment — if I don’t have a way to recruit a better replacement, then I should keep what I have? Balancing greater relevance against fewer resources are at the center of both of these challenges.

#### Employer Advisory Board Composition — Program Alumni

Phase 1 survey participants were asked to further delineate the composition of advisory board employer members, specifically whether these employers are alumni of the program they advise. Figure 8 below shows that over 53% of the Phase 1 study participants reported that more than zero but less than 25% (1 in 4) of their employers were program alumni, followed by equal amounts (of nearly 17% each) reporting none of the employers were alumni, or conversely up to 50% (1 in 2) of employer members were alumni. Very few Phase 1 survey participants (6.67%) acknowledged having over 50% program alumni composition representing employers on their program advisory boards.

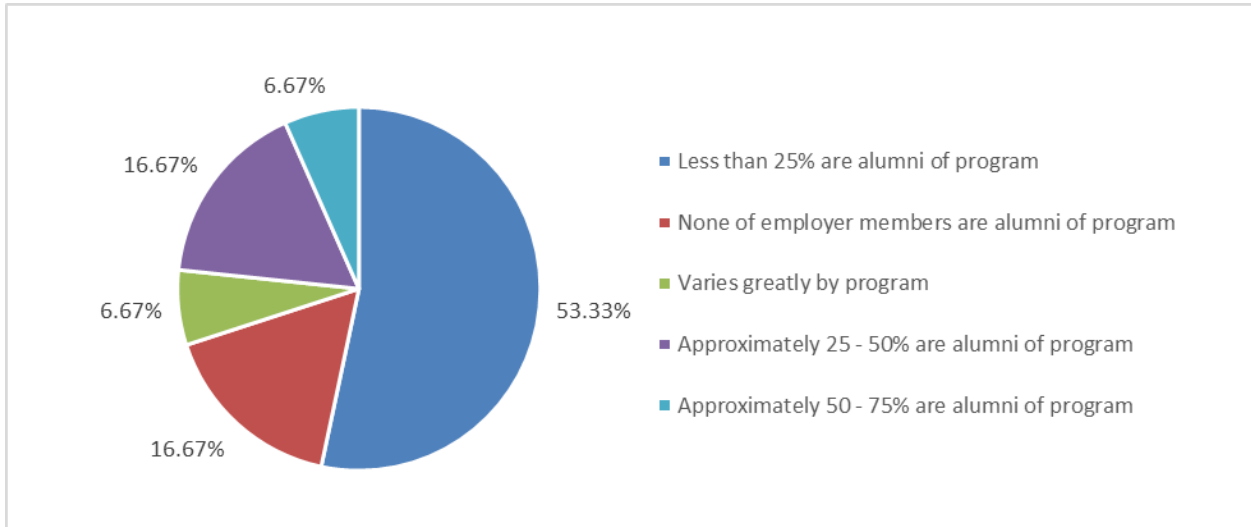


Figure 8. Alumni Composition of Advisory Board Employer Members

The alumni composition depicted in Figure 8 was compared to hiring practices of the employers serving on advisory boards. Phase 1 survey participants were asked whether advisory board employer members currently hire program graduates, with “currently” defined in the survey as within the last three years. Figure 9 illustrates the varied hiring practices of employers serving on advisory boards, as perceived by the Phase 1 survey participants.

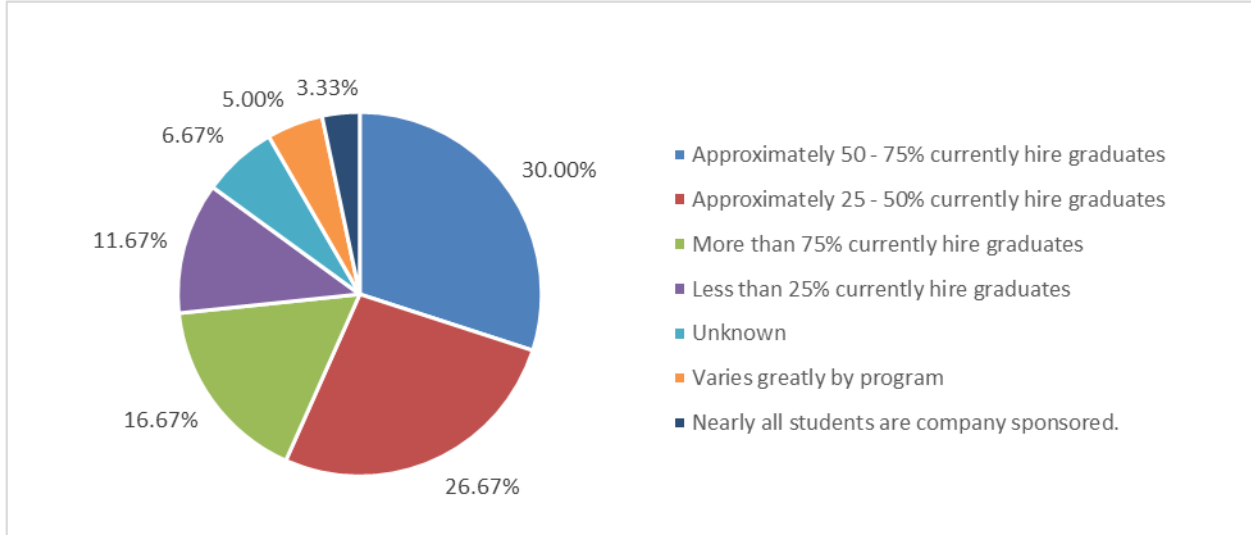
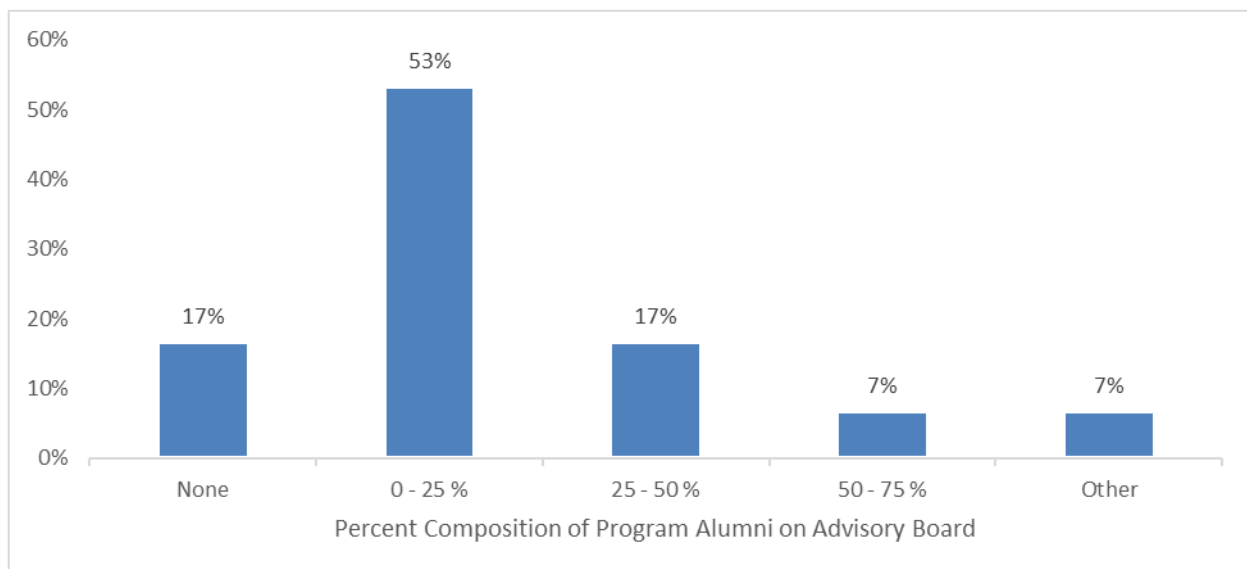


Figure 9. Hiring Practices of Advisory Board Employer Members



The results illustrated in Figures 8 and 9 indicate that advisory boards do hire graduates of programs. These two survey results were compared in an overlay, to see if any relationship exists between the percentage composition of program alumni serving on an employer advisory board and the hiring practices of the employer board members as perceived by the colleges surveyed. Figure 10 below illustrates this relationship, where each Phase 1 survey response for percent composition of program alumni is compared against the corresponding response for perceived hiring practices of employer board members from the same Phase 1 survey respondent.



*Figure 10. Overlay of Percent Alumni Serving on Advisory Board and Hiring Practices*

Figure 10 shows that within the Phase 1 survey sample space, having 0 to 25% composition of alumni on an employer advisory board has the greatest positive relationship with perceived hiring practices of employer board members, whereas no representation — or conversely, oversaturation — by alumni discourages or thwarts hiring of current graduates.

During the Phase 2 interviews, the ten participants offered opposing vantage points about alumni serving on advisory boards. The underlying theme in all responses was alumni knowledge. One faculty participant felt “alumni know what we know and serve as our best example of our program in action.” Four of the six (67%) non-faculty interview participants disagreed with this position, with one participant arguing that “alumni are the source of stagnation — they only know what we know and bring little new information or innovation to the advisory board.”

One Phase 2 faculty participant was very passionate about the positive influence of having program alumni serve on the employer advisory board:

Alumni know what we know, but more importantly, they know what we don't know – what they had to figure out in the first few years out of college. Sometimes I think our employers over exaggerate how underprepared grads are in an area to get focus on their [employer's] special needs, but when an alum tells me that he or she wasn't prepared to do the job, I know that's a problem. They [alumni] know where our holes are better than we do.

An administrative participant had an equally impassioned opposing view of the value of alumni on an employer advisory board:

I don't want alumni on my advisory board taking up space and resources I spend to learn about new opportunities. My faculty should know what we do now without alumni telling us every year. I want to hear from people who don't know what we do, to challenge us to move in new directions and try new things. I want my time with the advisory board to bring out innovation, not bring up memories.

#### Employer Advisory Board Structure and Function — General

The most common schedule for conducting employer advisory board meetings was twice per year (49%), followed by once per year (35%), and quarterly (10%). The remaining

minority (of less than 7%) met with employers every other month or monthly. Smaller rural or suburban colleges met more frequently with employers than larger urban colleges.

Over 76% of Phase 1 survey responses expected all advisory board employer members to attend all scheduled meeting dates, compared with 23% who invited or expected only specific employers to attend specific meetings on the schedule cycle, as “focus groups” or “definitive subject matter experts.” Nearly 84% of survey participants expected employers to attend these meetings face-to-face at the college campus, whereas 13% rotated locations for face-to-face meetings between the college campus and willing employer locations. The remaining 3% were split between “strictly at employer locations,” and “experimenting with remote web meetings using technology.” Over 86% kept advisory meetings to two hours or less in length, with the remaining responses targeting a goal of two to four hours in length. All 60 Phase 1 survey responses confirmed creating a documented agenda for the advisory board meeting, with over 80% of respondents providing a copy of the agenda to employer members prior to the actual meeting day.

Phase 2 interviews revealed the most common agenda items included program enrollment status, equipment or technology updates, changes to positions of leadership in program or college, updates on college-wide issues (usually from a dean or senior administrator), and industry updates from employer partners. When reviewing shared artifacts during the Phase 2 interviews, the researcher observed that urban colleges had a more formalized agenda structure, where rural college agendas were less defined. When asked about this observation, one Phase 2 participant felt that urban colleges “dealt with a larger number of large companies, and that they [companies] expected more structure and organization.”

One rural college Phase 2 interview participant was unique in this regard, and preferred no scripted agenda, but utilized one at behest of senior administration. Instead of operating under a formal meeting structure, employer members of this rural college were invited on campus monthly in smaller groups (of 2 or 3 related employers at a time) to “talk openly and freely” about current issues, review a list of relevant class outcomes, and tour the teaching and learning spaces at the college. This participant felt being “personable” was key, stating:

My employers want a partner, not a provider. Most of our local companies are led or even owned by local people who have always lived in the area – they know the college, and they want to work together. I don’t need to tell them about enrollment – they already know we have a student shortage. I don’t need a PowerPoint from leadership – they [employers] just want to know where they can help [the college], and if I can help them. It is our job to help them, to be partners, not providers.

Another Phase 2 interview participant from a larger urban college system shared a similar sentiment on formal structure and prescriptive agendas, stating:

We create a formal agenda, but it is just to keep the meeting on target. The real reason we are there is to listen. I want my employers to do all the talking, all the presenting... I want my faculty listening. My employers will help me [the college] solve their problems – and recognize that doing this, helping them, still helps me – but first I need to hear and understand their problems.

A final comment shared by an interview participant that emphasized the importance of having employer advisory board members create the meeting agenda when possible:

We try to get an employer to run the meeting, starting with creating the agenda. We provide a rough timeline and some possible topics but try to get a different employer to pick and choose the topics and order [of topics] each meeting if possible. We find that doing this makes the employer more engaged in the meeting, and employers are usually better at keeping other employers to task... I think it’s their experience with tighter timelines. Our best meetings are led by our [employer] board members.

Perceptions on Engaging Employers to Participate on Advisory Boards

Study participants were asked whether it was easy to identify potential employers for serving on advisory boards. Figure 11 below shows a majority of respondents (85%) agreed or strongly agreed that identifying potential employers to serve on employer advisory boards is easy, with very few (3%) disagreeing.

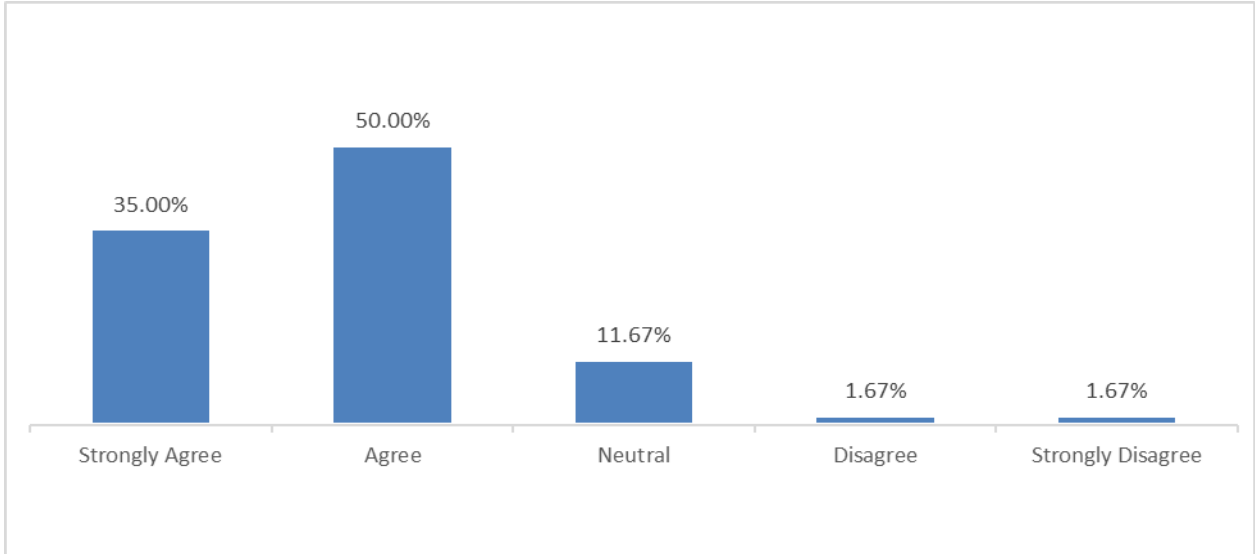
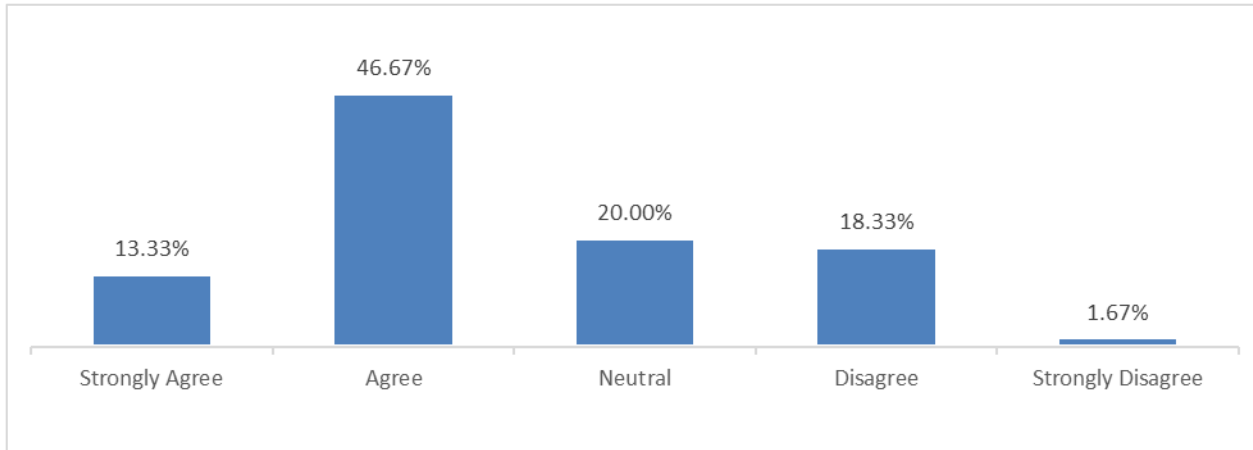


Figure 11. Perception: Ease of Identifying Employers for Participation on Advisory Boards

Phase 1 survey participants were then asked of the ease of getting these potential employer members to actively participate on advisory boards, as shown below in Figure 12. Only 60% agreed or strongly agreed it was easy to get employers to actively participate, whereas 20% disagreed or strongly disagreed.



*Figure 12. Perception: Ease of Getting Employers to Actively Participate on Advisory Boards*

A noticeable shift in perception registered between Figures 11 (identifying employer members) and 12 (activating employer members). The Phase 1 survey data supporting this shift was presented to participants of the Phase 2 follow-up interviews. Five Phase 2 participants provided five unique vantage points, each acknowledging a lack of active employer participation, but for distinctly different reasons:

1st Participant: We are surrounded by great companies. Many of these companies are already engaged with the college in other ways — foundation, scholarships, donating equipment — but that doesn't make them [employers] good advisors for our program. I think some only come because we ask them — they are already friends of the college, and don't want to say no. But they don't know what to do to help us, so they just take up space.

2nd Participant: I think this goes back to the earlier question about recruitment [of employers]. We know we need employers on the board, but we don't always get the right people [from the company] to show up for the meetings. If the advisory board is for welding, I want welders; if it is for nursing, I want nurses.... I don't want HR or recruiters or people here just trying to find employees. I want curriculum experts. We can find employers, but we don't always get the right person.

3rd Participant: They don't actively participate because we don't let them. Our [leader] keeps the meeting very tight, doesn't let companies talk to us about their problems, just tells them about ours. After three or four slides about enrollment, you can see that they are tuned out — you can tell who won't be back next time. It's too bad, because I think some of these folks want to do more with us, but we can't get out of our own way sometimes.

4th Participant: I would suggest that it's because we don't tell them [employers] how to participate. Look at it from their viewpoint — please come to the college, and in a few short hours, tell us everything we need to do, then go away until this time next year. I doubt they would invite us in to do the same for them [at their business]. We have an agenda and we have an outline, but none of that teaches them what to do, or how to “participate.”

5th Participant: You mentioned active participation in your question... but you having me thinking about accountability right now. When I look at the data you have, it reminds me of the classroom, from when I used to teach. You don't pass the class just because you showed up every day — you need to actively participate. You need to be accountable for something. What are we holding the employers accountable for?

Perceptions on active participation, or accountability, of employer advisory board members clearly vary between different interview participants. However, all ten interview participants acknowledged that a deficiency in active participation from employer members greatly diminishes the value of the advisory board as a whole. This acknowledgement agreed with the perceptions of Phase 1 survey respondents, 91% of whom responded (50% agree, 41% strongly agree) that active participation by employers on their advisory boards had a positive effect on program development. Similarly, 85% responded (47% agree, 38% strongly agree) that active participation by employers on their advisory boards had a positive effect on employer satisfaction with the college.

### Summary of General Findings

The Phase 1 survey data and Phase 2 interview comments discussed in the previous section provided the following general findings:

- Composition of employer advisory boards is not explicitly defined by the individuals participating in this study, with fewer than half of surveyed programs defining or documenting guidelines for employer membership, or methods for employer

recruitment. There is little evidence the programs surveyed are following guidelines for advisory board composition provided by the Carl D. Perkins Career and Technical Education Improvement Act of 2006. Perkins requirements are not explicitly referenced by any of the 60 Phase 1 survey participants, mentioned in only two follow-up interviews by the ten Phase 2 participants (in a following section discussing Research Question 3).

- Expectations regarding service term of employer members are loosely regulated, with less than a third of surveyed programs defining a method or process for controlling service term limits of employer members.
- Viewpoints on the inclusion of alumni as employer advisory board members varied among Phase 2 interview participants; however, the Phase 1 survey data did show colleges that reported having at least a small percentage (25% or less) of alumni employers participating on their employer advisory boards also reported a higher percentage of hiring by employers serving on those advisory boards.
- Over 80% of Phase 1 survey respondents confirmed the use of an agenda and formal structure in advisory board meetings, yet over 50% of Phase 2 interview participants conceded that it was difficult to engage employers to actively participate in these meetings, irrespective of the structure.
- There are differences in agenda and formal board structure between urban and rural community colleges, driven by college setting and allocation of resources.
- Nearly 90% of Phase 1 survey respondents and all Phase 2 interview participants believed having employers on advisory boards is positive for both the program's development and the employers' satisfaction with the college.

The general findings presented to this point from the Phase 1 survey and Phase 2 interviews provide insight into the design sample space used for examining the four research questions in the following section of this chapter. The four research questions were examined through the vantage point of a community college participant, under the lens of the theoretical frameworks of RDT, HCT, and collaborative workforce development partnerships, as expanded upon earlier in the literature review presented in Chapter Two.



## **FINDINGS SUPPORTING RESEARCH QUESTIONS**

The research questions for this mixed methods sequential multi-case study sought to describe, analyze, and interpret perceived and actual best practices developing and utilizing advisory boards as a method of collaborative engagement between college and community employers. The first two questions looked for benefits received by and provided by the community college through this collaborative arrangement with employers. The third question attempts to delineate key characteristics of a collaborative workforce development partnership between colleges and employers. The fourth question revisits the data collected throughout this study and the existing literature reviewed in Chapter Two, and uses emergent themes to guide the development of potential best practices discovered in this research design.

### **Coding and Analytics Guiding In-Depth Analysis of the Research Questions**

The data analysis conducted for examination of the research questions follows the analytical process for a sequential explanatory design defined by Creswell (2009 — also, see Figure 4 in Chapter Three of this dissertation). After careful review and comparative analysis of the Phase 1 and 2 datasets collected for this sequential explanatory research design, coupled with the examination of the general findings of the design space discussed above, a broad coding schema of 18 categories was generated from exploring Research Questions 1, 2, and 3. Those 18 coding categories were then fine-focused into four major themes to guide the subsequent in-depth analysis of best practices examined in Research Question 4. Table 3 summarizes the four research questions, the 18 defined coding categories, and the four major themes guiding the sequential explanatory data analysis of this mixed methods study.

Table 3: *Coding and Analytics Guiding In-Depth Analysis of the Research Questions*

RESEARCH QUESTIONS	CODING CATEGORIES	MAJOR THEMES
1. What benefit(s) (perceived and actual) does the college receive from engaging employers through program advisory boards?	Curriculum Significance to Community Telling the Story Validation Joint Philanthropy	Relevance Relationships Partnerships Accountability
2. What benefit(s) (perceived and actual) does the college provide employers from engaging through program advisory boards?	Community Service Positive Public Relations Monetary, In-kind Donations Advancing College Networks Acquiring Adjunct Faculty	
3. What are the characteristics of a mutually beneficial advisory board?	Grants & Funding New Technology Student Employment Feedback on Graduates	
4. What best practices can be replicated from this research?	Internships & Co-ops Soft Skills, Life Skills Faculty Training Faculty Externships	

*Four Emergent Themes Supporting Collaboration and Engagement*

An analysis of the Phase 1 survey data and Phase 2 interview responses using Excel and QDA Miner yielded word counts and generated plausible codes for thematic expression. As illustrated earlier in Table 3, significant survey data and interview keywords yielded a list of 18 defined coding categories fine-focused into four major themes. These four emergent themes support collaborative workforce development partnerships in college-employer advisory boards: relevance, relationships, partnerships, and accountability. Figure 13 below shows a comparative analysis of the strength of these emergent themes in this research design, based upon relative frequency in the Phase 1 survey and Phase 2 interview data.



*Figure 13. Comparative Analysis of Emergent Themes Supporting Collaboration*

### *Relevance*

All parties involved held a deference or concern for maintaining program or college relevance. Survey participants included relevance or mention of relevance in 88% of all write-in response answers. Relevance was the most commonly used word by interview participants — used over 60 times in unique responses by the Phase 2 participants. Each of the ten Phase 2 interview participants personally referenced relevance at least five times — followed by closely related keywords or phrases such as innovative, cutting edge, new, or current. References to relevance were used in equivalent capacity and frequency by faculty and administrators, across all geographic and demographic groups included in the research design.

### *Relationships*

Survey respondents indicated that forming relationships was the highest method of recruiting and engaging employers. In only a minority of cases (less than 6%), “other program relationships” surpassed CTE and WFD programs as a best method of engaging employers. Each of these minority cases were isolated to the southeastern Michigan region in the survey, and

specifically referenced “apprenticeship” relationships as a better method of engaging employers, over the college’s CTE or WFD programs. This difference was possibly caused by a localized regional interpretation or increase of apprenticeships.

Relationships was the second most common word used by Phase 2 interview participants — used at least four distinct times in responses provided by each of the ten Phase 2 participants. Both Phase 1 survey and Phase 2 interview participants used references to relationships to describe other existing institutional programs that help engage employers outside of advisory board participation, such as job fairs, career expos, open houses, career services, and promotional events held on campus.

Building relationships or creating relationships were keywords referenced by Phase 2 participants when responding to questions of recruitment and initial engagement with new employers. Relationship terminology appeared less in Phase 2 responses discussing how to sustain after initial engagement. Administrators communicated a connotation of relationships more frequently than faculty, emphasizing the key role faculty play in establishing good relationships with employers.

### *Partnerships*

Phase 1 survey and Phase 2 interview participants maintained a notable distinction between relationships and partnerships. Keywords connoting “relationship” were used to describe college-owned or college-managed functions or programs such as those listed earlier (job fairs, career expos, open houses, career services). Keywords connoting “partnership” described jointly owned or managed functions or programs, such as contract training, customized training, internships, apprenticeships, grant activity, and career and professional

development events. Partners and partnerships were keywords referenced explicitly when speaking about monetary and in-kind donations, adjunct faculty, and employer sponsored functions on campus. Faculty used or connoted “partnerships” when speaking about employers and advisory boards, and used terminology associated with positional “relationships” when speaking about involvement of college administrators on advisory boards.

### *Accountability*

Accountability preceded or followed keyword connections to partnerships, relevance, significance, or sustainment, yet had little or no connection when speaking of forming new relationships, recruitment, or involvement by “other college programs” (job fairs, career services, etc.). Of the ten Phase 2 interview participants, accountability was used more frequently (nearly 40% more often) in responses from administrators versus faculty when discussing employers. Faculty references to accountability were internalized to the college, whereas administration references were directed externally to employers.

### *Summary of Emergent Themes*

The four qualitative themes of relevance, relationships, partnerships, and accountability are interwoven within the survey and interview data of this sequential mixed methods study. Each of these four themes and the interactions between the themes support collaboration as perceived by the community college participants of this design sample space.

For each of the following research questions, quantitative data from the initial Phase 1 survey and qualitative interview responses from Phase 2 are provided as appropriate to support thematic analysis. Reference to significant keywords supporting the 18 coding categories in

Table 3 and the four major themes outlined above are highlighted as applicable in **[Bold Brackets]** at the end of Phase 2 interview responses to illustrate alignment or relationship of interview keywords with the coding schema used in the data analysis.

#### Research Question 1: Benefits Received

The first research question explored the benefits (if any), perceived and actual, that the college or program might receive from engaging employers collaboratively through program advisory boards. Three broad categories were considered: (1) benefits to curriculum, pedagogy, or course design, (2) monetary benefits, and (3) other potential benefits.

The Phase 1 survey data showed that a majority of respondents (over 90%) affirm realizing positive gains in each of the above three categories by engaging employers through advisory boards. The follow-up Phase 2 interview questions were used to identify specific characteristics of these benefits, and how employer advisory boards accentuated (or detracted) the benefits received by the college or CTE and WFD programs.

#### *Benefits to Curriculum, Pedagogy, or Course Design*

Over 91% of survey respondents indicated that employer involvement on advisory boards had a positive effect on curriculum, pedagogy, or course design. When asked in a subsequent write-in response question to describe or define the single greatest value received by the college or program from engaging with employers on advisory boards, keywords such as curriculum, pedagogy, course, program, or credential occurred in some manner in over 70% of all responses. Phase 2 interview participants were asked to elaborate on why they believed the topic of curriculum overshadowed jobs, funding or other pertinent challenges facing the

community college today. Three select responses that summarize the similar reactions of many

Phase 2 participants follow:

I want my employers to talk about our curriculum – I want them to tear it apart. They understand what today’s industry needs better than I do. And they bring a stronger voice than mine when talking to my peers. If someone from outside the system didn’t tell us to change the curriculum, I’m not sure we would ever change – we are too close to it, and don’t see the need for updates until much later... sometimes years later. I’ve been here for [X] years, and I know of some courses in [X] that have never changed, because no one ever checked up on the curriculum. **[Curriculum, Relevance, Industry Needs, Need for Change]**

Curriculum is the lifeblood of our college. Technology will become obsolete, and we can buy or secure replacements for that. And so can everyone else. But our core course outcomes, our way of doing things is what sets us apart from other schools, from corporate trainers, from universities. I want students to come here because they are learning the most relevant, cutting edge way. I want “real-world application” in the classroom. **[Curriculum, Relevance, Technology]**

Being relevant and responsive. That is a big part of our college culture, and it includes curriculum. Curriculum defines the student experience; it defines their [students’] value to employers. Most of our full time faculty no longer work in the private sector, and need a way to stay current. They need outside help setting priorities for the program. **[Curriculum, Faculty Training, Relevance]**

One interview participant provided a word of caution regarding the involvement of employers in planning and revising curriculum, sharing the following sentiment:

I appreciate our employers’ involvement. But sometimes they need to be reminded that the bag is only so big... we cannot be all things to all employers. There have been times where we open a course outline for discussion, and end up talking about five things the course doesn’t do but should – things that aren’t even a part of the course or even our program. Sometimes the suggestions employers make aren’t exactly correct, and it leaves me wondering if we are making improvements, or watering down our materials. **[Curriculum, Relevance, Improvement, Validation]**

### *Monetary and In-Kind Benefits*

According to the Phase 1 survey, having participation on employer advisory boards had little effect on monetary funding of the college or program by employer partners. For the

survey, “monetary funding” was defined as restricted dollars, unrestricted dollars, or financial donations other than “in-kind”, defined as materials, equipment, or other non-pecuniary resources. When asked if they perceived that an employers’ participation on the advisory board was a key determining factor for employers to contribute monetary funding, less than 25% of Phase 1 respondents agreed. An additional 38% of Phase 1 respondents were neutral on this specific question, and provided write-in comments with their responses. The three most common write-in responses are paraphrased below in rank order of occurrence:

1. Our employers prefer to contribute in-kind or through our college foundation.
2. Our employers donate money to the college, not a specific program.
3. Our employers are not in a financial position to donate money at this time.

One Phase 2 interview participant elaborated on why the question of monetary funding through advisory boards received a neutral reception, stating:

We typically do not ask our advisory board members for money... we rarely bring up the topic of money in the advisory meetings. They [employers] come to the college, they live in the area, and they know our financial position. If they have a way to help, it is often by donating materials for labs, helping us buy or leverage technology or equipment... and they will offer to do these things often before I ask. I can recall only once where we did share some financial challenges with our advisory board, and afterwards one of the members came up to me and said, “We all have money problems — don’t tell me yours unless you want to hear mine.” It might be something to consider revisiting, but I think it would depend upon the strength of the relationship [between employer and college]. **[Monetary & In-kind Donations, New Technology, Relationships, Accountability]**

The solicitation of in-kind donations from employer advisory board members received a much more positive response in both the Phase 1 survey and the Phase 2 follow-up interviews. For the survey, “in-kind” was defined as any resource that was not considered cash or directly



convertible to cash money. Examples provided in the survey question included equipment, materials, and guest lectures. When asked if they perceived that an employers' participation on the advisory board was a key determining factor for employers to contribute in-kind donations, over 62% of Phase 1 respondents agreed. The Phase 2 interview participants supported this position, as seen by the earlier response above. Another interesting (and passionately delivered) position held by one of the Phase 2 interview participants is shared here:

Historically we have avoided asking for money from our advisory board members, believing their contribution of time and knowledge was enough. However, we are strongly reconsidering this approach. Employers want our students to use advanced technology, advanced machines – we have no issue with incorporating these into our program if it makes sense. But the employer needs to have some skin in the game. If an employer shows up pushing a new piece of technology as a must have, I challenge them to help us get it, help supply raw material... don't come here and assume the college can buy whatever you think is going to make your company more competitively advantaged – you [employer] need to support the innovation. Nothing is free in this relationship. **[Monetary & In-kind Donations, New Technology, Relationships, Partnerships, Accountability]**

### *Other Benefits*

Phase 1 survey respondents indicated that the greatest benefit employer advisory board members provide value is in the form of new ideas or exposure to new technology. This survey question received the highest overall affirmative response (over 92%) in the “benefits received” category, surpassing curriculum support, monetary and in-kind support, and any other forms of support identified by respondents' write-in responses. In a subsequent write-in response question where respondents were asked to describe or define the single greatest value received by the college or program from engaging with employers on advisory boards, keywords and phrases including “new ideas” and “new or current technology” came in second

only to references to curriculum and course design when based upon frequency. A Phase 2 interview participant summed up the comments of the majority with this response:

I would expect this in today's environment. With all the pressures to perform, to close the skills gap, to graduate functional contributors to the workforce on time, everyone is chasing the "new" or the "innovative" approaches to education. At the rapid pace of change in technology today, falling behind means failing.... Relevance rules the day.  
**[New Technology, Relevance, Accountability]**

Phase 1 survey responses about perceived "other benefits" captured the interest of Phase 2 interview participants. The list below, which incorporates ten of the 18 coding categories (see Table 3 for full list) extracted from the Phase 1 survey, shown in rank order of highest to lowest percent relative frequency, was shared with Phase 2 interview respondents when discussing perceived "other benefits" of engaging with employers on advisory boards:

1. Providing students with employment (20%).
2. Making us [college] relevant or significant to our community (15%).
3. Supporting us with adjunct faculty, training for full time faculty (13%).
4. Telling our story (12%).
5. Increasing our (social, political, talent) network (10%).
6. Internships or Co-op opportunities for our students (8%).
7. Real-time feedback on our graduates (8%).
8. Interviewing, soft skills, life skills practice for our students, when they [employers] visit campus (7%).
9. Externships for faculty (3%).
10. Validating the existence of our program at the college to administrators (3%).

Below are several notable excerpts collected from the ten participants of the Phase 2 interviews, after reviewing the list of ten "other benefits" outlined above and asked their

insight of what these “other benefits” employer advisory boards might provide the college.

Relationship of significant keywords to the relevant coding categories and major themes is identified in **[Bold Brackets]** as appropriate under each Phase 2 interview comment.

Regarding the benefit of student employment, from an urban college participant:

Many of my WFD students already have jobs, so employment is not as big a driver for us. We are glad that our advisory boards like our students; but usually our students are already employed, so the advisory board members don't come here just to hire students. I actually think that's a plus — not having the employers “expect” that they will leave a meeting with a list of students' names for hire. **[Student Employment, Advancing College Network, Community Significance]**

Contrasted with a rural participant's comments on student employment:

We are the sole source provider of education and training in the region. Our company partners can't afford to go it alone. If someone stays local, they come to us. Employers participate on our advisory boards to help us define and refine the workforce. It's a partnership, not a service. We have students, they need workers. It makes sense to work together, to get everyone working again. **[Student Employment, Partnership, Community Significance, Accountability]**

Below, a Phase 2 participant shared a comment regarding relevance to community:

That's really what it's all about — being relevant and responsive to the community. If we all [employers and college] come together and do our best, then that's what's truly best for our community. It's a lot easier for senior leadership of the college to do their job in the community [raising funds, promoting programs, etc.] when we have the backing of the employers — their opinion can make or break us.... In a sense, we can do the same to them, to the whole community, if we don't stay relevant and responsive.

**[Community Relevance, Positive Public Relations, Validation, Accountability]**

Regarding support and training for faculty, supplying of adjunct faculty:

You've probably heard it said that faculty are the backbone of the program... well how smart is it to not support your backbone? We welcome SMEs [subject matter experts] as adjunct faculty — who better to teach a class than the person who uses the equipment every day, in a real job application? I have several of my employer advisory board members serving as adjunct faculty. When we talk about curriculum or equipment, there is usually nothing to debate, because everyone at the meeting has a shared experience. And my full time faculty get to train or refresh for free, just by hanging out

around the adjuncts. Employer support [with adjuncts] has really made a difference here. **[Adjunct Faculty, Curriculum, Faculty Training, Relevance]**

Regarding telling of our story:

This is the biggest indirect benefit, I think, of successfully engaging and working with our employers. We need help penetrating the nontraditional workforce — the people who hang out with our employers all day. If I can get an employer to take back some good information to his employees or if I can get him to tell another employer — the return is [exponential]. Think about it: two hours on campus can deliver a training opportunity, maybe a certificate, sometimes even an associate student. With the nontrads, it might be more than one [student]. That's a good ROI [return on investment]. **[Telling the Story, Validation, Positive Public Relations]**

Another perspective on telling the story of the college:

We need help telling our story. Competition for attention is getting harder. Students have more choices, and workers aren't always looking in the right places for help. Word of mouth still goes a long way in our community. My employer partners are free advertising. Positive exposure to employers is vital for students and the program. **[Telling the Story, Validation, Positive Public Relations, Community Significance]**

A contradictory position on benefit of real-time feedback of graduates:

I prefer to not talk too much about the highs and lows of recent graduates with our employers. You hope they [employers] guide your program in a direction that helps your students gain jobs. But often I find they can't separate their personal agenda from the objectives of the program. They basically use stories about recent grads to steer you, to convince you to run your program like their own training facilities. **[Telling the Story, Feedback on Graduates, Validation, Accountability]**

Regarding benefits related to interviewing, soft skills, and life skills for students:

Our employers interview students as part of the advisory board meeting. Sometimes a board member will offer to come back and give a session or talk about how to interview, how to dress for the interview, how to talk to management. It's a great chance for our employers to test drive some students, and it frees up some of our resources for other things. Plus, we have observed that students will listen to employers over faculty on some of these topics. **[Telling the Story, Soft Skills, Life Skills, Feedback on Graduates, Positive Public Relations]**

Regarding perceived benefit of providing externships for faculty:

We actually have a faculty externship program, and have had it for several years. It is not overly popular, partly because it is in the summer, and mainly because faculty currently don't get paid to participate. But we do have a couple of faculty who regularly go out each summer.... it's a great benefit for those faculty who can use it, and we really appreciate the partnerships that have allowed it to happen. I think it [externships] would get used more if we had funding to support it. **[Faculty Training, Faculty Externships, Partnerships]**

Regarding increasing our [college's] (social, political, talent) network:

Occupational programs need to be out in the community more than other parts of campus. Our jobs require a strong talent network for adjunct faculty, a strong social network for communicating with underrepresented student populations. Everyone thinks they know something about education because they went to school... that creates some challenges. We need a strong network to overcome some of the perceptions about our programs, our college. Telling our story is important, but we need to make sure the right people are hearing it. **[Telling the Story, Advancing College Network, Positive Public Relations, Community Significance, Relevance]**

Regarding validation of the program at the college:

I believe our program would not move forward without our employers on advisory boards. We are fighting for budget dollars, just like everyone else. But we seem to be in more of a bubble than the [liberal arts and science] programs. My [leader] has a [liberal arts] degree; he is not a technical person. He does not understand why we need such expensive equipment, or expensive lab supplies, or why we even have labs. But when a group of local employers comes in and says "why aren't you doing more here" it gets noticed. He [the leader] might not be technical, but he understands our students need the skills for the job. **[Telling the Story, Feedback on Graduates, Validation, Community Significance, Relevance]**

### *Summary of Benefits Received*

- Both the Phase 1 survey and Phase 2 interview data suggest colleges stand to receive many benefits by engaging with employers through program advisory boards, most notably the ability to stay current with employers' needs.
- The exposure to new ideas and technology through employer engagement, coupled with employers' support updating curriculum were the two benefits most valued by survey and interview participants.
- Direct monetary benefits from employers were not as highly realized as in-kind donations of equipment and materials; however, there is a perceptible shift in

philosophy on utilizing advisory board interactions with employers to solicit financial support in the current fiscal environment.

- Other perceived benefits noted in the Phase 1 survey responses, supported by Phase 2 interview comments included: (1) providing students with employment, (2) making programs relevant or significant to the community, (3) supporting programs with adjunct faculty and training for full time faculty, (4) “telling” the program or college story to the community, (5) increasing the social, political, and talent networks of the college, (6) providing internships or co-op opportunities for students, (7) providing real-time feedback on graduates, (8) providing soft-skills and life-skills opportunities for students, (9) providing externship opportunities for faculty, and (10) validating the existence of CTE and WFD programs to college administrators.

## Research Question 2: Benefits Provided

The second research question looked at the benefits (if any), both perceived and actual, that the college or program might provide employers from engaging collaboratively through program advisory boards. Three broad categories were considered: (1) effect of engagement on employer satisfaction with program and college, (2) responsiveness to employer needs, and (3) other potential ways employer support might be reciprocated.

The Phase 1 survey data disclosed that a majority of respondents (over 80%) believe employers that actively engage through advisory boards do receive at least some benefit in the above three categories. The Phase 2 follow-up interview questions were used to identify specific characteristics of these benefits, and perceptions of how employer advisory boards accentuated (or detracted) the benefits received by the employer.

### *Effect upon Employer Satisfaction*

When asked their perception in the Phase 1 survey, 85% of respondents felt (47% agree, 38% strongly agree) that active participation by employers on their advisory boards had a positive effect on employer satisfaction with the college. When asked in a subsequent write-in

response question to describe or define the single greatest measure of successful employer engagement on advisory boards, references or keyword connotations to employer satisfaction, satisfaction surveys, and positive employer feedback on programs were noted in over 55% of all responses. Phase 2 interview participants were asked if employer participation on their advisory boards influenced employer satisfaction. Following are two Phase 2 interview responses illustrating the impact of communication and positive relationships on employer perception and satisfaction.

The first response, given from a faculty perspective:

My employers in this area are pretty blunt.... they don't mix words. I think having the employers come in at least twice a year to see what we do and why we do it — that really helps with their perspective of us. They might arrive at the meeting ready to tear us up on using old equipment or wasting time on outdated practices, but if they come in and get a chance to understand the big picture, they usually leave supporting us. **[Telling the Story, Relevance, Positive Relationships, Accountability]**

The second response, shared from an administrator's perspective:

The employers that participate in our advisory boards are heard loudest by the faculty. I attend business meetings and conferences, but I am there to represent the whole collection of programs at the college, not an individual program.... I can't answer to all of it anyway — it [program] is driven by the faculty. And companies know that. They want to talk to the faculty — they know the faculty are the experts. I think you could say that the employers who engage directly with our faculty on a regular basis are most satisfied with what we do here. **[Accountability, Validation, Advancing College Network]**

### *Responsiveness to Employer Needs*

The greatest employer need identified in the survey was related to “student output” — nearly 95% of all responses referenced providing graduates, providing training, or providing future employees. Very few employer needs outside of those directly correlated to employees or employment surfaced in the Phase 1 survey responses. Phase 2 interview participants were

asked to comment on this perception, and provide any other examples of how or where engaged college programs might be responsive to employer's needs beyond student output.

One faculty member shared this perspective:

Right now, employment and employees is what it's all about. Occasionally we might help research a problem, or a piece of equipment, or run a test here for a smaller company. But they don't seem to want our know-how as much right now — they want our students. **[Student Employment, Relevance, New Technology]**

Another faculty member from a different college shared a similar viewpoint:

The first thing out of the employer's mouth is "you are not graduating enough people." Our [leader] just finished explaining our enrollment challenges, our funding challenges. That relationship [enrollment and graduation] is not always understood by the employers. They think we are telling students to transfer to you [the university], to not go to work. The primary focus is all about how to get more workers. **[Student Employment, Telling the Story, Validation, Positive Relations, Relationships]**

An administrator, from the same college as one of the two faculty above, shared:

Employees are a hot commodity right now. All that are left in the job market are the chronically unemployed, or people with the wrong skills set. And I think that's what the employers are sometimes trying to say, but maybe it's not heard the right way. When they say they can't find anybody, it might mean they can't find anybody they want on the outside. We are encouraging them to look inside. I can't force a 20-year old [student] to become a machinist, but I can train your 10-year employee to become one. **[Student Employment, Partnerships, Validation, Relevance]**

Validating the Phase 1 survey, only two of the ten (20%) Phase 2 interview participants were able to provide examples of how or where engaged college programs might be responsive to employer's needs outside of referencing jobs, employees, or employment. A follow-up verification to an earlier interview response (i.e., a member check) provided the researcher the chance to ask one mid-level administrator why the topic of employer needs might have been so one-dimensional, focused solely on employment. The administrator provided this response:

These are cyclical events. The last recession caused a similar pattern. What will be interesting is what happens to the surge of apprentices, certificate holders, two-year



graduates when the job market turns again. Will they survive, or will they have to return to us [college] to finish out a degree? We need to be ready to respond to all scenarios. **[Student Employment, Feedback on Graduates, Relevance, Community Significance]**

### *Other Ways Support is Reciprocated*

As stated in the section above, the Phase 1 study data and Phase 2 interview responses focused upon supporting employers with their employment needs. Below are three other ways in which college participants felt they reciprocated support of employers, in rank order of occurrence within the Phase 1 dataset and Phase 2 interviews:

1. Positive public relations between employer and community (30%).
2. Opportunities for joint philanthropy or community service projects (18%).
3. Mutual interest in securing external grants and funding (8%).

One Phase 2 interview participant pointed out that even this above list could still be construed as indirectly related to jobs or employment, and offered the following comment:

This is our role [to teach] and that is their role [to hire]. When it works, everyone is happy. The best way to keep it working is to stay in communication. Our employer advisory board members are also our market signal. If they stop complaining about not having enough graduates, or not being able to find enough employees, then we know something has changed. **[Relevance, Feedback on Graduates, Student Employment, Validation, Accountability]**

### *Summary of Benefits Provided*

- All of the above benefits discovered as part of Research Question 2 were related directly or indirectly to the ability of an employer to secure and sustain employees for a viable workforce.
- The current socioeconomic and political climate places strong emphasis on meeting the needs of the workforce. The programs and colleges studied in this sample space believe they provide engaged employers with benefits supporting their workforce, and therefore increase the employers' satisfaction with the college.

- This increased satisfaction also comes from greater interaction with faculty, greater access to students and graduates, and greater opportunity for community colleges and employers to work together to (1) positively improve public relations with the community, (2) perform joint community service projects, and (3) work collectively to secure external grants and funding.

### Research Question 3: Characteristics of Collaboration

The third research question sought to identify the key characteristics of a mutually beneficial or collaborative employer advisory board. The characteristics were classified into three main categories: (1) composition of a collaborative advisory board, (2) operations of a collaborative advisory board, and (3) metrics or outcomes to determine collaborative value.

The topic of effective collaboration is subjective, based upon perception of the college participants in this study; therefore, much of the supporting data for Research Question 3 was derived from the qualitative Phase 2 participant interviews. As prescribed by a sequential explanatory design, the Phase 1 quantitative survey data served as a baseline for collecting and investigating evidence of the perceptions about collaborative advisory boards within the design sample space. As stated earlier, the ten Phase 2 interview participants were chosen for the study based upon their equitable representation of the survey sample space, so that they might provide deeper context and understanding to the Phase 1 survey data. To frame Research Question 3, the Phase 2 interview participants were provided the working definition of collaboration found in Chapter One of this study, and asked to consider their personal experiences in the context of that working definition when responding to questions.

#### *Composition of Collaborative Advisory Boards*

As presented in the summary of general findings earlier, survey respondents indicated that: (1) composition of employer advisory boards is not explicitly defined, with fewer than half

of surveyed programs defining or documenting guidelines for employer membership, or methods for employer recruitment, (2) a process for establishing service term limits for employer members is not clearly established, with less than a third of surveyed programs defining a method or process for controlling service term limits of employer members, and (3) at least some amount of program or college alumni serve as employer representatives on advisory boards, yet viewpoints on the inclusion of alumni as employer advisory board members varied.

Phase 2 interview participants were provided a summary statement of the above general findings and asked if any of these factors might help or hurt the collaborative nature of an employer advisory board. Participants were also asked to suggest other compositional factors that might improve or inhibit the creation of a collaborative advisory board. The results of this inquiry are summarized below in Table 4. The top three entries listed in the table are derived from the Phase 1 survey; the remaining entries are generated from analyzing Phase 2 interview participants' recommendations.

Table 4: *Perceptions on Composition of Collaborative Advisory Boards*

COMPOSITION FACTORS INFLUENCING EMPLOYER ADVISORY BOARD	PROVIDES OR IMPROVES COLLABORATION	PREVENTS OR DETERS COLLABORATION
Recruitment Practices (survey)	Controlled process	No defined process
Service Term Limits (survey)	Short term, renewable	No defined term
Alumni Participants (survey)	Fewer is better	Greater than 25%
Ideal Advisory Board Size – Total Count	9 - 15 total	< 6 or ≥ 15 total
Number of Employer members	Min 40 %: 3 - 6 at one time	< 3 or ≥ 8
Number of Faculty members	Max 50%: 3 - 5 Full Time 1 - 3 Adjunct	< 3 or ≥ 8
Number of Administrators	Max 10%: 2 - 3	None or only 1 or ≥ 4

COMPOSITION FACTORS INFLUENCING EMPLOYER ADVISORY BOARD	PROVIDES OR IMPROVES COLLABORATION	PREVENTS OR DETERS COLLABORATION
Relative Age Difference of Participants	Within +/- 10 years	> 15 - 20 years
Employer Job Titles	Engineer, Nurse, etc. Managerial positions	H. R. or Recruiter Owner, President
Administrator Job Titles	Dean, Asst. or Assoc. Dean Program Coordinator	Formal title above Dean (without special cause)
Relative Diversity (Gender, Race, etc.)	More diversity is better	No or low diversity

The ten participants of the Phase 2 interviews collectively contributed to the list of compositional factors above. Following are some specific comments that helped frame the parameters for collaboration shown above in Table 4.

Regarding ideal board size and mix of membership, from a Phase 2 participant representing a larger suburban college:

We try to keep our boards at 12 to 15 total people. Too many more, and we find people “hiding” and are not engaged; too few, and we tend to see a halo effect, where only one or two voices lead the meeting, and others are afraid to speak out. When possible we like to have more employers than faculty, but that is driven by who shows up that day. Faculty prefer to only have one or two administrators in the room at a time; otherwise it seems the employers talk to the administrators versus the faculty.

Another comment regarding ideal board size and mix of membership, from a smaller program perspective at a rural school:

I try to pair up two or three employers with two faculty during small breakout sessions. So the number of faculty in the program usually dictates the size of the advisory board. Employers have responded positively to the smaller size, and they usually share the best information directly to the faculty in the breakout sessions. They like the personal attention.

A comment on relative age difference, from a Phase 2 participant justifying the boundary width suggested for members’ age differences:

This has just recently become a bigger issue. Many of my advisory board members are getting older, several are retired, and they don't seem as comfortable talking with the younger faculty about new technology. The faculty want to use 3-D printers in the lab; my advisory board members don't all have cell phones. Part of this is generational differences, but a larger part is comfort with technology.

In regards to job titles, one Phase 2 interview participant shared the following:

We want our faculty talking to the end users, or the direct managers of those users. I try to discourage recruiters or HR from joining our boards unless our [leader] promotes their membership. I also stay away from owners, unless it is a smaller company that doesn't have as many layers of management. I want our advising to be as close to the action as possible... I remind our companies that this [advisory board meeting] is not a job fair – send someone who can help us help you get better.

Another participant shared a viewpoint of job titles, from within the college:

My [leader] is a great person, but [he] is spread too thin. So when he attends these meetings, if an employer asks a question, he tends to commit before checking with our program on resources. I understand he wants to appear responsive to their [employer] needs, but the college is getting too big for him to know all the specifics all the time. When he is not there, we are able to say, "We have to talk to [him, the leader] first" and we can leverage our position. Doesn't work if he's sitting in the room, because they [employers] usually want an answer now.

### *How Collaborative Advisory Boards are Operationalized*

In the general findings, it was discovered that the majority (over 80%) of survey respondents (1) conduct advisory board meetings that are highly structured, often following a prescribed agenda, (2) hold their advisory meetings at the college, and (3) try to keep the meeting timeframe to approximately two hours.

Phase 2 interview participants were again provided a summary statement of the above findings, and asked if any of these factors might help or hurt the collaborative operation of an employer advisory board. They were also asked to suggest other factors that might improve or inhibit the operation of a collaborative advisory board. The results of this inquiry are

summarized below in Table 5. The top three entries listed in the table are derived from the Phase 1 survey; the remaining entries are derived from Phase 2 participant recommendations.

Table 5: *Perceptions on Operation of Collaborative Advisory Boards*

FACTORS INFLUENCING EMPLOYER ADVISORY BOARD OPERATION	PROVIDES OR IMPROVES COLLABORATION	PREVENTS OR DETERS COLLABORATION
Structured Meeting Format; Follows Prescribed Agenda (survey)	Agenda to maintain general flow and direction, but does not dictate pace or limit possible topics	No defined agenda – “freewheeling” or overly prescriptive agenda – no room for discussion
Meeting Held at College (survey)	Held in space or visits spaces in college relevant to program (e.g., specific lab, classroom)	Held offsite or in boardroom or remote conference room
Two Hour Meeting Length (survey)	Two hours with opportunity to run over if needed	Less than 2 hours, greater than 4 hours (not including meal)
Ideal Time of Day for Meeting	Mid-morning	Late afternoon, evening
Ideal Day of Week	Mid-week	Monday or Friday
Ideal Time of Year	≥ 2x year, near middle of term(s) with students present and available for interaction with employers	Only 1x year, too early or too late in term, or when all students off campus
Use of Technology	Minimal use of presentations, balanced with tangible examples	All PowerPoint; All conducted remote by www
Use of Rules, Collection of Records	Secretary captures notes, flexible use of meeting format familiar to all involved	No rules (“freewheeling”); Strict Robert’s Rules; No meeting notes
Who “owns” the meeting	College or joint ownership	Only college ownership
Who “leads” the meeting	Employer or Joint leadership	Only college leadership
What is generated in the meeting	List of follow-up activities and tasks; Possibly some solutions identified during the meeting	Immediate solutions required; Little or no follow-up; No assignments or tasks

The ten participants of the Phase 2 interviews collectively contributed to the list of operational factors above. Following are some specific comments that helped frame the parameters shown in above in Table 5.

When explaining the value of a “loose” agenda, one participant shared the following:

Agendas are necessary to keep the meeting progressing. But I encourage my faculty to write the agenda in the form of three or four questions, not 10 or 15 statements. We find that this helps everyone question what we are discussing – that is really why we [college] brought them [employers] in, to question what we are doing. If I say “enrollment trends” you might listen to me talk, you might look at your cell phone.... If I ask, “why is my enrollment dropping?” and you need employees from me, you sit up and pay attention.

The questions also give a starting point for other discussion, so having a few good questions on the agenda is often more valuable than having a whole day’s worth of prepared presentations.

A different perspective on agendas and structured timelines, provided by a large urban college participant:

This is just an observation, but many of the employers we work with come from big companies. They seem trained to have to get through everything on the meeting agenda in the time allotted. We might be getting to a real breakthrough, and one of them [employers] will check his clock against the agenda, and say, “time to move on to the next topic.” I prefer going deep on a valuable topic versus getting through everything, so now I factor in some recovery time on my agenda.

A comment on choosing an appropriate meeting location follows:

In an ideal situation, we would like to visit each of our employers, have them take turns hosting the advisory meetings. But that doesn’t work right now for several reasons: (1) resources — time and travel expenses to multiple locations don’t fit our model right now; (2) several of our smaller employers would struggle hosting a large group in their facility for the day; (3) NDAs — a lot of our partners work in similar industries, and it would be difficult to agree on what is off limits to competitors. Plus, I want them at the college, I want them to see what we have and don’t have, so they really understand what my faculty are working with.

Regarding the time of year, time of day, time of week, as characterized by a large urban college administrator:

We have been experimenting with this a little. Traditionally our meetings were held around a Friday lunch, as an incentive to participate.... plus we knew a lot of our employers took the afternoon off, and preferred a Friday. Then we started to notice a drop in attendance, and that employers are working differently. They need to be in the office more on Monday and Friday, so we moved our meetings to a Tuesday or Thursday meeting over brunch. We try to hold the meetings in the later half of the term, before faculty get busy with final projects or final exams. It depends upon the program, but right now our sweet spot is Tuesday, 9 to 11, over a light breakfast brunch.

An interesting comment regarding the minimal use of technology follows:

It's pretty straight forward — if we have technology out, so will the employers. If my faculty are pulling up files on computers, then I can look around the room and see them [employers] opening laptops or pulling out phones. So we only allow the projector computer and a jump drive. We even remind everyone to silence all cell phones just like the movies. Two hours is not that long to go without technology.

When discussing the subtleties between owning the advisory board and leading the advisory board, one interview participant shared this distinction:

My program coordinators understand they own the advisory board. Anything program related that comes out of the board, good or bad, is their responsibility. They are 100% accountable. But I don't want it [meeting] to turn into a show and tell. So I encourage the coordinator to let someone else lead the meeting. If an employer will lead — great, if not, let another faculty lead the meeting. I want that separation between owner and leader, to help create that sense of accountability.

Regarding the outputs — the information or tasks generated during the meeting — a mid-level administrator shared this comment:

It took me several years to impress upon my faculty that we are not trying to solve all the problems in the meeting. We are meeting to identify the problems, and possibly brainstorm some solutions. Two hours is barely enough time to cover the material, let alone solve all the issues. And I want real solutions, not hunches.

Another administrator shared a similar thought, incorporating the importance of meeting notes:



We have a staff secretary take meeting notes, and I make all the [administrators] in the room take notes as well. We then publish out all the versions of the notes, to compare for themes and differences. The key point of these meetings is to listen. You might hear things differently than me, so I want as many versions as possible to compare against. I don't want to react to one interpretation, and I certainly don't want to react to memory. Before we make a big change, we will often run the proposal back through the advisory board, to make sure we got it right. And we will include what we thought was said at the meeting with the response, because sometimes they [employers] forget too.

### *Metrics or Outcomes to Determine Collaborative Value*

The Phase 1 survey asked respondents if they currently did anything to evaluate successful employer engagement. Of the 60 responses, the most common answer was “no” or “nothing” (48%). Others referenced student placement (22%) or program enrollment (9%) as indirect measures of collaborative success. Approximately 18% pointed to employer evaluations or employer surveys conducted by the program annually or as part of the advisory board meetings as a possible indirect indicator of collaboration.

The ten Phase 2 interview participants also provided few objective metrics for determining collaborative value. When asked to comment on the above provided Phase 1 survey results, 80% questioned the validity of student placement or program enrollment as a measure of employer engagement, but rather a measure of “college performance, irrespective of collaboration with employers.” Those Phase 2 interview participants that actively used a program survey did not believe the current questions on their survey provided a true measure of collaboration, but rather an indirect relationship with employer satisfaction. One Phase 2 participant shared this insight about their current employer survey:

Our employer survey is designed to work with the Perkins requirements. Perkins requires our employer advisory boards, but they [Perkins] is concerned about the money; the questions want to know how monies were allocated, and they are less concerned about collaboration.

Another administrator participant had a similar viewpoint about Perkins survey data and the validity of a survey metric in general:

We collect data for Perkins, it's a requirement for our funding. But it doesn't answer your question about collaboration. I'm not sure an employer survey would answer the question, because it [collaboration] is based upon our perspective. You might hire all my graduates, and be very satisfied because you hired all my graduates, but we may have never collaborated — it's possible we never spoke. That's not collaboration, that's luck. It could be bad luck — you get no grads and give poor satisfaction ratings with the college... that still doesn't translate cleanly into collaboration. When I think of collaboration, I think of partners, not producers or vendors. I think a count of employer partnerships — big or small — is a better measure of collaboration.

An administrator in a different college environment had this position, when asked of the value of a metric to determine collaborative value of their partnerships:

I'm not sure what a metric would tell me. There might be some correlation to it, but no cause. What would it tell the program? I think of collaboration as more of an input or a requirement than an outcome. We know if we don't collaborate that our employer satisfaction goes down, that we miss out on information or new opportunities. I think we accept collaboration as part of our culture, one of our values, something that we must do to be relevant and responsive.

### *Summary of Collaborative Characteristics*

Research question 3 provided guidelines collected and derived from Phase 1 and 2 research participants on composition and operation of collaborative employer advisory boards. Summarized in Tables 4 and 5, these guidelines, when examined with the general findings and findings outlined in Research Questions 1 and 2, have established a working understanding of characteristics that improve or inhibit collaboration as perceived in this design sample space, and have created a platform for discerning potential best practices in Research Question 4.

#### Research Question 4: Potential Best Practices

The fourth research question sought to discern any best practices that could be transferred from the sequential explanatory design space of this mixed methods study. Based upon survey and interview responses collected and examined in this study, the ability to define objective quantitative metrics for collaboration has proven challenging for community colleges participants. As a result, nearly half (48%) of the Phase 1 survey participants admitted to doing nothing to objectively measure the success of employer advisory boards. As shown above in Research Question 3, that position was supported by Phase 2 interview participants, who also had little or no objective evidence to defend perceptions or stated recommendations as objectively quantifiable “best” practices.

The lack of widely recognized advisory board metrics also impeded an objective, quantitative measure of defining best practices during this study. Therefore, to accomplish Research Question 4, the Phase 1 survey and Phase 2 interview data were reexamined post-hoc for congruence with the existing research and literature presented in Chapter Two. Prevalent themes and guidelines that support the creation and sustainment of collaboration and engagement between employers and community colleges, as viewed through the perspective of the community college participants that contributed in this study and in the existing literature were used to generate a summary of suggested best practices. This secondary analysis utilized Tables 4 and 5 derived from Research Question 3 as a baseline. The summary of suggested best practices is outlined below in Table 6. This table will be used in Chapter Five to suggest best practices transferrable from this research design to employer advisory boards and collaborative workforce development partnerships.

Table 6: *Proposed Best Practices — Collaborative Employer Advisory Boards*

PROPOSED BEST PRACTICES	PARAMETERS ENCOURAGING COLLABORATION
Employer Recruitment Practices	Define and document a controlled, enforceable process. Require vetting process, requiring program pre-approval. Establish a “wish list” of potential industries. Establish a metric of one new member, new company per year.
Employer Acceptance Criteria	Define and document a controlled, enforceable process. Require vetting process, requiring program pre-approval. Establish metrics (attendance, etc.) to encourage adherence.
Service Term Limits	Define and document a controlled, enforceable process. Establish a service limit that aligns with meeting frequency. Allow opportunity for renewals, with program approval. Establish metrics (attendance, etc.) to encourage adherence.
Proposed Composition	Ideally 9 - 15 total persons; varies by program size and location.
Number of Employer members	Min 40% of total e.g., 3 - 6 employers at one time
Number of Faculty members	Max 50% of total e.g., 3 - 5 Full Time Faculty e.g., 1 - 3 Adjunct Faculty
Number of Administrators	Max 10% of total e.g., 2 - 3 (includes secretary or note-taker)
Number of Program Alumni	0 - 25% of total employer representatives.
Proposed Employer Participants	Engineer, Nurse, etc. “Subject Matter Experts” Frontline Managerial positions.
Proposed College Participants	Faculty — Full time and Adjunct “Subject Matter Experts” Admin — Program Coordinator, Dean, Ass’t. or Assoc. Dean.
Schedule Structure	≥ 2x year, near middle of semester term(s), with students present and available for interaction with employers.
Meeting Location	Meetings held in space or visits space(s) in college relevant to program (e.g., program-specific labs, classrooms).
Meeting Length	Two hours with opportunity to run over if needed; max 4 hours.
Meeting — Day of Week	Mid-week, avoiding Mondays or Fridays.
Meeting — Time of Day	Mid-morning, preferably over breakfast or brunch.
Structure and Agenda	Prepare an agenda to maintain general flow and direction, but do not dictate pace or place limit on possible topics. Format agenda items as questions to stimulate attention. Include opportunity for breakout sessions or focus groups led jointly by faculty and employers. Close meeting with list of action items and assignments.

PROPOSED BEST PRACTICES	PARAMETERS ENCOURAGING COLLABORATION
Use of Technology, Presentations	Limit technology to one or two presentation devices. Presentation must be flexible to accommodate engagement. Limit use of cell phones and devices (allow breaks). Be respectful of different technology aptitudes.
Capturing Meeting Notes, Records	Use a dedicated secretary or professional assistant. Have multiple note-takers for multiple perspectives. Share and review notes within the week of meeting. Provide meeting notes to employers and solicit feedback.
Outcomes Generated	List of follow-up activities and tasks, team assignments. Possible solutions identified during the meeting, but not completely resolved during the meeting without research. Timeline for follow-up review and completion.
Meeting Ownership	Program Coordinator and Program Faculty or joint leadership. Meeting owner (responsible party) should not lead meeting.
Meeting Leadership	Preferably led by employers, or jointly by employer and faculty. Meeting owner (responsible party) should not lead meeting.

## SUMMARY

Chapter Four presented the data collected in this sequential mixed methods multi-case study. A representative sample of 60 community college participants from 25 of the 28 community colleges in Michigan participated in an online survey. The survey data was reviewed with ten self-selecting interview participants, chosen as a convenience sample to provide rich contextualization of the survey results, for qualitative coding and deeper thematic analysis. General findings and findings specific to each of the research questions guiding this study were presented.

Chapter Five will provide conclusions of the data analysis presented here, implications for developing best practices, and recommendations for further research.

## CHAPTER FIVE: FINDINGS, RECOMMENDATIONS, AND CONCLUSIONS

### **INTRODUCTION**

This chapter provides a summary of the study completed herein to identify and evaluate perceived benefits of collaborating with employers in community college CTE and WFD advisory boards. It begins by summarizing the study purpose and research questions. The analysis completed in Chapter Four is then used to present major findings and recommendations, including implications for developing best practices, and recommendations for further research in this research design space.

### **SUMMARY REVIEW OF THE STUDY**

Chapter One of this study introduced the need for research by explaining the historical context and importance of WFD and CTE programs, and the contemporary status of the community college-employer relationship. The potential benefits and challenges of collaborative workforce development partnerships were presented, outlining the problem definition of this study — that relevance and efficiency of the modern career workforce can only be achieved through collaborative effort between college and employer.

The purpose of this research was to identify whether employer advisory boards actually provide colleges and employers the collaborative benefits identified in the existing literature reviewed in Chapter Two. The goal of the study was to help educational leaders identify what

aspects, if any, of employer advisory boards add value to the creation and sustainment of collaborative workforce development partnerships. This research goal was operationalized using a sequential mixed methods explanatory research design to describe, analyze, and interpret perceived and actual best practices utilizing advisory boards as a method of collaborative engagement between college and community employers.

This study analyzed the following research questions:

1. What benefit(s) (perceived and actual) does the college receive from engaging employers through program advisory boards?
  - a. What, if any, are the benefits to curriculum, pedagogy or course design?
  - b. What are monetary benefits, if any?
  - c. What other benefits are realized?
2. What benefit(s) (perceived and actual) does the college provide employers from engaging through program advisory boards?
  - a. What effect does engagement on advisory boards have upon employer satisfaction with the program? The college?
  - b. How responsive is an engaged program to employer needs?
  - c. In what other ways is the employer's support reciprocated?
3. What are the characteristics of a mutually beneficial advisory board?
  - a. What is the composition of its membership?
  - b. How is such an advisory board operationalized?
  - c. What metrics or outcomes are used to measure or determine value for all parties involved?
4. What best practices can be replicated from this research?

Chapter Two of this study presented the existing literature, further outlining the potential benefits and challenges of collaborative workforce development partnerships. Chapter Two also provided two theoretical frameworks for engagement — RDT and HCT — and proposed an interaction of three key factors — collaboration, resource dependency, and human capital — as a framework for creating and sustaining a successful collaborative relationship.

Chapter Three explained the research approach utilized in this study. To answer the research questions detailed above, a mixed methods multi-case study was conducted using a sequential explanatory design. Phase 1 of the study utilized an online survey of community college participants representing the state of Michigan. The survey achieved a 43% response rate, and acquired data from 60 respondents representing 25 of the 28 community colleges in Michigan. The Phase 1 survey data were used to establish a baseline of general findings and perceptions about collaborative workforce development partnerships. Using this data and baseline findings, ten follow-up Phase 2 semi-structured interviews were conducted with self-selecting participants of the initial survey group to gain insight and deeper understanding of the survey responses, and add deeper, richer qualitative context to the quantitative dataset.

Chapter Four presented the descriptive statistics and supporting qualitative data garnered from the survey and follow-up interviews. The chapter presented the data in configuration with the research questions, using a combination of survey statistics and qualitative commentary. Data sets were organized and analyzed using Excel and QDA Miner. A broad coding schema of 18 categories was generated from exploring Research Questions 1, 2,



and 3. Those 18 coding categories were then fine-focused into four major qualitative themes to guide the subsequent in-depth analysis of best practices examined in Research Question 4.

This final chapter provides a means of discussing the research findings in relation to the research questions and previous literature reviewed in Chapter Two. A collection of best practices using the learning gained by this research is proposed, and opportunities and recommendations for further research are suggested.

## **MAJOR FINDINGS AND RECOMMENDATIONS**

The goal of the study was to help educational leaders identify what aspects, if any, of employer advisory boards add value to the creation and sustainment of collaborative workforce development partnerships. Research findings are presented in alignment with the study research questions and the data analysis in Chapter Four. A collection of guidelines and implications closes this discussion of the research findings.

### **Research Question 1: Benefits Colleges Receive**

The benefits colleges receive from engaging employers through collaborative workforce development partnerships are listed below in rank order, according to the significance and value placed upon them by Phase 1 survey respondents and Phase 2 interview participants of this study. The benefits are also classified by their alignment with three key factors — collaboration, resource dependency, or human capital — following the proposed framework first put forth in Figure 3 of Chapter Two as a model for relating the research findings to the literature and illustration of a successful collaborative relationship. The factor alignment proposed is from the vantage point of the community college participants that contributed to

this study. Figure 14 revisits the model originally illustrated in Figure 3 from Chapter Two for visual understanding of the relationship between the key factors.

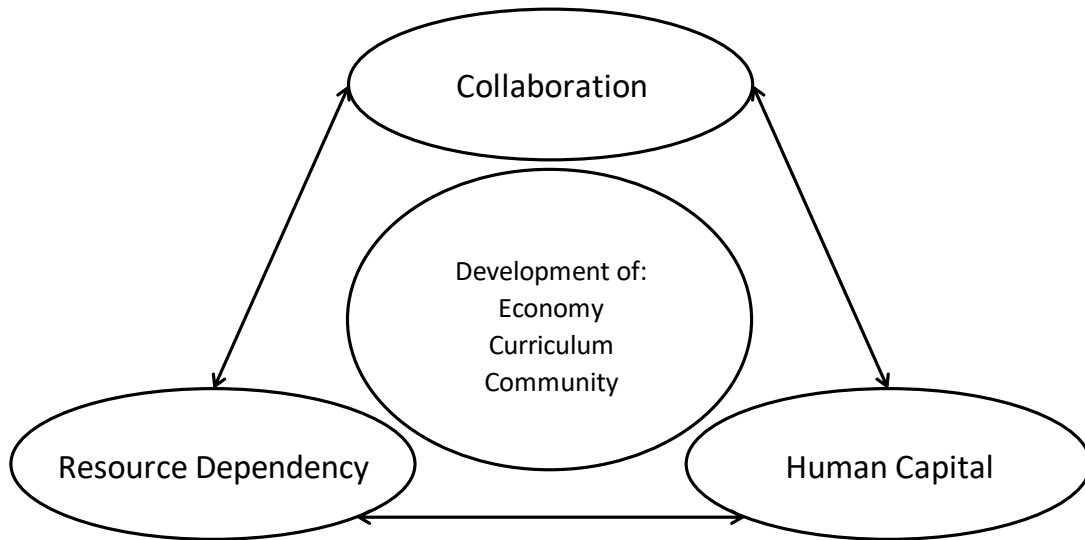


Figure 14. Proposed Model for Interaction of Key Factors (revisited)

**Curriculum, Pedagogy, or Course Design.** (91%) The study found the greatest benefit realized by community colleges that participate in employer advisory boards was collaborative support for creating and sustaining relevant curriculum. Having relevant curriculum was a top concern among participants of the study, surpassing securing funding, and placement of students and graduates. Curriculum support aligns with the key factor of collaboration.

**Monetary and In-kind Donations.** (62%) Financial support, through several means, was the second greatest benefit realized by college participants in this study. Participants of the study received in-kind donations in the form of equipment and materials. Direct monetary funding of the program by employer advisory board members was less likely to occur versus these in-kind donations; however, there was a perceptible shift in the comfort and frequency of

actively soliciting donations of any kind from employer partners. Monetary and in-kind donations align with the key factor of resource dependence.

***Providing Students with Employment.*** (20%) Employers serving on advisory boards were a valued source of employment for students and graduates of the college. This benefit aligns with the key factor of human capital. Student employment improves the education and productivity of the community and fulfills the workforce mission of CTE and WFD programs. Securing employment for students was a benefit for colleges, and directly linked to a top benefit for employers — obtaining skilled employees.

***Relevance to the Community.*** (15%) Servicing employers and meeting their needs helps colleges and employers remain relevant to their communities. This benefit also fulfills an element of many community college missions, and aligns with the key factor of collaboration.

***Employer Training Full-Time Faculty, Supplying Adjunct Faculty.*** (13%) Employer training of existing faculty was considered in alignment with growth of human capital, whereas supplying adjunct faculty fulfills a resource dependency. Each of these benefits helps the college remain relevant to the needs of employers, and furthers opportunities for developing collaborative college-employer partnerships.

***Communicating the College Story.*** (12%) Telling the story of the college to the community was classified as a collaborative factor. The college potentially benefits in multiple ways from the telling of the story; however, study participants recognized employers are a key contributor to the “making” of a successful story — one worth sharing with the community.

**Increasing the College Network.** (10%) Successful networking within political, social, and talent groups yielded direct and indirect access to additional resources for the college, classifying this benefit as an element of resource dependency.

**Internship and Co-op Opportunities.** (8%) Similar to student employment, this benefit improves the human capital of the community by increasing educational value and productivity, supporting the workforce mission of community colleges.

**Feedback on Graduates.** (8%) Feedback on graduates was incorporated into several elements already identified as components of collaboration: curriculum, community relevance, telling of the story, and validation. Graduates are an output of the college and an input of the employer for understanding many of the components identified here, namely curriculum and validation.

**Soft Skills and Life Skills Practice for Students.** (7%) These elements were deemed components of human capital, and support the earlier elements of internships, co-ops, and student employment. These skills sets benefit the student seeking employment, but also benefit the overall human capital of the larger community.

**Externships for Faculty.** (3%) Like faculty training, externships were considered an element of human capital. Increasing the knowledge base and experience of faculty through externships benefits the college from a skills and productivity standpoint.

**Validation.** (3%) Validation in this study refers to validation of a program to the college itself. This element is a clear collaborative factor, requiring relationships that support accountability between employer, faculty, and administration.

## Research Question 2: Benefits Colleges Provide

The benefits colleges provide employers through collaborative workforce development partnerships are listed below in rank order, according to the significance and value placed upon them by Phase 1 survey respondents and Phase 2 interview participants of this study. The benefits are also classified by their alignment with the three key factors of collaboration, resource dependency, and human capital. The factor alignment proposed is from the vantage point of the community college participants that contributed to this study.

***Employer Satisfaction.*** All of the components of collaboration identified in Research Question 1 are validated by employer satisfaction. Put simply, without employer satisfaction, there would be no employer collaboration with the college. Employer satisfaction goes beyond the benefits of collaboration, and also penetrates elements of resource dependency (donations, access to technology) and human capital (student employment, employee retention, employee training). Therefore, participants in this study considered employer satisfaction to be continually operating in the background, the foundation upon which all collaborative workforce development partnerships are developed.

***Responsiveness to Employer Needs.*** In the current economy and the social-political depiction of the middle skills crisis, employer needs can be classified largely by the components of human capital identified in Research Question 1. In simple terms, today's employers need trained workers. Study participants recognize employer needs are dynamic, often cyclical with changes in the economy. They seek to provide employers relevant and responsive solutions to their current needs.

**Positive Public Relations.** This element is classified as collaborative. Although it does benefit both parties (college and employer), it requires efforts by both parties to sustain. Whereas community relevance, identified as a college benefit in Research Question 1, justifies the community college as “needed,” positive public relations signifies the employer presence as “wanted” — the public looks positively upon employers they want to support in the community.

**Philanthropy and Community Service.** Colleges provide employers a focus or target for philanthropic activities, and bridge employer and community together in service. Therefore, this element was considered a component of collaboration. Employers could successfully perform philanthropy without the support of colleges; however, the participants of this study felt employers engaged with the college were more likely to pursue joint ventures.

**Grants and Funding.** Similar to philanthropy, colleges provide employers with access and means to secure grants and external funding for training and resources. However, unlike philanthropy, these grants were often for benefit of the employer (and college) and therefore are categorized as components of resource dependency.

### Research Question 3: Characteristics of Collaboration

Research Question 3 sought to identify key characteristics of collaborative advisory boards, by focusing on three main categories: composition, operation, and measurement. Phase 1 survey respondents provided quantitative baseline information on each of these categories, which was then reviewed qualitatively with Phase 2 interview participants for more context and a richer understanding of collaboration. A summary by category follows.

**Composition.** The study found that while a majority of respondents felt capable identifying potential employers for advisory boards, little formal definition or defined processes for recruiting those members existed. There is little evidence the programs surveyed are following guidelines for advisory board composition provided by the Carl D. Perkins Career and Technical Education Improvement Act of 2006 — Perkins requirements are not explicitly referenced by any of the 60 Phase 1 survey participants, mentioned in only two follow-up interviews by the ten Phase 2 participants. Only 45% of survey responses confirmed having documented and defined requirements for selecting advisory board members. Similarly, over 73% of responders stated the service term of an advisory board employer member was not defined — that employer members could serve as long as they choose to. Common reasons for why these processes were poorly defined included interference from administration, concern over creating too rigid or too flexible criteria, and concern over enforcing criteria.

An acceptable percent composition of alumni serving on advisory boards was also poorly defined or not defined. Only 17% of respondents reported having no alumni on their advisory boards, with some (7%) reporting over 50% and as much as 75% alumni employer representation. What might be considered an acceptable percentage was found to vary by region and setting, and a subtle relationship showing that having at least some (up to 25%) alumni on the advisory board could benefit future graduates seeking employment, whereas no representation — or conversely, oversaturation — by alumni might discourage or thwart hiring of future program graduates.

Study participants suggested maintaining an ideal total count of 9 to 15 persons for improved collaboration on advisory boards. Within this total count, it was further suggested at

minimum 40% be employers, at most 50% faculty, and at most 10% administration. Several interview participants encouraged at least 1 to 3 adjunct faculty be part of the represented faculty contingent. A relative age difference of +/- 10 years between members was also suggested, largely because of changing technology and generational bias. Job titles suggesting working-level subject matter experts and mid-level managerial participants were favored over administrators, owners or executives by both employers and college participants. Relative diversity of race, gender, and background was also considered more conducive to collaboration.

**Operation.** On the surface, operation of the employer advisory board is consistent across the sample space, with a few notable exceptions on how agendas are created, and how and where meetings are conducted. Over 76% of survey responses expected advisory board employer members to attend all scheduled meeting dates, and nearly 84% of survey participants expect employers to attend these meetings face-to-face at the college campus. Over 86% of respondents keep advisory meetings to two hours or less in length, with the remaining responses targeting a goal of two to four hours in length.

All 60 responses confirmed creating a documented agenda for the advisory board meeting, with over 80% providing the agenda to meeting members prior to the actual meeting day. Typical agenda items included program enrollment and equipment or technology updates, changes to leadership in program or college, updates on college-wide issues (usually from a dean or senior administrator), and industry updates from employer partners. Phase 2 interview participants offered reasons why agenda and structure might vary, and these reasons were usually delineated by college size and setting. Larger urban and suburban colleges typically held



to a stricter agenda, whereas smaller rural colleges typically reported more freedom within the schedule structure.

Ideal meeting time and frequency has shifted in recent years to accommodate changes in employer behavior. The preferred meeting frequency for college participants was at least two times per year, but survey participants acknowledged challenges with compelling employers to attend at this frequency. Historically a majority of survey and interview participants held meetings on Friday afternoons. However, this schedule has shifted to mid-week, mid-morning to accommodate employer behaviors.

Interview participants encouraged minimal use of technology and structured presentations to encourage spontaneity and attentiveness. Several participants also recognized a purposeful separation between who “owns” the meeting and who “runs” the meeting, implying greater collaboration occurred when employers were involved in running the meeting.

It was universally acknowledged that some form of record or notes are captured during the advisory meeting; however, there were varied suggestions on how to follow up on the notes. Interview participants warned against trying to solve problems during the two-hour meeting, instead encouraging task assignment and follow-up activities outside the meeting space to promote continued collaboration and engagement.

**Measurement.** The Phase 1 survey asked respondents if they currently did anything to evaluate successful employer engagement. Of the 60 responses, the most common answer was “no” or “nothing” (48%). Approximately 18% pointed to employer evaluations or employer surveys conducted by the program annually or as part of the advisory board meetings as a possible indirect indicator of collaboration. When asked to comment on the Phase 1 survey

results, 80% of the Phase 2 interview participants questioned the validity of student placement or program enrollment as a measure of employer engagement, but rather a measure of “college performance, irrespective of collaboration with employers.” Those interview participants that actively used an advisory board survey did not believe their current surveys provided a true measure of collaboration, but rather an indirect relationship with employer satisfaction.

#### Research Question 4: Potential Best Practices

The fourth research question sought to discern any best practices that might be transferred from the design space to other advisory board applications. In Chapter Four, the researcher acknowledged the challenge of defining a practice as “best” without any clear objective metric or quantitative measurement widely recognized by participants of Phases 1 or 2 in the sample space. Therefore, the survey and interview data were examined first for emergent themes that supported the creation and sustainment of collaboration and engagement between employers and colleges, as viewed through the perspective of the community college participants that participated in this study. A secondary analysis utilized key characteristics derived from the general findings and Research Questions 1, 2, and 3, in combination with review of the existing literature in Chapter Two to generate a summary of proposed best practices.

#### Summary of Proposed Best Practices — Collaborative Employer Advisory Boards

Table 7 below provides a summary of proposed best practices for creating and sustaining an employer advisory board that encourages collaboration through effective

workforce development partnerships between colleges and employers. This table is a culmination of suggestions identified in the Phase 1 survey and Phase 2 interviews and the four research questions examined in this study.

Table 7: *Summary of Proposed Best Practices — Collaborative Employer Advisory Boards*

PROPOSED BEST PRACTICES	PARAMETERS ENCOURAGING COLLABORATION
Employer Recruitment Practices	Define and document a controlled, enforceable process. Require vetting process, requiring program pre-approval. Establish a “wish list” of potential industries. Establish a metric of one new member, new company per year.
Employer Acceptance Criteria	Define and document a controlled, enforceable process. Require vetting process, requiring program pre-approval. Establish metrics (attendance, etc.) to encourage adherence.
Service Term Limits	Define and document a controlled, enforceable process. Establish a service limit that aligns with meeting frequency. Allow opportunity for renewals, with program approval. Establish metrics (attendance, etc.) to encourage adherence.
Proposed Composition	Ideally 9 - 15 total persons; varies by program size and location.
Number of Employer members	Min 40% of total: e.g., 3 - 6 employers at one time
Number of Faculty members	Max 50% of total: e.g., 3 - 5 Full Time Faculty e.g., 1 - 3 Adjunct Faculty
Number of Administrators	Max 10% of total: e.g., 2 - 3 (incl. secretary or note-taker)
Number of Program Alumni	0 - 25% of total employer representatives.
Proposed Employer Participants	Engineer, Nurse, etc. “Subject Matter Experts” Frontline Managerial positions.
Proposed College Participants	Faculty — Full time and Adjunct “Subject Matter Experts” Admin — Program Coordinator, Dean, Asst. or Assoc. Dean.
Schedule Structure	≥ 2x year, near middle of semester term(s), with students present and available for interaction with employers.
Meeting Location	Meetings held in space or visits space(s) in college relevant to program (e.g., program-specific labs, classrooms).
Meeting Length	Two hours with opportunity to run over if needed; max 4 hours.

PROPOSED BEST PRACTICES	PARAMETERS ENCOURAGING COLLABORATION
Meeting — Day of Week	Mid-week, avoiding Mondays or Fridays.
Meeting — Time of Day	Mid-morning, preferably over breakfast or brunch.
Structure and Agenda	Prepare an agenda to maintain general flow and direction, but do not dictate pace or place limit on possible topics. Format agenda items as questions to stimulate attention. Include opportunity for breakout sessions or focus groups led jointly by faculty and employers. Close meeting with list of action items and assignments.
Use of Technology, Presentations	Limit technology to one or two presentation devices. Presentation must be flexible to accommodate engagement. Limit use of cell phones and devices (allow breaks). Be respectful of different technology aptitudes.
Capturing Meeting Notes, Records	Use a dedicated secretary or professional assistant. Have multiple note-takers for multiple perspectives. Share and review notes within the week of meeting. Provide meeting notes to employers and solicit feedback.
Outcomes Generated	List of follow-up activities and tasks, team assignments. Possible solutions identified during the meeting, but not completely resolved during the meeting without research. Timeline for follow-up review and completion.
Meeting Ownership	Program Coordinator and Program Faculty or joint leadership. Meeting owner (responsible party) should not lead meeting.
Meeting Leadership	Preferably led by employers, or jointly by employer and faculty. Meeting owner (responsible party) should not lead meeting.

## General Conclusions and Implications

Four main themes emerged from the activities and practices of college-employer advisory boards that support collaboration: relevance, relationships, partnerships, and accountability.

**Relevance.** All parties invoked a passion or concern for maintaining program or college relevance. Survey participants included relevance or mention of relevance in 88% of all write-in response answers. Relevance was the most commonly used word by interview participants. Each of the ten interview participants used multiple references to relevance — followed by closely related words or phrases such as innovative, cutting edge, new, or current. References to relevance were used in similar capacity by faculty and administrators, across all geographic and demographic groups included in the research design.

**Relationships.** Survey respondents indicated that forming relationships was the highest method of recruiting and engaging employers. Survey and interview participants often used a reference to relationships to describe other existing institutional programs that help engage employers outside of advisory board participation, such as job fairs, career expos, open houses, career services, and promotional events held on campus. Building relationships or creating relationships were frequent terms referenced when responding to questions of recruitment and initial engagement with new employers. Administrators communicated a connotation of relationships more frequently than faculty, emphasizing the key role faculty play in establishing good relationships with employers.

**Partnerships.** Survey and interview participants maintained a notable distinction between relationships and partnerships: the former often used to describe college-owned or college-managed functions or programs such as those listed earlier; the latter used to describe jointly owned or managed functions or programs, such as contract training, customized training, internships, apprenticeships, grant activity, and career and professional development events. Partners and partnerships were referenced explicitly when speaking about monetary

and in-kind donations, adjunct faculty, and employer sponsored functions on campus. Faculty referenced partnerships when speaking about employers and advisory boards, and used terminology associated with positional relationships when speaking about involvement of college administrators on advisory boards.

**Accountability.** Accountability preceded or followed connections to partnerships or relevance, yet had little or no connection to relationships, recruitment, or involvement by “other college programs” (job fairs, career services, etc.). Of the ten Phase 2 interview participants, accountability was more frequently used in responses from administrators. Faculty references to accountability were internalized to the college, whereas administration references were directed externally to employers.

Using the findings from the four research questions and the themes identified above, the following conclusions and implications are proposed.

**Conclusion 1.** The four themes of Relevance, Relationships, Partnerships, and Accountability are critical to the development and sustainment of successful collaboration between employers and community college WFD and CTE programs.

**Implications.** Any and all activities supporting or involving employers, specifically employers serving on advisory boards, should be viewed within the context of these four themes. Decisions on curriculum, employer satisfaction, training, donation solicitation for the college, resource expenditures, community philanthropy, joint grant applications, and student involvement should be complementary to these four themes. Decisions made against or without consideration of relevance, relationships, partnerships, or accountability should not be considered collaborative.

**Conclusion 2.** Although colleges recognize the importance of employer advisory boards, little is done currently to formally control and document processes for employer recruitment, employer acceptance criteria, or employer service term limits on these advisory boards.

**Implications.** In an environment dictated by policy and procedure, it is surprising to discover such lax control of what constitutes many programs' main source of contact with the private sector. Failing to control or define recruitment policy potentially threatens relevance and relationship building with key employer entrants. Failing to control or define service term limits potentially threatens relevance, and might result in missed opportunities for new partnerships. Lack of any policy whatsoever conflicts with the theme of accountability.

**Conclusion 3.** Some alumni participation on employer advisory boards could prove beneficial or positively influence the hiring practices of those companies, with respect to hiring of future graduates. However, no alumni presence, or over-saturation of alumni on the advisory board can have detrimental effects on hiring.

**Implications.** Recognizing that alumni perception of a program will be different from non-alumni perceptions, the variation in hiring practices could be a signal of alumni bias or memory. Furthermore, surrounding a program with alumni precludes the opportunity to develop new relationships with other companies or industries, a potential threat to relevance and forging of new partnerships.

**Conclusion 4.** Meeting membership, structure, and operation greatly influence the value produced by employer advisory boards.

**Implications.** Some modicum of structure and formality are necessary to ensure minimum requirements are met during advisory meetings. However, too much structure can

stifle inquiry and collaboration. The best use of advisory boards is to challenge and question current practice, to prove its advantages or define a new path forward. The best people to provide that challenge are subject matter experts and current practitioners.

**Conclusion 5.** When seeking to create a collaborative environment, recognize advisory board ownership and advisory board leadership are not the same thing.

**Implications.** Ownership suggests responsibility, and leads to “show and tell” advisory board meetings, where responsibilities are justified. Leadership implies guidance. The research herein suggests a separation of responsibility and guidance creates a more collaborative environment. Allowing others to lead the collaborative effort improves relationships and partnerships by instilling trust and accountability into the process.

## **RELATIONSHIP TO LITERATURE**

Two theoretical frameworks were prevalent in the existing literature on employer engagement within higher education: resource dependency theory (RDT), and human capital theory (HCT). Each theory provided a different element of engagement and opportunity for collaboration between college and employer.

RDT supporters suggest the college has much to gain from interacting with employers, largely in the form of obtaining scarce resources: capital funding, in-kind donations and adjunct faculty (Askin, 2007; Foy, 2015; Hillman, Withers, & Collins, 2009; Pfeffer & Salancik, 2003; Powell & Rey, 2015). HCT is based upon the premise that increased education and training yield greater personal productivity, which translates into greater societal and economic value for the whole (Davis, 2013; Hitchcock, 2016).

Soares (2010, p. 4) defined a collaborative workforce development partnership as



A collaboration between a community college and an individual business, group of firms, chamber of commerce, industry association, or sector partnership with the purpose of using the combined resources to create alternative college education programs that are tightly linked to regional economic development and labor force needs for non- and traditional students — both younger workforce entrants and older ones in need of skills and education upgrades.

Soares suggest the interactions of three key factors — collaboration, resource dependency, and human capital — as a basis for a successful collaborative relationship. Very few researchers collectively consider community colleges, motivation, resource or human capital, and the formation of formal collaborative partnerships in their research (Amey, 2010; Amey, Eddy, & Ozaki, 2007; Eddy & Amey, 2014). This study has attempted to begin answering this gap in the literature with the proposal of a model illustrating the interaction of key factors for collaboration when viewed through the lenses of RDT and HCT.

#### Revised Model for Interaction of Key Factors of Collaboration

Research questions 1 and 2 provided additional components supporting the interaction of the three key factors — collaboration, resource dependency, and human capital — suggested as a basis for a successful collaborative relationship.

Figure 15 below is a revised depiction of the original model proposed in Figure 3 of Chapter Two, incorporating the components identified in Research Questions 1 and 2, and the characteristics and themes discovered as best practices in Research Questions 3 and 4.

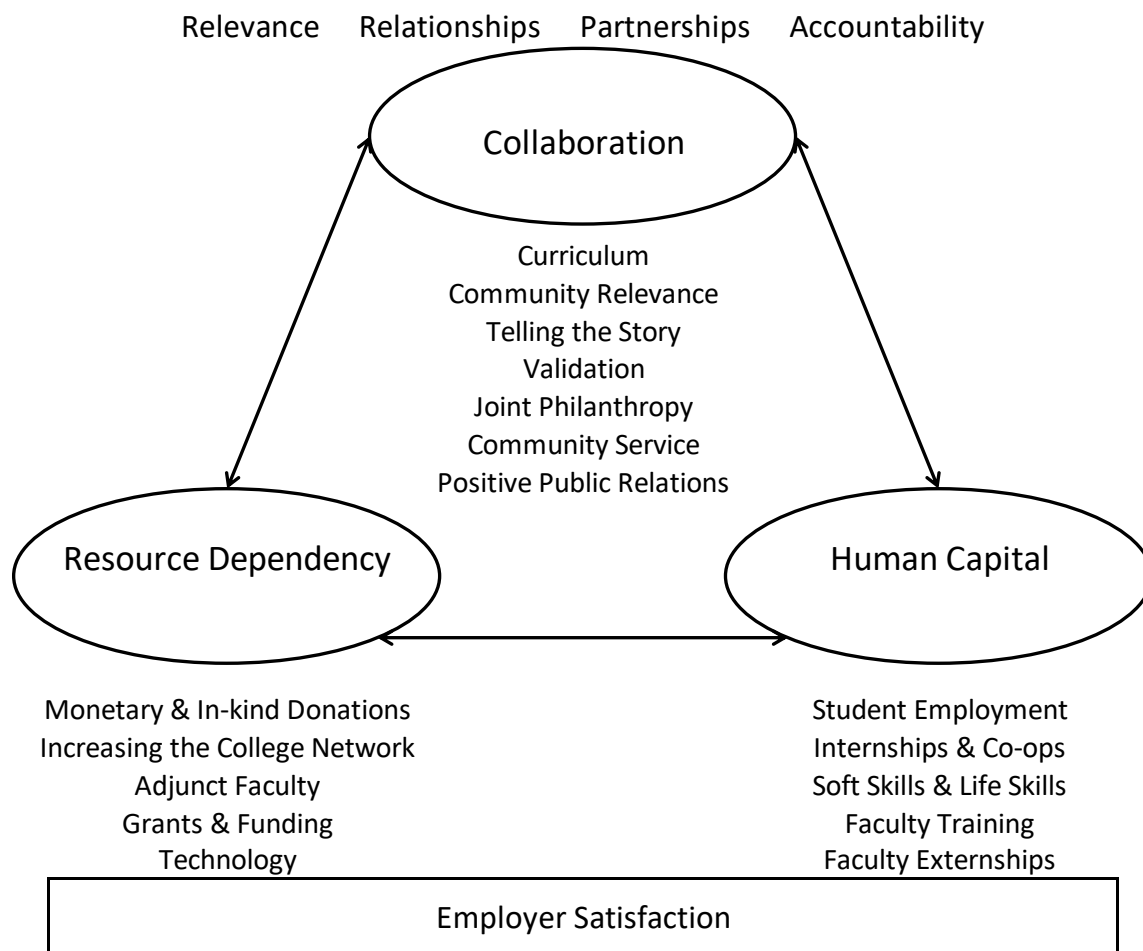


Figure 15. Revised Model for Interaction of Key Factors of Collaboration

The revised model maintains the critical relationships between the three key factors of collaboration, resource dependency, and human capital derived from the existing literature. Added to the model under each key factor are the research findings from this study. Anchoring collaboration at the top of the model are the four emergent themes identified in the research, namely relevance, relationships, partnerships, and accountability. The model’s foundation rests upon employer satisfaction, identified in the study as the basis for validation of successful college-employer collaboration.

The components identified in this research study bolster the connections between collaboration, RDT, and HCT. The structure of the model suggests that a gain or loss in one area (e.g., a component of RDT or HCT) could have an adverse effect on other adjoining areas. In order to maintain connection and relative balance between the components, the four themes of relevance, relationships, partnerships, and accountability must be considered. For example, failure to sustain curriculum (a component of collaboration, and the greatest concern among study participants) could adversely affect student employment (a component of HCT) or program donations (a component of RDT). All of this would have a detrimental effect on employer satisfaction, the foundation of successful employer-college collaborative workforce development partnerships.

To prevent such an outcome, the four themes of relevance, relationships, partnerships, and accountability must be incorporated into employer advisory board activities. Doing so will anchor collaboration, and ensure decisions on curriculum (for this example) remain relevant to the members held in partnership on the employer advisory board. Relevance supports new or continued relationships in other components with other employers. Accountability instills sustainment of relevance and continual improvement.

## **SUGGESTIONS FOR FUTURE STUDY**

This study focused upon describing, analyzing, and interpreting perceived and actual best practices utilizing advisory boards as a method of collaborative engagement between college and community employers. This study was conducted through the vantage point of the community college participant. The first recommendation for further study is to replicate this study through the vantage point of employer participants. This study was focused upon CTE and

WFD programs in community colleges; therefore, a second recommendation is to apply the study to understand how advisory boards are used in different disciplines within the college.

This research design was conducted as a sequential mixed methods multi-case study, incorporating a wide reaching survey capturing perceptions at 25 of the 28 community colleges in Michigan. Some regional and college settings — for example, urban versus rural — did show potential differences in the analysis. A third recommendation for further study is to use the findings and practices derived from this research design as a baseline for studying a singular department or college, or a singular region or college demographic. The summary guidelines proposed in Table 6 could be developed into a survey instrument or interview questions for deeper refinement and analysis of the proposed best practices within a specified environment. Such a single case study could research deeper connections into how specific programs engage with specific employers, to gain a deeper understanding of unique engagement practices.

A fourth recommendation for study surrounds the development of meaningful metrics, using the data, research question components, and themes derived from this study. Few meaningful objective metrics were discovered to instill the theme of accountability. Replicating this study with these components and themes at the onset of the research may yield more meaningful ways to measure successful collaboration.

## **LIMITATIONS OF THE STUDY**

Several limitations influence the generalizability of the findings of this study to the larger community college population. First, the study focused solely upon Michigan community colleges. The sample selection was purposeful, targeting CTE and WFD college professionals; however, the response rate for the Phase 1 survey was 60 of 140 invitations (43%), and of those

60, only ten individuals were included in Phase 2 follow-up interviews. This sample space is not large enough to generalize findings to the entire community college population. Lastly, the researcher was working at the time as faculty in a CTE program within a university setting, and brought personal experiences and biases about employer advisory boards that may have inadvertently influenced this study.

## **CONCLUSIONS**

Chapter Five concluded this study by providing a summary review of the research completed. Major findings and recommendations related to each of the four research questions were presented. Each component of the research findings was related to one of three key factors underlying the premise of this research study: collaboration, resource dependency, and human capital. Four thematic elements — relevance, relationships, partnerships, and accountability — were derived from examining quantitative data collected in a Phase 1 survey, supported contextually by qualitative data collected in Phase 2 follow-up interviews.

Five conclusions and implications of this study were presented; the conclusions summarized here:

1. Relevance, Relationships, Partnerships, and Accountability are critical to the development and sustainment of successful collaboration.
2. Little is done currently to formally control and document processes for employer recruitment, employer acceptance criteria, or employer service term limits on employer advisory boards.
3. Some alumni participation on employer advisory boards could prove beneficial with respect to hiring of future graduates. However, no alumni presence, or over-saturation of alumni on the advisory board may have detrimental effects.
4. Meeting membership, structure, and operation greatly influence the value produced by employer advisory boards.

5. When seeking to create a collaborative environment, colleges should recognize advisory board ownership and advisory board leadership are not the same thing.

A summary table of proposed best practices derived from the research was presented, outlining guidelines for advisory board recruitment, composition, meeting structure, operation, and meeting deliverables or outcomes. Relationship of this research to the existing literature was examined, and a model illustrating the interaction of collaboration, RDT, and HCT with the component findings and thematic elements from the research was proposed. Suggestions for future study were presented, as well as possible limitations inherent in the design space of this study.

A successful modern and evolving economy demands alignment between employers and educators. It is essential that collaboration between academics and employers remain robust to ensure college efforts are relevant and sufficient. Employer advisory boards play a crucial role in fostering and sustaining the success of this collaboration.

## REFERENCES

- Advisory Committee on Student Financial Assistance (2012). *Pathways to success: Integrating learning with life and work to increase national college completion*. Retrieved from <http://www2.ed.gov/about/bdscomm/list/acsfa/edlite-publications.html>
- American Association of Community Colleges. (2000). *The knowledge net: Connecting communities, learners, and colleges*. Washington, D.C.: Community College Press, American Association of Community Colleges
- American Association of Community Colleges. (2012, April). *Reclaiming the American dream: A report from the 21<sup>st</sup>-century commission on the future of community colleges*. Washington, D.C.: Community College Press, American Association of Community Colleges. Retrieved from AACC website: <http://www.aacc21stcenturycenter.org/wp-content/uploads/2014/03/21stCenturyReport.pdf>
- American Association of Community Colleges. (2017, October). *Community colleges: Addressing the skills gap*. Washington, D.C.: Community College Press, American Association of Community Colleges. Retrieved from AACC website: <https://www.aacc.nche.edu/wp-content/uploads/2017/10/SkillsGapReportforPrint.pdf>
- American Association of Community Colleges and National Center on Education and the Economy. (2009). *Sustaining partnerships for regional economic growth: A compendium of promising practices and tools*. Retrieved from <http://www.aacc.nche.edu/Resources/aaccprograms/cwed/Documents/sustainingpartnerships.pdf>
- Amey, M. J. (2010). Leading partnerships: Competencies for collaboration. In D. L. Wallin (Ed.), Special Issue: Leadership in an era of change. *New Directions for Community Colleges*, 136, 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. In M. J. Amey (Ed.), *Collaborations across educational borders*. *New Directions for Community Colleges*, 139, 5-14. doi: 10.1002/cc.288
- Askin, J. A. (2007, December). Community college mission: Re(S)ources make a difference. *Community College Journal of Research and Practice*, 31(12), 977-997. doi: 10.1080/10668920600932868

- Aspen Institute. (2013). *Skilled trades playbook: Dynamic partnerships for a new economy, how businesses and community colleges can work together to find, train, and place workers in the skilled trades*. Retrieved from [www.skilledtradesplaybook.org](http://www.skilledtradesplaybook.org)
- Atkinson, R. (1999, December). Project management: Cost, time, and quality, two best guesses and a phenomenon, it's time to accept other success criteria. *International Journal of Project Management*, 17(6), 337-342. doi: 10.1016/S0263-7863(98)00069-6
- Badolato, V. (2014). The changing role of community colleges in workforce development. *National Conference of State Legislatures Magazine*. Retrieved from <http://www.ncsl.org/research/education/building-community>
- Bailey, D. & Koney, K. M. (2000). *Strategic alliances among health and human services organizations: From affiliations to consolidations*. Thousand Oaks, CA: Sage Publications.
- Baller, S., Dutta, S., & Lanvin, B. (2016). The global information technology report 2016. In *World Economic Forum, Geneva* (pp. 1–307). Retrieved from [http://www3.weforum.org/docs/WEF\\_Future\\_of\\_Jobs.pdf](http://www3.weforum.org/docs/WEF_Future_of_Jobs.pdf)
- Becker, G. S. (1993). *Human capital: A theoretical and empirical analysis, with special reference to education* (3rd ed.). New York, NY: National Bureau of Economic Research (NBER).
- Bernhardt, A., & Osterman, P. (2017). Organizing for good Jobs: Recent developments and new challenges. *Work and Occupations*, 44(1), 89–112. doi: 10.1177/0730888415625096
- Bills, D. B. (2003). The sociology of job training. In D. B. Bills (Ed.), *Research in the sociology of work*. London, UK: Emerald Publishing Group Limited.
- Blair, A., Bransberger, P., & Conway, M. (2007). Sector initiatives and community colleges: Working together to provide education for low-wage working adults. *Aspen Institute Update*, (4), 1-24. Retrieved from Aspen Institutes website: <https://assets.aspeninstitute.org/content/uploads/files/content/docs/07-009.PDF>
- Bloomberg, L. D. & Volpe, M. (2012). *Completing your qualitative dissertation: A road map from beginning to end* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Bragg, D. D. & Ruud, C. M. (2007). Career pathways, academic performance, and transition to college and careers: The impact of two select career and technical education (CTE) transition programs on student outcomes. *Community College Review*, (35), 1, 10-29
- Bray, J., Painter, R., & Rosin, M. (2011). *Developing human capital: Meeting the growing global need for a skilled and educated workforce*. Retrieved from McGraw-Hill Research Foundation website: <http://www.mcgraw-hillresearchfoundation.org/>
- Bureau of Labor Statistics. 2018, July. *Job openings and labor turnover- May 2018*. U.S. Department of Labor. Retrieved from <https://www.bls.gov/news.release/pdf/jolts.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*. Retrieved from [http://www.businessroundtable.org/initiatives/education/community\\_college](http://www.businessroundtable.org/initiatives/education/community_college).
- Campbell, K. S. (2014). *Manufacturing workforce development playbook: preparing for the manufacturing renaissance in America*. Chicago, IL: Summit Media Group, Inc.
- Carnevale, A., & Desrochers, D. M. (2002). *The missing middle: Aligning education and the knowledge economy*. Princeton, NJ: Educational Testing Service
- Carnevale, A., Smith, N., & Strohl, J. (2010). *Help wanted: Projections of jobs and education requirements through 2018*. Georgetown University Center on Education and the Workforce. Retrieved from <https://cew.georgetown.edu/jobs2018/>
- Carnevale, A. P., Strohl, J., Cheah, B., & Ridley, N. (2017). *Good jobs that pay without a BA*. Georgetown University Center on Education and the Workforce. Retrieved from <https://goodjobsdata.org/>
- Chronicle of Higher Education. (2012, December). *The role of higher education in career development: Employer perceptions*. Chronicle of Higher Education. Retrieved from Chronicle of Higher Education website: <http://www.chronicle.com/items/biz/pdf/Employers%20Survey.pdf>
- Cohen, A. M., Brawer, F. B., & Kisker, C. B. (2014). *The American community college* (6th ed.). San Francisco, CA: Jossey-Bass
- Committee on Education and the Workforce. (2015, March). *Testimony by U.S. Secretary of Labor Thomas E. Perez before the Committee on Education and the Workforce*. U.S. House of Representatives. Retrieved from [https://edworkforce.house.gov/uploadedfiles/secretary\\_perez\\_testimony\\_3-18.pdf](https://edworkforce.house.gov/uploadedfiles/secretary_perez_testimony_3-18.pdf)
- Cooper, C., Mackinnon, I., & Garside, P. (2008, February). *Employer engagement* (Research Report No. 29). Retrieved from Institute of Education Digital Education Resource Archive website: [http://dera.ioe.ac.uk/9572/1/research-report-29\\_1.pdf](http://dera.ioe.ac.uk/9572/1/research-report-29_1.pdf)
- Connor, H. & Hirsh, W. (2008). *Influence through collaboration: Employer demand for higher learning and engagement with higher education*. London, UK: Council for Industry and Higher Education (CIHE). Retrieved from <https://aces.shu.ac.uk/employability/resources/CIHE%20-%200809CollabSummary.pdf>
- Coughlin, G. F. (2012). *Employer satisfaction with workforce development programs: A survey study*. (Doctoral dissertation). ProQuest Dissertations and Theses database (UMI No. 3502684).

- Cummins, P. A. (2013). *Credential attainment by older workers: The role of community colleges and the dislocated worker program in successful employment outcomes*. (Doctoral dissertation). Available from ProQuest Dissertations and Theses database (UMI No. 3570337).
- Creswell, J. W. (2002). *Research design: Qualitative, quantitative, and mixed method approaches* (2nd ed.). Thousand Oaks, CA: SAGE Publications.
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Davis, A. L. (2013). *The importance of workforce training in community colleges: a case study on the discourse and best practices during financial difficulty*. (Doctoral dissertation). Available from ProQuest Dissertations and Theses database (UMI No. 3574915).
- Deloitte Development, LLC. (2015). *The skills gap in U.S. manufacturing 2015 and beyond*. Retrieved from <https://www2.deloitte.com/us/en/pages/manufacturing/articles/boiling-point-the-skills-gap-in-us-manufacturing.html>
- Deluca, S., Plank, S., & Estacion, A. (2006). *Does career and technical education affect college enrollment?* St. Paul, MN: National Research Center for Career and Technical Education
- Dougherty, K. & Bakia, M. (1999). *The new economic development role of the community college*. Retrieved from Columbia University Academic Commons website: <http://dx.doi.org/10.7916/D8HD7SQD>
- Dougherty, K. & Bakia, M. (2000). Community colleges and contract training: Content, origins, and impact. *Teachers College Record*, 102(1), 197-243.
- Eddy, P. L. & Amey, M. J. (2014). *Creating strategic partnerships: A guide for educational institutions and their partners*. Sterling, VA: Stylus Publishing, LLC.
- Eide, E. & Showalter, M. (2010). Human capital. In D. Brewer & P. McEwan (Eds.), *Economics of education* (pp. 27-32). San Diego, CA: Elsevier
- Eyster, L. & Briggs, A. (2016, November). *State workforce and economic development: Opportunities for collaboration*. Urban Institute. Retrieved from Urban Institute website: [https://www.urban.org/sites/default/files/publication/86131/2001004-state-workforce-and-economic-development-opportunities-for-collaboration\\_1.pdf](https://www.urban.org/sites/default/files/publication/86131/2001004-state-workforce-and-economic-development-opportunities-for-collaboration_1.pdf)
- Foy, M. K. (2015). *An exploration of institutionalized structures as employer engagement strategies in the Wisconsin Technical College System*. (Doctoral dissertation). Available from ProQuest Dissertations and Theses database (UMI No. 3702598).

- Fry, R. (2017, January). *U.S. still has a ways to go in meeting Obama's goal of producing more college grads*. Pew Research Center. Retrieved from <http://www.pewresearch.org/fact-tank/2017/01/18/u-s-still-has-a-ways-to-go-in-meeting-obamas-goal-of-producing-more-college-grads/>
- Gajda, R. (2004). Utilizing collaboration theory to evaluate strategic alliances. *American Journal of Evaluation*, 25, 65-77. doi: 10.1177/109821400402500105
- Glaser, BG. & Strauss, AL. (1967). *The discovery of Grounded Theory: Strategies for qualitative research*. New York: Aldine De Gruyter
- Grasz, J. (2014, May). *Nearly one-third of employers expect workers to job-hop*. CareerBuilder Media Harris Poll. Retrieved from <http://www.careerbuilder.com/share/aboutus/pressreleasesdetail.aspx?sd=5%2F15%2F2014&id=pr824&ed=12%2F31%2F2014>
- Grubb, W. & Lazerson, M. (2005) The education gospel and the role of vocationalism in American education. *American Journal of Education*, 111(3), 297-320.
- Hillman, A. J., Withers, M. C., & Collins, B. J. (2009). Resource dependence theory: A review. *Journal of Management*, 35(6), 1404–1427. doi: 10.1177/0149206309343469
- Hitchcock, A. (2016, April). *Human capital and economic growth in global cities*. Chicago Council on Global Affairs. Retrieved from the Chicago Council on Global Affairs website: [https://www.thechicagocouncil.org/sites/default/files/160420-elperspectives\\_adamhitchcock.pdf](https://www.thechicagocouncil.org/sites/default/files/160420-elperspectives_adamhitchcock.pdf)
- Hoffman, N. (2011). *Schooling in the workplace: How six of the world's best vocational education systems prepare young people for jobs and life*. Cambridge, MA: Harvard Education Press
- Hoke, L., Abernathy, T., & Doron, S. (2014, August). *Re-imagining workforce development: 2013 report on the future of the south*. Southern Growth Policies Board. (Revised 2014 by Delta Regional Authority). Retrieved from Delta Regional Authority website: [http://dra.gov/images/uploads/content\\_files/reimagining-delta-wf.pdf](http://dra.gov/images/uploads/content_files/reimagining-delta-wf.pdf)
- Holm, R. & Vollman, J. (2012). *Employer engagement: A business plan for further education and training colleges*. Retrieved from Jobs for the Future website: [https://jfforg-prod-prime.s3.amazonaws.com/media/documents/EmployerEngagementS-061812\\_RLH.pdf](https://jfforg-prod-prime.s3.amazonaws.com/media/documents/EmployerEngagementS-061812_RLH.pdf)
- Holzer, H. J. & Lerman, R. I. (2009). *The future of middle-skill jobs*. Center on Children and Families. Retrieved from [https://www.brookings.edu/wp-content/uploads/2016/06/02\\_middle\\_skill\\_jobs\\_holzer.pdf](https://www.brookings.edu/wp-content/uploads/2016/06/02_middle_skill_jobs_holzer.pdf)

- HR Policy Association. (2010, August). *Educating the 21<sup>st</sup> century workforce: The views of chief human resources officers regarding workforce development*. Retrieved from HR Policy Association website: <http://www.hrpolicy.org/documents/positions/10-123%20Educating%20the%2021st%20Century%20Workforce.pdf>
- Hughes, M. (2003). *Successful engagement: Guidance for colleges and providers on effective employer engagement in post-16 learning*. London, UK: Learning and Skills Development Agency. Retrieved from <https://files.eric.ed.gov/fulltext/ED480447.pdf>
- Institute for Learning. (2013). *Leading partnerships with employers and building collaborative professionalism: Towards excellence in vocational education*. Retrieved from Institute of Education, University of London website: [https://set.foundation.co.uk/media/108349/2013\\_04\\_25\\_Leading\\_partnerships.pdf](https://set.foundation.co.uk/media/108349/2013_04_25_Leading_partnerships.pdf)
- Jacobs, J. (2009). Meeting new challenges and demands for workforce education. In G. Myran (Ed), *Reinventing the open door* (pp. 109-121). Washington, D.C.: Community College Press.
- Jacobs, J. & Dougherty, K. J. (2006). The uncertain future of the community college workforce development mission. In B. K. Townsend and K. J. Dougherty (Eds.), *New Directions for Community Colleges*, 136, 53-62. doi: 10.1002/cc.259
- Jacobson, L., Focarazzo, L., Sacchetti, M., & Benus, J. (2011, June). *Improving America's workforce through enhanced collaboration between the public workforce system and community colleges*. IMPAQ International, LLC report to the U.S. Department of Labor. Retrieved from USDOL website: [https://www.dol.gov/asp/evaluation/completed-studies/Improving\\_Americas\\_Workforce\\_Through\\_Enhanced\\_Collaboration\\_between\\_the\\_Public\\_Workforce\\_System\\_and%20\\_Community\\_Colleges/FINAL\\_REPORT\\_improving\\_america\\_workforce\\_through\\_enhanced\\_collaboration.pdf](https://www.dol.gov/asp/evaluation/completed-studies/Improving_Americas_Workforce_Through_Enhanced_Collaboration_between_the_Public_Workforce_System_and%20_Community_Colleges/FINAL_REPORT_improving_america_workforce_through_enhanced_collaboration.pdf)
- Johnson, K. (2011). *Examining noncredit workforce training programming at Kirkwood Community College: A new conceptual model for measuring student motivations and perceptions of high quality job attainment*. (Doctoral dissertation). Available from ProQuest Dissertations and Theses database (UMI No. 3494051)
- Klein-Collins, R., Sherman, A., & Soares, L. (2010, October). *Degree completion beyond institutional borders: Responding to the new reality of mobile and nontraditional learners*. Washington, DC: Center for American Progress. Retrieved from [https://cdn.americanprogress.org/wp-content/uploads/issues/2010/10/pdf/degree\\_completion\\_beyond\\_borders\\_exec\\_summary.pdf](https://cdn.americanprogress.org/wp-content/uploads/issues/2010/10/pdf/degree_completion_beyond_borders_exec_summary.pdf)
- Lavendar, M. S. (2007). *Community college partnerships with business and industry*. (Doctoral dissertation). Available from ProQuest Dissertations and Theses database (UMI No. 3265907).

- Mann, E. (2017, July). Connecting community colleges with employers: A toolkit for building successful partnerships. Brown Center on Education Policy at The Brookings Institution. Retrieved from [https://www.brookings.edu/wp-content/uploads/2017/07/gs\\_20170731\\_community\\_colleges\\_toolkit\\_final.pdf](https://www.brookings.edu/wp-content/uploads/2017/07/gs_20170731_community_colleges_toolkit_final.pdf)
- Mann, A. & Glover, C. (2011). Employer engagement in schools: The business case. *Local Economy*, 26(3). doi: 10.1177/0269094211402572
- McElroy, J. & Dove, L. (2017). *Function and value of advisory boards for academic programs*. Retrieved from [https://www.ncfr.org/sites/default/files/2017-01/ncfr\\_symposium\\_function\\_and\\_value\\_advisory\\_boards\\_for\\_academic\\_programs\\_0.pdf](https://www.ncfr.org/sites/default/files/2017-01/ncfr_symposium_function_and_value_advisory_boards_for_academic_programs_0.pdf)
- Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation* (2nd ed.). San Francisco, CA: Jossey-Bass
- Meyer, C. B. (2001). A case in case study methodology. *Field Methods*, 13(4), 329-352. doi: 10.1177/1525822X0101300402
- Mitchell, M. & Leachman, M. (2015, May). *Years of cuts threaten to put college out of reach for more students*. Center on Budget and Policy Priorities. Retrieved from <https://www.cbpp.org/research/state-budget-and-tax/years-of-cuts-threaten-to-put-college-out-of-reach-for-more-students>
- Mullin, C. M., & Honeyman, D. S. (2008). The funding of community colleges: Formulas & governance. *Community College Journal of Research and Practice*, 32(7), 512–524. doi: 10.1080/10668920701382518
- National Center on Education and the Economy. (2007). *Tough choices or tough times: The report of the new commission on the skills of the American workforce*. San Francisco, CA: Jossey-Bass
- National Conference of State Legislatures. (2017). *A brief history lesson: The federal government's role in apprenticeships*. Retrieved from [http://www.ncsl.org/documents/statefed/apprenticeships\\_federal\\_final.pdf](http://www.ncsl.org/documents/statefed/apprenticeships_federal_final.pdf)
- Obama, B. (2009, July 14). *Remarks by the president on the American Graduation Initiative*. Macomb Community College Warren, MI. Retrieved from [http://www.whitehouse.gov/the\\_press\\_office/Remarks-by-the-President-on-the-American-Graduation-Initiative-in-Warren-MI/](http://www.whitehouse.gov/the_press_office/Remarks-by-the-President-on-the-American-Graduation-Initiative-in-Warren-MI/)
- Orr, M. T. (2001). Community colleges and their communities: Collaboration for workforce development. In D. D. Bragg (Ed.), *The new vocationalism in community colleges* (pp. 39-49). San Francisco, CA: Jossey-Bass

- Payne, J. (2008). Sector skills councils and employer engagement – delivering the ‘employer-led’ skills agenda in England. *Journal of Education and Work*, 21(2), 93-113. doi: 10.1080/13639080802090260
- Pfeffer, J. & Salancik, G. R. (2003). *The external control of organizations: A resource dependence perspective*. Redwood City, CA: Stanford Business Books.
- Polenske, K. (2010, August). Competition, collaboration, and cooperation: An uneasy triangle in networks of firms and regions. *Regional Studies*, 38(9), 1029-1043. doi: 10.1080/0034340042000292629
- Powell, K. K., & Rey, M. P. (2015). Exploring a resource dependency perspective as an organizational strategy for building resource capacity: Implications for public higher education universities. *Management in Education*, 29(3), 94–99. doi: 10.1177/0892020615586805
- Soares, L. (2010). *The power of the education-industry partnership. Fostering innovation in collaboration between community colleges and businesses*. Washington, DC: Center for American Progress. Retrieved from [https://cdn.americanprogress.org/wp-content/uploads/issues/2010/09/pdf/community\\_colleges.pdf](https://cdn.americanprogress.org/wp-content/uploads/issues/2010/09/pdf/community_colleges.pdf)
- Soliz, A. (2016, December). *Preparing America’s labor force: Workforce development programs in public community colleges*. Brookings Institution. Retrieved from Brookings Institution website: <https://www.brookings.edu/research/preparing-americas-labor-force-workforce-development-programs-in-public-community-colleges/>
- Spaulding, S. & Martin-Caughey, A. (2015, December). *The goals and dimensions of employer engagement in workforce development programs*. Urban Institute. Retrieved from the Urban Institute website: <https://www.urban.org/sites/default/files/alfresco/publication-pdfs/2000552-The-Goals-and-Dimensions-of-Employer-Engagement-in-Workforce-Development-Programs.pdf>
- Steinberg, S. A. (2013, April). *The high cost of youth unemployment*. Center for American Progress. Retrieved from Center for American Progress website: <https://www.americanprogress.org/issues/economy/reports/2013/04/05/59428/the-high-cost-of-youth-unemployment/>
- Stoll, M. (2010). Workforce development and public policy: Addressing new realities in low-skill labor markets. In Plotnick, R., Meyers, M., Romich, J., & Smith, S.R., (Eds.), *Old assumptions, new realities: Ensuring economic security for working families in the 21st century*. (pp.71-102). New York, NY: Russell Sage Foundation.
- Strauss, A. & Corbin, J. (1990). *Basics of qualitative research: Grounded Theory procedures and techniques*. Newbury Park, CA: Sage Publications.

- Subcommittee on Higher Education and Workforce Training. (2013, April). *Reviving our economy: The role of higher education in job growth and development*. Serial No. 113-11. Retrieved from <https://www.gpo.gov/fdsys/pkg/CHRG-113hhr80195/pdf/CHRG-113hhr80195.pdf>
- Sullivan, J. (2015, June). *Hiring job hoppers: 10 reasons why they are so valuable*. Talent Management and HR. Retrieved from <https://www.tlnt.com/hiring-job-hoppers-10-reasons-why-they-are-so-very-valuable/>
- Syms, D. & Metzger, K. (2012, December). *The new Macomb County*. (Report by Macomb Community College). Retrieved from Data Driven Detroit website: [https://datadrivendetroit.org/files/MAC/NewMacombCntyProjRept\\_782\\_13\\_iPack\\_PRNT2c.pdf](https://datadrivendetroit.org/files/MAC/NewMacombCntyProjRept_782_13_iPack_PRNT2c.pdf)
- Toossi, M. (2012). Labor force projections to 2020: A more slowly growing workforce. *Monthly Labor Review*, 135(1), 43-64. Retrieved from <http://www.bls.gov/>
- U.S. Department of Labor, Bureau of Labor Statistics. (2016, September). *Employee tenure in 2016*. (USDOL Publication No. USDL-16-1867). Retrieved from <https://www.bls.gov/news.release/pdf/tenure.pdf>
- U.S. Department of Education. (2006). Carl D. Perkins Career and Technical Education Act of 2006 (Public Law 109-270).
- U.S. Department of Education, Office of Vocational and Adult Education [OVAE]. (2012). *Integrating industry-driven competencies in education and training through employer engagement*. Community College Virtual Symposium. Washington, DC: U.S. Department of Education.
- Unruh, R. (2011, August). *Driving innovation from the middle: Middle-skills jobs in the American Economy*. National Skills Coalition. Retrieved from National Skills Coalition website: [https://m.nationalskillscoalition.org/resources/publications/file/NSC\\_SGA\\_MiddleSkillsBrief\\_2011-08-FINAL.pdf](https://m.nationalskillscoalition.org/resources/publications/file/NSC_SGA_MiddleSkillsBrief_2011-08-FINAL.pdf)
- Van Noy, M., Jacobs, J., Korey, S., Bailey, T., & Hughes, K. L. (2008). Noncredit Enrollment in Workforce Education: State Policies and Community College Practices. *American Association of Community Colleges* (NJ1), 1-60. Retrieved from <http://www.aacc.nche.edu/noncredenroll>.
- Vogt, W. P. (2007). *Quantitative research methods for professionals*. Boston, MA: Pearson Education.
- Voorhees, R. A., & Harvey, L. (Eds.). (2005). Workforce development and higher education: A strategic role for institutional research. *New Directions for Institutional Research*. San Francisco, CA: Jossey-Bass

- Wilson, D. (2010). The casualties of the twenty-first-century community college. *Academe*, 96(3), 12-18
- Wilson, R. (2015). *A resource guide to engaging employers*. Boston, MA: Jobs for the Future.
- Wismer, J. N. (1994). Training for trade: A partnership strategy. In S. L. Kantor (Ed.), *A practical guide to conducting customized work force training* (pp. 77-85). San Francisco, CA: Jossey-Bass
- Wyner, J. S. (2014). *What excellent community colleges do: Preparing all students for success*. Cambridge, MA: Harvard Education Press.
- Yin, R. (2009). *Case study research: Design and methods* (4th ed.). Thousand Oaks, CA: Sage.



## APPENDIX A: IRB APPROVAL LETTER



Date: February 22, 2018

To: Sandra Balkema  
From: Gregory Wellman, R.Ph, Ph.D, IRB Chair  
Re: IRB Application for Review

The Ferris State University Institutional Review Board (IRB) has reviewed your application for using human subjects in the study, "*Exploring Best Practices for Utilizing Employer Advisory Boards in Community Colleges*" and determined that it does not meet the Federal Definition of research on human subjects, as defined by the Department of Health and Human Services or the Food and Drug Administration. Upon review, the primary purpose of the survey is to gather information about the program. Where individual questions are asked they are about demographics or programmatic performance. As such, this would not be classified as human subjects research. Therefore, approval by the Ferris IRB is not required for the proposed project.

This determination applies only to the activities described in the submission; it does not apply should changes be made. If changes are made and there are questions about whether these activities are research involving human subjects, submit a new request to the IRB for determination. This letter only applies to Ferris IRB Review; it is your responsibility to ensure all necessary institutional permissions are obtained and policies are met prior to beginning the project, such as documentation of institutional or department support. Note that quality improvement project findings may be published, but any findings presented or published should be clearly identified as part of a quality improvement initiative and not as research.

Your project will remain on file with the Ferris IRB for purposes of tracking research efforts at Ferris. Should you have any questions regarding the determination of this letter, please contact the IRB.

Regards,

A handwritten signature in black ink, appearing to read "Gregory Wellman".

Gregory Wellman, R.Ph, Ph.D, IRB Chair  
Ferris State University Institutional Review Board  
Office of Research and Sponsored Programs

## APPENDIX B: PHASE 1 SURVEY QUESTIONS

## Advisory Boards in Community Colleges

You are invited to participate in a voluntary Survey exploring best practices for utilizing employer Advisory Boards in community colleges, as relates to career and technical education programs. The researcher is interested in studying how community colleges can effectively engage employer partners, achieving maximum benefit for all parties involved. The survey will take approximately 10-15 minutes to complete.

### Demographics of College & Advisory Board

Please respond to the following questions with the answer that best fits your description. Elaborate on any responses in the "other" space following the questions. Examples are greatly appreciated.

**1. Where in the state of Michigan would you classify your college?**

*Mark only one oval.*

- South - Eastern Michigan
- South - Western Michigan
- Central Michigan
- North - Eastern Michigan
- North - Western Michigan
- Other: \_\_\_\_\_

**2. Which of the following best describes your college?**

*Mark only one oval.*

- Rural
- Suburban or semi-rural
- Urban - within a large city or near a large city
- Other: \_\_\_\_\_

**3. What is your current position?**

*Mark only one oval.*

- Senior Administration (President, Vice President, Associate or Assistant Vice President)
- Mid-Level Administration (Dean, Associate or Assistant Dean, Director)
- Staff member
- Faculty member
- Other: \_\_\_\_\_

**4. How many years of experience in current position?**

*Mark only one oval.*

- 0 to less than 1 year
- 1 up to 4 years
- 5 up to 9 years
- 10 or more years
- Other: \_\_\_\_\_

**5. Please identify the category of your previous position:**

*Mark only one oval.*

- Administration – same institution
- Administration – different institution
- Staff or Faculty member – same institution
- Staff or Faculty member – different institution
- Private Industry
- Other: \_\_\_\_\_

**6. How many years of experience in previous position?**

*Mark only one oval.*

- 0 to less than 1 year
- 1 up to 4 years
- 5 up to 9 years
- 10 or more years
- Other: \_\_\_\_\_

**7. Does your program have an advisory board?**

*Mark only one oval.*

- Yes
- No
- Not Sure
- Other: \_\_\_\_\_

**8. If yes, does the program require that the advisory board include employers?**

*Mark only one oval.*

- Yes, it is required to include employers
- Not required, but it does include employers
- Not required and does NOT include employers
- Other: \_\_\_\_\_

9. Does the program require that the advisory board include other stakeholders?

Mark only one oval.

- Yes, it is required to include stakeholders other than employers
- Not required, but it does include stakeholders other than employers
- Not required and does NOT include stakeholders other than employers
- Other: \_\_\_\_\_

10. Are there defined and documented requirements for selecting advisory board members?

Mark only one oval.

- Yes - requirements are defined and documented
- Not documented, but defined or loosely defined
- Not documented nor defined
- Not Sure
- Other: \_\_\_\_\_

11. What is the term of an advisory board EMPLOYER member?

Mark only one oval.

- As long as they choose to – not defined by college or program
- Term defined as 1 – 3 years
- Term defined as 3 – 5 years
- Term defined, longer than 5 years
- Other: \_\_\_\_\_

12. Which of these defined compositions best describes your advisory board EMPLOYER members?

Mark only one oval.

- None of employer members are alumni of program
- Less than 25% are alumni of program
- Approximately 25 – 50% are alumni of program
- Approximately 50 – 75% are alumni of program
- More than 75% are alumni of program
- Other: \_\_\_\_\_

13. Approximately how many of your advisory board EMPLOYER members currently hire program graduates ("currently" defined as within last 3 years)?

Mark only one oval.

- None currently hire graduates
- Less than 25% currently hire graduates
- Approximately 25 – 50% currently hire graduates
- Approximately 50 – 75% currently hire graduates
- More than 75% currently hire graduates
- Other: \_\_\_\_\_

## Function & Organization

---

Please respond to the following questions with the answer that best fits your description. Elaborate on any responses in the "other" space following the questions. Examples are greatly appreciated.

14. How often does program advisory board meet with employers?

Mark only one oval.

- Once per year
- Twice per year
- Often more than twice, but not more than four times per year
- If more than four times per year, please define frequency below in "other"
- Other: \_\_\_\_\_

15. Do all advisory board EMPLOYER members attend every meeting?

Mark only one oval.

- Yes, if available – expected to attend all meeting dates
- No, even if available – only EXPECTED to attend specific meeting dates
- No, even if available – only INVITED to attend specific meeting dates
- Other: \_\_\_\_\_

16. Where are advisory board meetings held?

Mark only one oval.

- Almost always at college - Face-to-Face
- Almost always at employers' facilities - Face-to-Face
- Rotate locations - Face-to-Face
- Conducted remotely via technology
- Other: \_\_\_\_\_

17. Approximately how long are meetings?

Mark only one oval.

- 2 hours or less
- 2 - 4 hours
- 4 - 6 hours
- Entire Day
- Other: \_\_\_\_\_

18. Is an agenda created and provided to EMPLOYER members?

Mark only one oval.

- Agenda created & provided prior to the meeting day
- Agenda created, but not provided until day of meeting
- No directed agenda - Meeting is spontaneous
- Other: \_\_\_\_\_

## Perceptions

---

Please respond to the following questions with the answer that best fits your description. Elaborate on any responses in the "other" space following the questions. Examples are greatly appreciated.

19. It is easy to identify employers for our program or college advisory board.

Check all that apply.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

20. It is easy to get EMPLOYERS to actively participate in our program or college advisory board meetings.

Check all that apply.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree



21. Program or college advisory boards have a positive effect on employer satisfaction with the college.

*Check all that apply.*

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

22. Program or college advisory boards have a positive effect on my program development (e.g., curriculum, course design).

*Check all that apply.*

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

23. Advisory board EMPLOYER members bring value in the form of new ideas and/or exposure to new technology.

*Check all that apply.*

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

24. Advisory board EMPLOYER members bring value in the form of monetary funding that likely would not be received if employer were not part of advisory board.

*Check all that apply.*

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

25. **Advisory board EMPLOYER members bring value in the form of in-kind donations that likely would not be received if employer were not part of advisory board.**

*Check all that apply.*

- Strongly Agree  
 Agree  
 Neutral  
 Disagree  
 Strongly Disagree

26. **My program or college would continue to utilize advisory board employer members, even if not required by the program, accreditation, or the college.**

*Check all that apply.*

- Strongly Agree  
 Agree  
 Neutral  
 Disagree  
 Strongly Disagree

27. **There are considerable costs (monetary, time, or other) accrued by my program or college for advisory boards with EMPLOYER members when compared to the gains (monetary, in-kind, or other).**

*Check all that apply.*

- Strongly Agree  
 Agree  
 Neutral  
 Disagree  
 Strongly Disagree

28. **When weighing the efforts and resources put forth by the program or college, versus the benefits received by the program or college, how useful are program advisory boards to your college?**

*Check all that apply.*

- Very Useful  
 Useful  
 Neutral  
 Not very useful  
 No value at all

### **Open Response Questions**

Please respond to the following questions with the answer that best fits your experiences. Examples are greatly appreciated.

29. Other than advisory boards, are there other existing institutional programs or structures that help engage employers? Please provide a brief description of each.

---

---

---

---

---

30. Other than advisory boards, could there be other institutional programs or structures that currently DO NOT EXIST, but might help engage employers? Please provide a brief description of each.

---

---

---

---

---

31. Please describe the greatest value of employer engagement from your perspective.

---

---

---

---

---

32. Please describe the greatest cost of employer engagement to the COLLEGE from your perspective.

---

---

---

---

---

33. Please describe the greatest cost of employer engagement to the EMPLOYER from your perspective.

---

---

---

---

---

34. What do you perceive to be the greatest measure of successful employer engagement?

---

---

---

---

---

### **Survey is Complete**

---

Thank you for your time and effort. It is greatly appreciated.

35. Would you be open to discussing these topics in more detail in a follow-up interview? If so, please provide a point of contact below (Name and email or phone).

---

**PLEASE REMEMBER TO HIT SUBMIT**

---

---

## APPENDIX C: PHASE 2 SEMI-STRUCTURED INTERVIEW QUESTIONS

List of Possible Interview Questions (NOT IN A SPECIFIC ORDER, NOT ALL-INCLUSIVE)

CONFIRMATION OF CONSENT: In the survey, you acknowledged an interest in participating further in this study. You are now invited to participate in a voluntary follow-up interview exploring best practices for utilizing employer Advisory Boards in community colleges, as relates to career and technical education programs. The researcher is interested in studying how community colleges can effectively engage employer partners, achieving maximum benefit for all parties involved.

1. Basic background & follow-up on survey responses (varies by respondent).
  - a. Structure & Function: Composition of WFD & CTE program A-boards (questions 10-18)
  - b. Perceptions: ease of active employer participation, effect, value (questions 20-25)
  - c. Open Responses: Discussion of respondent vs. sample population (questions 27-34)
2. Who owns (perhaps, who has responsibility for) the A-board? (At what level within college or company or community or?)
  - a. What sets the tone or direction?
  - b. Is there a stated mission or vision?
  - c. Who is the Chair? (College or Other); do program faculty attend & contribute?
3. How recruit new members for A-board?
  - a. Criteria for selecting members?
  - b. Senior executives or ground level?
  - c. Chamber of Commerce? Economic Development? More or less value than employers?
  - d. Why or Why not Alumni?
4. How do members cycle off the A-board?
  - a. Time, relevance, other reasons?
  - b. Allowed to return after term?
5. What topics are covered (curriculum, industry trends, resource needs, etc.)?
  - a. Which is most useful/relevant to you? To employers?
  - b. Which is least useful/relevant to you? To employers?
6. Is actual meeting scripted (follows agenda) or becomes spontaneous?
7. Are you asked (and ask) questions or given results? Given demands (or maybe expectations)?
8. Do you have any metrics? If so, example with status; if not, any suggestions?
  - a. Would you find metrics useful with advisory board (possess power to drive change?).
9. How do you hold yourself and others accountable to the A-board's advising or requests?
10. Does the advisory board assist with problem resolution? For the College? The employer? The Community? Student?
  - a. Any relevant examples?
11. What defines "contribution" from the A-board to you?

- a. Is it collaborative in nature?
  - b. Is collaboration required?
12. Does owner of A-board have ability to compel change or make improvements if there is a better model?
- a. What changes might you (or they) suggest?
13. What would you change about A-boards if able (Structure, Content, Timing)?
14. Would you keep A-boards if not required or move to other methods or structures?
- a. What?
  - b. How better?
  - c. How implement?
15. Are there other levels of engagement for employers (or for advisory committee members) outside of the planned or prescribed A-board activity?
- a. Examples?
16. What more could be done or offered by college or company? (Both in terms of advisory board process or in general for employer engagement?)
- a. E.g., would you consider faculty immersion or externships if your employers supported?
17. What changes do you see in WFD and or CTE in next 5 years? 10-20 years?
- a. Does current level of employer engagement support these?
  - b. Specific to your regional employers in next 5 years-
    - i. What is biggest hope or excitement?
    - ii. What is biggest concern?
18. Any general advice?

## APPENDIX D: PHASE 1 SURVEY INVITATION



**Mark A Dunneback**

---

**From:** Mark A Dunneback Tuesday,  
**Sent:** April 3, 2018 8:18 PM  
**To:**  
**Subject:** Please share your experience

Hello,  
My name is Mark Dunneback, and I am a faculty member in the College of Engineering Technology at Ferris State University.  
I am also a doctoral student, conducting a study on perceptions of engaging employers involved on program advisory boards.

I am asking that you please share your experiences with employer advisory boards, by completing the short electronic survey below.  
Your responses will help me understand the perceptions of employer advisory boards in career and technical education and workforce development programs, and will serve as a foundation of my dissertation research.

The survey will only require 10 – 12 minutes to complete. All responses are confidential, and no personally identifiable information will be associated with any reports of the survey data.

Please enter the survey by clicking this link (or by pasting link into your browser): <https://goo.gl/forms/>

Thank you very much for your time and cooperation supporting this study.  
If you wish to receive more information about the study, please feel free to email me directly. The survey will remain open through the end of April.

Thank you-  
-MD



Mark Dunneback  
Assistant Professor  
Ferris State University | College of Engineering Technology  
915 Campus Dr. SWN 220 | Big Rapids, MI 49307-2291  
231.591.2955 office [markdunneback@ferris.edu](mailto:markdunneback@ferris.edu)

Your participation in this study is voluntary. You may decline to answer any question at any time, without consequence. If you have questions about this study, please contact the researcher via the contact information listed above. If you have questions about your rights as a participant, contact the Ferris State University Institutional Review Board (IRB) for Human Participants at Office of Academic Research, 1010 Campus Drive, FLITE 410D, Big Rapids, MI 49307 or [IRB@ferris.edu](mailto:IRB@ferris.edu).