

COMPLEX SCHOOL-UNIVERSITY PARTNERSHIPS:
UNIVERSITY AND UNIVERSITY-SYSTEM LEADERS' EXPERIENCES

A Dissertation

by

DORIAN NOEL MARTIN

Submitted to the Office of Graduate and Professional Studies of
Texas A&M University
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

Chair of Committee,	Jia Wang
Committee Members,	Larry M. Dooley
	Kelli Peck Parrott
	Timothy P. Scott
Head of Department,	Fredrick M. Nafukho

May 2015

Major Subject: Educational Human Resource Development

Copyright 2015 Dorian Noel Martin

ABSTRACT

The purpose of this study was to explore the experiences of university and university-system mid-level leaders' experiences in complex partnerships in which they have been involved. A complex partnership was defined as a codified ongoing collaborative effort that involves at least three different organizational entities. These complex partnerships are designed to leverage resources and personnel through developing shared capacity to fulfill a specific agreed-upon educational mandate.

Two major areas comprise the focus of this inquiry: (a) the leaders' description about their practice in facilitating complex partnerships, and (b) factors that shaped the leaders' practices in relation to these partnerships. The leaders in this study were mid-level university-system or university managers who were involved in or had recent experience in facilitating complex partnerships.

The study participants' experiences in complex partnerships were experienced from a qualitative perspective and through extensive open-ended individual interviews and document review. Ten mid-level leaders from university systems and universities in the United States were purposefully selected. The constant comparative analysis method was employed for data analysis and result interpretations.

Five themes and three subthemes directly related to these leaders' participation in complex partnerships emerged from the data. The five themes were: (a) emerging needs; (b) relationships; (c) leadership; (d) accountability; and (e) staffing and infrastructure.

The three subthemes were: (a) communication; (b) collaboration; and (c) driving force leadership.

A model for organization development in a complex partnership was proposed to understand how these multi-organization partnerships function. Implications for HRD theory and practice were drawn and specific future research directions were discussed. This study provides insight that may inform HRD professionals when designing organization development interventions in a complex partnership.

ACKNOWLEDGEMENTS

Like many graduate students, the road to achieving this doctorate has been a long and winding one. Despite numerous challenges, the chance to gain new knowledge kept me moving forward toward this degree. I could not have made this journey without the support of many people. First and foremost, I want to thank Dr. Toby Marshall Egan, who started as my doctoral advisor, and Dr. William E. Reaves, my former boss. Both helped me learn that I could stretch past my initial perceptions of myself. I also would like to offer my deepest appreciation to Dr. Jai Wang, who stepped in as my advisor during the dissertation process and kept me kindly and firmly focused. I also would like to thank my committee who provided timely feedback and critical moral support – current members, Dr. Kelli Peck Parrott, Dr. Timothy P. Scott, and Dr. Larry M. Dooley and previous members, Dr. Jamie Callahan and Dr. Don Moynihan.

I want to thank all of my family members and friends who continue to serve as my cheerleaders. Thanks also go to the department faculty and staff for making my time at Texas A&M University a great experience.

Finally, thanks to all of my family members who encouraged me to pursue graduate school. I'd like to give special thanks to my father, Lewis J. Martin, who helped me learn that there are many types of strength and perseverance in this world.

TABLE OF CONTENTS

	Page
ABSTRACT.....	ii
ACKNOWLEDGEMENTS.....	iv
LIST OF FIGURES.....	viii
LIST OF TABLES.....	ix
CHAPTER I INTRODUCTION.....	1
Background of the Study.....	1
Problem of the Study.....	5
Purpose and Research Questions.....	8
Theoretical Framework.....	9
Research Method.....	14
Boundary of the Study.....	14
Significance of the Study.....	15
Definitions of the Key Concepts.....	16
Summary.....	17
CHAPTER II LITERATURE REVIEW.....	18
Human Resource Development.....	18
Organization Development.....	18
Organization Culture.....	22
Organization Change.....	24
Traditional School-University Partnerships.....	29
Partnership Formation.....	29
Partnership Operation.....	31
Leadership in Partnerships.....	34
Financial Issues.....	35
Boundary-Spanning.....	36
Collective Impact Initiatives.....	41
Large-Scale Educational Partnerships.....	44
Leadership.....	49
Partnership Mission.....	50
Partnership Operation.....	51
Evaluation.....	54

Policy Recommendations.....	55
Critical Issues and Gaps.....	58
Summary.....	59
CHAPTER III METHODOLOGY.....	61
Restatement of Purpose and Research Questions.....	61
Rationale for Qualitative Research	62
Research Paradigm and Implications for the Study.....	66
Design of the Study.....	67
Sampling Procedures.....	68
Study Participants.....	69
Methods of Data Collection.....	71
First-Round Interviews.....	73
Second-Round Interviews.....	74
Document Review.....	75
Data Analysis Process.....	76
Data Transcription.....	77
Data Analysis Procedure.....	77
Reporting the Findings.....	79
Trustworthiness and Credibility.....	80
Trustworthiness.....	80
Credibility.....	81
The Researcher’s Role.....	83
Summary.....	85
CHAPTER IV FINDINGS.....	86
Study Participants.....	87
Mary.....	89
Brenda.....	91
Sondra.....	93
Leslie.....	94
Mara.....	96
Eric.....	97
Jackie.....	99
Kaye.....	101
Howard.....	102
Chris.....	103
Study Themes.....	104
Theme 1: Emerging Needs.....	106
Theme 2: Relationships.....	109
Subtheme 2.1: Communication.....	117
Subtheme 2.2: Collaboration.....	120

Theme 3: Leadership.....	123
Subtheme 3.1: Driving Force.....	129
Theme 4: Accountability.....	131
Theme 5: Staffing and Infrastructure.....	136
Summary.....	140
CHAPTER V DISCUSSION, RECOMMENDATIONS, AND CONCLUSIONS.....	141
Research Questions.....	141
Findings in Response to Question 1.....	142
Theme 2: Relationships.....	142
Subtheme 2.1: Communication.....	145
Subtheme 2.2: Collaboration.....	148
Theme 3: Leadership.....	152
Findings in Response to Question 2.....	154
Theme 1: Emerging Needs.....	154
Subtheme 3.1: Driving Force.....	158
Theme 4: Accountability.....	161
Theme 5: Staffing and Infrastructure.....	166
A New Conceptual Framework.....	168
Implications for Practice, Research, and Theory.....	172
Implications for Practice.....	172
Implications for Research.....	174
Implications for Theory.....	177
Summary and Conclusions.....	182
REFERENCES.....	183
APPENDIX A TEXAS A&M INSTITUTION REVIEW BOARD APPROVAL.....	201
APPENDIX B STUDY INVITATION LETTER.....	202
APPENDIX C INFORMED CONSENT FORM.....	203
APPENDIX D FIRST-ROUND INTERVIEW GUIDE.....	204
APPENDIX E INTERVIEWER MEMO.....	205
APPENDIX F SAMPLE OF SECOND-ROUND INTERVIEW IN WRITING...	206
APPENDIX G SAMPLE OF INDIVIDUAL CASE ANALYSIS.....	207

LIST OF FIGURES

	Page
Figure 1	A Preliminary Evaluation Framework for the National Science Foundation's Math and Science Partnership Program..... 55
Figure 2	Organization Development Model for Complex Partnerships..... 169

LIST OF TABLES

		Page
Table 1	Differences Between Collaboration and Collective Impact.....	42
Table 2	First-Generation Partnership.....	45
Table 3	Second-Generation Partnership.....	46
Table 4	Third-Generation Partnership.....	47
Table 5	Input Factors in K-20 Partnerships.....	52
Table 6	Process Factors in K-20 Partnerships.....	52
Table 7	Outcome Factors in K-20 Partnerships.....	53
Table 8	Landmines Facing P-16/P-20 Councils.....	57
Table 9	Data Analysis Procedure.....	77
Table 10	Demographic Profile of the Study Participants.....	88
Table 11	Study Participants' Location Based on U.S. Census Regions.....	89
Table 12	Study Findings.....	105
Table 13	Major Themes by Participant.....	105
Table 14	Frequency of Occurrence of Emerging Needs Theme.....	106
Table 15	Subthemes Under Relationships.....	110
Table 16	Frequency of Occurrence of Relationship Theme/Subthemes.....	111
Table 17	Subtheme Under Leadership.....	124
Table 18	Frequency of Occurrence of Leadership Theme/Subtheme.....	125
Table 19	Frequency of Occurrence of Accountability Theme.....	132
Table 20	Frequency of Occurrence of Staffing and Infrastructure Theme.....	136

Table 21	Analysis of Participants' Collaboration Through Kanter's Five Levels of Integration.....	151
Table 22	Elements of Complex Adaptive Systems Seen in Complex Partnerships.....	178

CHAPTER I

INTRODUCTION

This chapter describes the background of this study, the problem, purpose, and research questions. A brief overview of the conceptual framework that informed this study is described. Additionally, the methods and significance of the study are discussed.

Background of the Study

Organizations increasingly are developing collaborative strategies in which leaders from two or more organizations decide to work together toward agreed-upon objectives at a time of increasing environmental pressures (Cummings & Worley, 2005). This type of collaboration results in a complex effort that requires the strategies, goals, structures, and processes of the partnering organizations to become increasingly interdependent, coordinated, and aligned in order to give the agreed-upon partnership the best chance for success. One example of this type of collaborative effort is a school-university partnership.

Traditional school-university partnerships have been well documented in the literature. They are often portrayed as being a dyadic (one school/department/teaching team/teacher partnered with one university/university department/faculty member) relationship. Goodlad (1991) offered a commonly cited definition of a school-university partnership:

A school-university partnership represents a planned effort to establish a formal, mutually beneficial interinstitutional relationship characterized by the following:

- Sufficient dissimilarity among institutions to warrant the effort of seeking complementarity in the fulfillment of some functions.
- Sufficient overlap in some functions to make clearly apparent the potential benefits of collaboration.
- Sufficient commitment to the effective fulfillment of these overlapping functions to warrant the inevitable loss of some present control and authority on the part of the institution currently claiming dominant interest. (p. 159)

Traditional school-university partnerships started in the 1980s as a way to create a new type of school focusing on teaching students to think critically (Field, Hoffman, & Cohen, 1999). Recommendations from the Carnegie Forum and the Holmes Group led to the creation, in the mid-1990s, of professional development schools that were designed to provide in-service opportunities, develop and conduct research, and offer a setting for pre-service teacher education (Burstein, Kretschmer, Smith, & Gudoski, 1999).

Since their inception, traditional school-university partnerships' missions have expanded tremendously, with various foci ranging from school retention, academic performance, and professional development to administrative needs and educational change (James & Haig-Brown, 2001; Mark, 1998). Kirschenbaum and Reagan (2001) analyzed 57 collaborations between universities and school districts and found the following: (a) 45.6% of these partnerships focused on curricular enrichment; (b) 21.1%

were community programs supporting schools through donations of consulting services, tuition, and equipment; (c) 12.3% focused on school-linked health and social services programs; (d) 12.3% were designed as school-to-work programs, including career days and job shadowing; and (e) 8.8% involved tutoring and mentoring programs.

As these partnership efforts evolved, scholars have looked for new ways to define them. For instance, Sockett (1998) defined a school-university partnership as a relationship between institutions based on social, educational, or political causes. He stated,

This moral claim can be justified by general value commitments, e.g., “the whole is better than the sum of its parts”; by empirical beliefs, e.g., that institutions have become atomized; and by more specific moral claims, e.g., that the development of a sense of community is critical for universities, which ought to commit themselves to an agenda of social justice. (p. 76)

Other researchers described school-university partnerships as focusing on simultaneous renewal of both the university and the school (Dallmer, 2004; Stephens & Boldt, 2004).

Complex school-university partnerships spanning three or more organizations began to emerge as a result of the introduction of state policies focusing on prekindergarten-grade 16 (P-16) education (Krueger, 2006; Rochford, O’Neill, Gelb, & Ross, 2007). Beginning in the mid-1990s, several system-wide efforts emerged to improve P-16 education (Rochford et al., 2007). Georgia has the oldest and most established initiative in the P-16 movement (Krueger, 2006). This effort was created in

1995 by Governor Zell Miller and expanded by his successor, Governor Roy Barnes. By 2006, the initiative had an operating budget of more than \$12 million and a staff of 50 employees. The Georgia P-16 network was run by the University of Georgia in partnership with the Governor's Office, the Department of Education, the Department of Early Care and Learning, and the Georgia Partnership for Excellence in Education. Georgia's P-16 initiative was divided into 15 local councils, which focused on specific regional needs. The larger network met regularly to share knowledge and address statewide P-16 issues and concerns. Maryland and Oregon were other early leaders in the P-16 movement. Since then, other iterations of complex partnerships at the state, regional and local levels have emerged.

These multi-organization initiatives do not form and evolve in a vacuum. In fact, human resource development (HRD) strategies and tactics related to organization development and change (OD/C) are at the core of many initiatives that span organizational boundaries. For instance, Du Chatenier, Verstegen, Biemans, Mulder, and Omta (2009) outlined the challenges of creating collaborative knowledge in innovation teams that span different organizations. Furthermore, White (2014) introduced a new socio-networked learning framework that incorporated Senge's shared vision discipline (Senge, 1990, 2006).

This study focused on one type of OD/C endeavor – a complex school-university partnership. Based on my experiences working in one such P-16 initiative (Martin, Egan, McWilliams, Wilson, Holt, & Reaves, 2008; Martin, Reeves, Wilson, O'Dell, & Egan,

2004), I proposed a working definition of complex school-university partnerships (heretofore known as complex partnerships) as codified ongoing collaborative efforts that involve at least three different organizational entities. These complex partnerships are designed to leverage resources and personnel by developing shared capacity to fulfill a specific agreed-upon educational mandate. I then used this definition to ground this study in practice when identifying a theoretical framework.

Problem of the Study

Even though these complex school-university partnerships have existed for almost two decades, scholars have only recently studied how these entities function. Clifford, Millar, Smith, Hora, and DeLima (2007) conducted a literature review on kindergarten-grade 20 (known as K-20) partnerships. After reviewing 74 highly cited K-20 partnerships, the authors concluded that “the K-20 partnership literature lacks methodological rigor and scope, that partnership is inadequately defined in essentially all cases, and that the research about how K-20 partnerships form and function, and what they achieve contains significant gaps” (p. 2). Therefore, complex partnerships offer a fertile area for research. For instance, how do some complex partnerships bypass the clash of organizational cultures in order to create an integrated and adaptive multi-organizational system? Universities are self-directed with individual faculty encouraged to focus on the individual teaching, research, and service efforts (Birnbaum, 1988). K-12 schools, on the other hand, are often engaged in professional learning communities and experience frustration at being handcuffed by rigid school accountability regulations

(Hord, 1997; Regenstein & Romero-Jurado, 2014). Community colleges, who participate in some of these partnerships, seem to serve as a hybrid of universities and K-12 schools through handling remedial education, technical education, and vocational education, as well as serving as a higher education stepping stone for students who want to attend four-year institutions (Education Commission of the States, n.d.). Other partnering organizations involved in these partnerships have their own specific organizational cultures and demands.

Furthermore, other issues can emerge that hamper the efforts undertaken in complex partnerships. For example, elevated finger pointing across organizational lines has become more common within partnerships. Some policymakers are concerned about K-12 students' lack of preparedness when entering higher education since many students must take part in remedial education in order to be successful in college (National Conference of State Legislators, n.d.). Meanwhile, public school administrators worry that universities are devaluing teacher preparation and believe that both the quantity and quality of teacher candidates being prepared by higher education have been severely diminished (Strauss, 2013). Some university arts and science faculty members do not understand or embrace their role in P-16 education in relation to teacher education and preparation (Mucher, 2014). Similarly, community colleges are not immune from challenges. For instance, researchers have found that more than 10 percent of community college students lose almost all of their course credits when transferring to a four-year institution, thus costing these students time and money (Bidwell, 2014; Monaghan & Attewell, 2014). Furthermore, the quality of the workforce that is being

produced continues to be of concern to policymakers and business leaders (Vandal, 2009). Another issue that faces a complex partnership is accountability. Many of the participating educational institutions operate in an environment governed by ever-changing accountability standards mandated by legislators (Kirwan, 2007; Education Trust, 2009). However, these accountability systems often do not span the entirety of the P-16 system. Instead, they focus on either K-12 schools or higher education (Kirst & Venezia, 2001). A key question is: how can a complex partnership develop an accountability system that can inform the initiative's efforts while also taking into account the measures for which educational partners are already individually being held accountable?

While these types of issues present serious challenges to the operation of complex partnerships, they also provide opportunities for real growth, integration, adaption, and renewal. One way that these opportunities can be realized is through HRD, which Swanson and Holton (2001) defined as “a process for developing and unleashing human expertise through organization development and personnel training and development for the purpose of improving performance” (p. 4). HRD focuses on building numerous skills and competencies at the organizational level through organization development (OD) and at the individual level through training and development (T&D) (Swanson & Holton, 2001). Therefore, HRD professionals can play a vital role in the formation and functioning of cross-organizational efforts such as complex partnerships described in this study. However, working with multiple organizations requires HRD professionals to have a better understanding of the larger

picture, which differs tremendously from what they encounter in working with one organization. Currently, little research on the experiences of participants in complex partnerships exists to inform HRD efforts.

Purpose and Research Questions

The purpose of this study was to explore the experiences of university and university-system leaders' experiences in complex partnerships in which they have been involved. Leaders in this study are confined to individuals at the mid-organizational level as defined by their respective organization. I purposefully selected this level because I believed individuals at this level are both leaders and managers; thus, they can describe both the big picture and the day-to-day operations of the complex partnership. Two major areas comprise the focus of this inquiry: (a) the leaders' perceptions about their involvement in facilitating these efforts, and (b) factors that have shaped leaders' practices in relation to these multi-organizational partnerships. Therefore, the following two questions were used to guide this research:

1. How do university and university-system leaders describe their practice in complex partnerships?
2. What factors shaped the leaders' practice in complex partnerships?

Given the limited theory and knowledge about complex partnerships, this study is timely in providing much needed empirical evidence that may enable HRD professionals to better understand issues confronting higher education leaders who

participate in complex partnerships. Taken together with research that explores other facets of these collaborations, this study can shed light on these types of boundary-spanning initiatives and assist HRD practitioners in making educated and informed decisions in their OD endeavors.

Theoretical Framework

This section discusses the conceptual framework that guided this study. I have chosen to use complex adaptive systems theory as the theoretical framework.

A complex adaptive system is comprised of a large number of elements that interact and link with each other, thus binding the system together (Hill, 2011). Complex adaptive organizations are believed to be best suited to environments that experience frequent change. Furthermore, these systems are both self-organizing and focused on learning (Dooley, 1997). One such environment is health care (Hill, 2011; McDaniel et al., 2009; Plsek, 2001). Noting that complex adaptive systems are comprised of microsystems and macrosystems, Plsek (2001) described doctors' offices, hospitals, pharmacies, and long-term care facilities as microsystems and the combination of these microsystems as a macrosystem. Hill (2011) also identified global health as another example of a complex adaptive system. He stated,

...global health can be understood to operate as a system, displaying the key characteristics of a complex adaptive system: relationships and networks; the presence of 'hybrids' of social and material elements within these structures; the

non-linear nature of feedback in these relationships; and the emergent properties of the system that result from these dynamic interactions. (p. 595)

Plsek (2001) identified eight key elements that can be used to think about complex organizational systems. These elements include: adaptable elements; simple rules; nonlinearity; emergent behaviors that foster continual creativity; observed instead of predicted detail; inherent order; context within a larger system; and co-evolution through constant tension and balance. Furthermore, Plsek suggested that the different parts of a complex adaptive system,

...have the freedom and ability to respond to stimuli in many different and fundamentally unpredictable ways. For this reason, emergent, surprising, creative behavior is a real possibility. Such behavior can be for better or for worse; that is, it can manifest itself as either innovation or error. Further, such emergent behavior can occur at both the microsystem and macrosystem levels. (p. 310)

The general building blocks of a complex adaptive system are agents, which are semi-autonomous units that evolve over time in order to maximize some measure of fitness (Dooley, 1997). Van Beurden, Kia, Zask, Dietrich, and Rose (2011) stated that a complex adaptive system behaves in a fundamentally different way from the constituent agents. Furthermore, behavior cannot be predicted. The system and agents must co-evolve, with the agents modifying the system based on their interaction with the system. These agents scan both the complex adaptive system environment as well as the external environment to develop a schema of rules (Dooley, 1997). However, these schemas are

based on incomplete and/or biased information and can be contradictory. In addition, these schema are dependent on the observer since the complex adaptive system often cannot be separated from its context. Dooley (1997) stated, “Even though observations which negate existing schema will tend to be discarded, competing schema can evolve concurrently and may not be logically inclusive of one another” (p. 85). Schema also can define interactions between agents. Dooley (2007) wrote,

As agents aggregate into meta-agents, schema can follow so that whole subunits of the CAS (complex adaptive system) can be differentiated by common schema within, but differentiated schema outside of the subunit. In general, there is consensus within an aggregate about the mission, strategy, goals, means, measurement, and correction. In order to create such an environment of consensus, leaders create common language and conceptual categories, define group boundaries and criteria for inclusion and exclusion, distribute power and status, develop norms for intimacy and friendship, define and allocate rewards and punishments, and explain the unexplainable. (p. 86)

Interactions between agents also create schema that define interpretation rules and action rules (which involve an exchange of information and resources). Dooley (1997) explained, “Information and resources can undergo multiplier effects – their impact can increase in a nonlinear fashion and cascade throughout the system – based on the nature of interconnectedness in the system” (p. 88).

Schema can morph as a complex adaptive system evolves. Dooley (1997) pointed out that schema, which compete for survival, can go through three types of change: first-order change, second-order change, and third-order change. First-order change is when action is taken to adapt the observation to the current schemata. Second-order change involves purposeful change in the schema to more closely fit observations. Third-order change involves the schema surviving or dying based on whether the corresponding complex adaptive system continues to exist.

Designing a complex adaptive system can be challenging. Noting that complex adaptive systems cannot be understood a priori, Plsek (2001) suggested four key elements to consider when developing a complex adaptive system. These elements include:

- Use of biological metaphors to guide thinking.
- Creation of conditions in which the system evolves naturally over a period of time.
- Creation of simple rules and minimum specifications.
- Development of a vision and creation of a space in which natural creativity can emerge from local actions.

Dooley (1997) also suggested that a complex adaptive system should be designed in such a way that convergent and divergent forces are balanced in an organic fashion. The researcher offered the following guidelines for designers to consider: creation of a shared purpose; encouragement of inquiry, learning, trial and error, and divergent

thinking; the use of communications and technology to enhance interconnections; use of rapid feedback loops; cultivation of diversity, specialization, differentiation, and integration; creation of shared values and expected action; and development of a few essential structural and behavioral boundaries.

Challenges exist in leading and managing complex adaptive systems. Van Beurden et al. (2011) stressed that probes are necessary to identify emergent patterns in decision-making through sensing which initiatives are useful. Van Beurden et al. warned, “Analytic techniques appropriate to the ordered domains will not work. A highly collaborative approach to group function is desirable and the more diverse the partners, the better a system can be understood and appropriate probes developed” (p. 5). Emphasizing that organizations that are complex adaptive systems defy conventional analysis, Van Beurden et al. further stated,

Attempts to turn emergent patterns into policy or procedure by top down ‘installation’ that disregards their context will inevitably be confronted by new emergent patterns, each of which will also be understood only on reflection....Indeed, we cannot be sure that apparently repeating patterns will continue, because we cannot see their underlying causes. So, even expert opinion, based on historically stable patterns of meaning, will not sufficiently prepare us to recognize and act on new unexpected patterns. This has implications for replicability of complex interventions (e.g. a health promotion

project with good outcomes in a highly networked context may have different outcomes elsewhere). (p. 5)

Research Method

This general qualitative study was exploratory, inductive, constructive, and subjective in nature (Merriam, 2009). Purposive sampling (specifically criterion sampling and snowball sampling strategies) were used to identify ten study participants (Biernacki & Waldorf, 1981; Merriam, 2009; Patton, 1987). Data was collected through individual interviews and document analysis. The data was analyzed using the constant comparative method (Merriam, 2009). To ensure the trustworthiness of the findings, I utilized a number of strategies to ensure trustworthiness and credibility.

Boundary of the Study

Because of constraints in time, financial resources, and geographical access, this study was bounded to ten mid-level administrators in universities or university systems in the United States. The selection of the participants represents purposeful sampling (Creswell, 2007; Merriam, 2009). Each participant was required to have actively participated in either a current or previous complex partnership in the United States. Furthermore, these participants were in mid-management positions so they were intimately involved in the decision-making process and often were aware of, if not intimately involved in, the day-to-day activities of the partnership; thus, they were able to offer a rich description of the phenomenon. Participant selection was also based on a set of predetermined criteria, which were discussed in Chapter III.

Significance of the Study

As mentioned earlier, much of the published research on school-university partnerships has focused primarily on the dyadic link between one school and one university, whether at the organizational level, group level (i.e., a specific college or department or a K-12 team of teachers), or individual level (i.e., a faculty member and a teacher), (Baker, Gardner, & Curry, 2008; Kirschenbaum & Reagan, 2001; Sockett, 1998). Complex partnerships have not been well researched, creating a gap in the literature regarding the operation, opportunities, and challenges associated with this type of organization initiative.

This gap also extends to HRD research and practice. Much has been learned about organization development, which Cummings and Worley (2005) defined as “a systemwide application and transfer of behavioral science knowledge to the planned development, improvement, and reinforcement of the strategies, structures, and processes that lead to organization effectiveness” (p. 1). However, HRD’s exploration of organizational development initiatives, such as complex partnerships, is in its infancy. In a *Human Resource Development Review* editorial describing the changes in HRD, Torraco (2005) posited, “As facilitators of change, HRD now has system-wide responsibility for facilitating strategic change and large-scale projects that cut across organizations and into the community” (p. 251). While studies related to inter-organizational development have emerged in business-related journals (Holmqvist, 2003; Ingram & Simons, 2002; Knight & Pye, 2005; Larsson, Bengtsson, Henriksson, &

Sparks, 2014), research published in HRD journals has been limited (Du Chatenier et al., 2009; White, 2014). Therefore, an opportunity exists to provide additional insights into inter-organizational practices in complex partnerships so as to inform HRD practice and research.

This study also may offer valuable information to policymakers and funders. Hanleybrown, Kania, and Kramer (2012) posited that funders' investments may be well suited to support large-scale change that multi-organizational partnerships address. However, little is known about how these partnerships work and whether targeting funding to areas such as staffing to facilitate the partnership might be a worthwhile idea.

Definitions of the Key Concepts

Complex School-University Partnerships (Complex Partnerships) – A complex partnership is a codified ongoing collaborative effort that involves at least three different organizational entities. These complex partnerships are designed to leverage resources and personnel through developing shared capacity to fulfill a specific agreed-upon educational mandate. This definition was developed based on my own experiences working in such a partnership and was informed by the gaps in the school-university partnership literature that I identified based on my professional experiences (Martin et al., 2008; Martin et al., 2004).

P-16 – P-16 is a systemic educational effort that spans the educational system from prekindergarten (P) to a four-year college degree (Grade 16) (Education Commission of the States, n.d.).

Traditional School-University Partnership – This type of partnership is a planned effort that establishes a formal, mutually beneficial relationship between institutions (Goodlad, 1991). This type of partnership often describes a dyadic relationship in which one school/ department/teaching team/teacher is partnered with one university/university department/faculty member.

Summary

This chapter described the context in which this study was conducted. The problem to be addressed was highlighted, followed by the purpose and research questions that guided this inquiry. This chapter also briefly introduced the conceptual framework that informed the study and set its boundary. Next, this chapter addressed the study's significance to the field of human resource development. The chapter concluded with definitions of the key concepts included in this study.

CHAPTER II

LITERATURE REVIEW

This chapter provides an overview of the literature for this study. To begin to understand the foundations of complex partnerships, one needs to look at five areas in the literature. The first area identifies the human resource development literature. The second area focuses on education's school-university partnership literature. The third area covers the literature about boundary spanning. The fourth area highlights collective impact initiatives. The fifth area describes large-scale educational partnerships, including policy reports that encourage P-16 practices and offer recommendations for future P-16 collaboration. In this chapter, I discuss each of these five areas.

Human Resource Development

Three areas related to human resource development have relevance to complex partnerships: organization development, organizational culture, and organizational change. In this section I discuss relevant literature in these three areas.

Organization Development

Organization development is defined as “a systemwide application and transfer of behavioral science knowledge to the planned development, improvement, and reinforcement of the strategies, structures, and processes that lead to organization effectiveness” (Cummings & Worley, 2005, p. 1). The challenge in a complex

partnership is to ensure each partnering organization will move forward when undertaking an initiative.

Bringing organizations together to work on a complex partnership requires a strong shared vision. White (2014) suggested that Senge's shared vision discipline should be incorporated into interorganizational learning to create socio-networked learning for social innovation. White posited,

A shared vision is vital for learning organizations because it provides focus and energy for the task. Generative learning occurs only when people are striving to accomplish something that matters deeply to them. Shared vision is a vision that people can truly commit to, because it reflects their personal vision. (p. 278)

Furthermore, a shared vision is essential for creating interdependency and socio-networked learning, which can enable organizations to increase knowledge that previously wasn't available within each individual organization.

Collaboration among organizations requires five levels of integration (Kanter, 1994). The first level involves strategic integration, in which top leaders are in continual contact to discuss broad goals and changes in each company. The second level requires tactical integration, in which middle managers and professionals come together to plan for specific projects or activities and to identify organizational or system changes that will improve the bond between the partners or to transfer knowledge. The third level focuses on operational integration so that the participants who are involved in the daily work have timely access to the necessary information, resources or people in order to

accomplish their tasks. The fourth level entails interpersonal integration in which many people in the partnering organizations know each other personally and are willing to make the extra effort to participate on joint teams. The fifth level of integration involves cultural integration, which requires participants to be able to have the cultural awareness and ability to communicate in order to bridge differences.

Complex partnerships can also be analyzed through looking at the factors influencing collaborative knowledge creation (Du Chatenier et al., 2009). Factors that influence collaborative knowledge creation in team emergent states include group efficacy, shared cohesion, learning climate, cognitive distance, and power distribution. Factors in team composition inputs are team diversity, team stability, hierarchy, leadership, structural composition, functional composition, geographical proximity, and learning history. Team-level inputs are influenced by autonomy, resource availability, innovation goal, nature of knowledge, level of uncertainty, and learning future.

Learning and the creation of knowledge are critical components of collaborative efforts. Knight and Pye (2005) described network learning as the changes in network-level properties, such as shared practices and processes. These changes need to have a discernible effect on network properties; otherwise, if changes were only seen in an organization, the description would be organizational learning within the network. Larsson et al. (1998) explained that interorganizational learning can be achieved through both transferring existing knowledge and creating knowledge. Transferring knowledge requires simultaneous transparency as well as receptivity between the partnering

organizations. If an organization is not transparent, existing knowledge will not be disclosed and used to generate new knowledge. Furthermore, receptivity and motivation are needed to absorb the disclosed or generated knowledge. Kania and Kramer (2013) posited that the rules of interaction that govern collective impacts result in changes in both individual and organizational behavior. These changes create an ongoing progression of alignment and discovery that lead to learning and emergence.

Researchers are exploring how learning occurs in large-scale partnerships. Ingram and Simons (2002) reported that interorganizational groups transfer experiences through increasing three specific mechanisms: (a) the opportunity for transfer through participation in meetings and social activities; (b) the motivation for transfer through providing the time and encouraging the effort; and (c) the capability for transfer through creation of organization groups that can access both the knowledge and the know-how. White (2014) described seven components in socio-networked learning: (a) cross-organizational participation; (b) shared power and inclusiveness; (c) focus on a social cause; (d) learning through exploratory discussions and meetings; (e) challenging normative assumptions through the socio-networked learning; (f) creation of a shared vision; and (g) commitment by learning organizations to some form of social justice. Conflicts between organizations that result from a weak authority structure can produce strong learning and movement toward goals; however, these types of challenges may also result in smaller scale changes in policy and practice in the participating organizations. Du Chatenier et al. (2009) identified four process stages. The first stage, externalizing and sharing, involves stakeholders sharing knowledge, information, and

needs with group members in order to distribute knowledge. The second stage, interpreting and analyzing, requires stakeholders to interpret and analyze information in order to place new information into context. At this point, knowledge becomes decentralized since interpretations differ among stakeholders. The third stage, negotiation and revision, involves stakeholders meeting to build mutual understanding and meanings based on their various interpretations. At this point, stakeholders revise their own thinking to develop a shared meaning. The fourth stage, combining and creating, consists of stakeholders combining their knowledge bases to create new ideas for innovation and improvement. At this point, an action plan may emerge.

Organization Culture

The organizational culture of various partners can play a large part in the success or failure of a complex partnership. Wilkof, Brown, and Selsky (1995) cautioned,

Differences in technical areas, structures, and systems (from performance monitoring to problem resolution) are responsible for many of the conflicts that arise. However, attempts to resolve these conflicts are often unsuccessful because of a more fundamental problem, cultural mismatches between the partnering organizations. (p. 374)

Wilkof et al. (1995) suggested four guidelines for creating cultural awareness. The first guideline involves a culture analysis of all organizations involved in the partnership. This step allows the various parties to become aware of and understand each other's cultures. The second guideline uses the cultural analyses to identify the

organizational frames that define the approaches taken during interactions among various groups for task completion. The third guideline combines the data from the previous two steps to identify each organization's preferred mode of acculturation at the partnership interface. The fourth guideline focuses on the collaborative development of systems and structures for interaction and task completion.

To accomplish a change in culture within the partnering organizations, managers from the various organizations in the partnership must become teachers as well as learners (Kanter, 1994). They must also demonstrate interest and respect in order to build goodwill to offset cultural and organizational differences.

In some large-scale partnerships, the focus on culture can extend far beyond the organizational boundaries. For instance, civic culture was identified as a critical factor in the success of collective impacts (Harwood, 2014). This type of culture determines how trust is formed, citizens become engaged, and if change happens within a community.

Harwood (2014) identified five characteristics of civic culture that collective impact initiatives must address. The first characteristic involves community ownership that includes both expert knowledge and public knowledge due to authentic engagement of the community. The second trait ensures that strategies are a good fit for the community. Selected strategies are selected based on the community's agenda and implemented at the proper stage of the initiative. The third characteristic involves a sustainable environment comprised of underlying community conditions that enables the initiative to move forward. The fourth trait features a focus on the impact of the initiative

so that community members believe they are undertaking something that is bigger than themselves. The fifth characteristic requires a story that the community tells about itself that informs citizens' perceptions, behaviors, and actions.

Kania and Kramer (2013) described several elements that help inform the culture in a collective impact, including developing a common agenda that can help all participants achieve a common understanding of the problem, agreeing to joint goals in order to address the issue, and identifying common indicators that will allow for accountability. The solutions and resources needed often are identified through the partners' vigilance, learning and action, and are emergent. Such an approach can be very uncomfortable for many participants who are used to more concrete ways of working.

Organization Change

Organizational designers encourage change by creating new strategies and performance incentives that can include changes in structures and roles, technologies, work processes, reward systems, ways of interacting with customers, and human resource practices (Mohrman, Tenkasi, & Mohrman, 2003). Helping participants create new knowledge is critical for organizational change in complex partnerships since these initiatives require the concurrent development of new understanding and creation of new approaches (Mohrman et al., 2003).

The evolutionary nature of large-scale partnerships should be considered when initiating change efforts. Lowndes and Skelcher (1998) described four stages in a partnership's life cycle: (a) pre-partnership collaboration; (b) partnership creation and

consolidation; (c) partnership program and delivery; and (d) partnership termination and succession. The Harwood Group and the Charles Stewart Mott Foundation (1999) outlined five stages in a community-based partnership: (a) the waiting place, in which people believe that the community is not working correctly, but they cannot identify what needs to be done; (b) impasse, when a community has reached the bottom and a sense of urgency is emerging; (c) catalytic, in which a small group of people and organizations join together to take risks and experiment, thus challenging existing community norms; (d) growth, in which a common sense of purpose and direction is developed as networks grow and spread; and (e) sustainability and renewal, in which communities develop new leaders and new cadres of citizens to lead future initiatives.

The formation and development of large-scale partnerships to bring about change needs forethought and planning. Hanleybrown, Kania, and Kramer (2012) identified three stages in bringing a collective impact initiative to life. The first stage involves initiating action through creating an understanding of the existing work as well as the landscape and key players. Baseline data on the social problem is available, and an initial governance structure is put into place. The second stage is focused on organizing for impact and requires the establishment of common goals, shared measures, and a supporting backbone organization. At this point, the partnering organizations begin aligning themselves with the shared goals and measures. The third stage is designed to sustain action and impact. In this phase, stakeholders focus on prioritized areas in a coordinated way and collect data. Sustainable processes that enhance active learning and allow for course correction also are developed.

However, working in a partnership may result in unanticipated change to an organization. Therefore, Kanter (1994) suggested two guidelines for change efforts. The first guideline is to empower the relationship managers. These managers need to be able to vary the organization's procedures to make partnership-specific decisions, and often need more knowledge and skills. The second guideline is creating an infrastructure for learning. Specific forums and cross-functional projects can assist partners in learning from each other.

Transformative learning at the individual and partnership level is critical to making the major change in thinking and perspective required for participants to take responsibility for their actions, to be autonomous, and to make more informed decisions (Franz, 2003). At the individual level, four types of transformative learning were identified: (a) developing a more holistic view of the work; (b) gaining a better understanding of processes; (c) personal development; and (d) ending professional isolation. The types of transformative change at the partnership level involved: (a) a deeper commitment to the goals; (b) enhanced action; (c) enhanced learning; and (d) increased reliance on shared leadership styles. Five common conditions related to transformative learning and change were also found in these partnerships: (a) strong partner facilitation to encourage reflective discourse and to facilitate learning; (b) critical reflection in transforming partnerships, which involved critical thinking about individual, work, and process assumptions; (c) critical events that created the foundation for change or enhanced transformation; (d) creation of a common purpose to bridge fundamental differences between partners; and (e) having both independence and

interdependence so that participants not only retained personal autonomy but also collaborated with the other partners to continually build the success of the initiative.

Furthermore, learning in complex partnerships often is diffused among all the stakeholders. Suggesting that this type of learning results in a different model of change, Kania and Kramer (2013) explained,

The traditional model of social change assumes that each organization learns its own lessons and finds its own solutions, which are then diffused over time throughout the sector. In effective collective impact initiatives, however, learning happens nearly simultaneously among all relevant stakeholders and, as a result, many organizations develop and respond to new knowledge at the same time. This has two important consequences: first, new solutions are discovered that bridge the needs of multiple organizations or are only feasible when organizations work together, and second, all participating organizations adopt the new solution at the same time. (p. 5)

A diffused change effort may benefit large-scale partnerships. Mohrman et al. (2003) posited that effective change implementation is better achieved by using self-design networks instead of hierarchical networks. Mohrman et al. stated, “Existing hierarchical networks fail on two counts: they are capable only of information sharing within the existing schema and they are overly reliant on prescriptive commands” (p. 320). The creation of rich external networks contributes to implementation learning because these networks allow participants to tap into external perspectives and

knowledge. Furthermore, Kania and Kramer (2013) held that the rules of interaction that govern collective impacts result in changes in both individual and organizational behavior. These changes create an ongoing progression of alignment and discovery that lead to learning and emergence. Knight and Pye (2005) concurred,

...where changes occurred that delivered (perceived) improvements in performance, it was because there was a new alignment, or consonance, between network interpretations, structures and practices. If structures and practices increasingly reflect and are reflected in the values, identity and goals of the service, there will be a shared sense that progress has been made during the course of the episode, that the network has moved forward. We see this notion of progress during the course of an episode as more relevant to analyzing network learning than performance. (p. 387)

Creating lasting change is the goal of learning efforts undertaken by participating organizations in a complex partnership. Knight and Pye (2005) identified three conceptual themes that emerge in network learning: (a) changes in network interpretation; (b) changes in network structures; and (c) changes in network practices. These changes must be widespread and enduring in order to be classified as network learning outcomes, but they do not need to be universal or uniform. Furthermore, conceptual themes related to developing meaning, commitment, and methods can occur in any order and may be developed concurrently or consecutively.

Traditional School-University Partnerships

Most organizations, including educational entities, are continually on a quest to find ways to increase capacity. The use of educational accountability systems has resulted in additional public scrutiny and calls for enhanced productivity. In public schools, this productivity includes improved student achievement and college readiness. In higher education, increased productivity covers higher graduation rates over a four-year period and better preparation of students to enter the workforce. Therefore, education leaders continue to look for effective ways to meet the goals identified by policymakers who increasingly raise the bar for accountability.

Partnership Formation

Traditional school-university partnerships emerged in the 1980s and continued to proliferate in the 1990s (Burstein et al., 1999; Field et al., 1999). These collaborative efforts involved forming linkages between loosely coupled educational institutions to increase capacity through working toward identified educational goals and tapping into each partnering organization's expertise (Field et al., 1999).

School-university partnerships between higher education institutions and school systems often begin on the edge of each organization and have limited K-12 and faculty participation in order to allow both organizations to try out agreed-upon programs without making changes in their core mission and efforts (Teitel, 1992). These partnerships allow for the "bending of rules" to promote innovation, as described by Teitel (1992). However, they may also lead to temporary efforts as well as issues with

reliability and/or commitment (Acar & Robertson, 2004; Darling-Hammond, 1994; Teitel, 1992).

These collaborations can take on various forms and can lead to different expectations by the participants about the goals of the effort (Firestone & Fisler, 2002; Sockett, 1998). For instance, Sockett (1998) developed a typology of school-university partnerships with examples of each type of partnership. This typology, which moves from less intensive (service relationships) to more collaborative (transformative relationships), included:

- A service relationship, in which an individual or unit provides support for an institution-related function. Examples of this type of partnership are faculty members serving as school science fair judges, bilingual outreach programs, or university students volunteering or performing in a school.
- An exchange relationship, in which parties exchange resources for mutual benefit. Examples of this type of partnership include promoting family courses in neighborhood schools, faculty access to organizations to further research agendas, and early admission of high school students from low socioeconomic status communities to a university program.
- A cooperative relationship, in which parties plan together and share responsibilities. Examples of this type of partnership include a school and university working together to build a parent education curriculum, university faculty's research on

problems identified by school communities, grant-supported projects that end when funding is exhausted, and a school-based master's program for teachers.

- A systemic and transformative relationship, in which parties share responsibility for planning, decision-making, funding, operations, and evaluation of activities, and in which each institution is transformed through participating in the relationship. Examples of this type of partnership include peer mediation projects, small grant programs for neighborhoods, and early identification programs.

Partnership Operation

A partnership can be jeopardized in its early stages if it is not built around a genuine problem or issue that needs to be addressed and that has meaning to both the university and the school (Lefever-Davis, Johnson, & Pearman, 2007). To develop realistic expectations, Sockett (1998) described three steps that need to be considered by leaders as they form partnerships. The first step is to clarify expectations about the extent of participants' involvement and the partnership's construction. The second step involves considering the growth that will occur through the partnership in order to guide the partners' deliberate actions toward set goals. The third step entails understanding that the partnership could cause a change in leadership style from autonomy to shared authority and power.

Developing a common understanding and language among all participants during the initial stages of the partnership is important. Lefever-Davis et al. (2007) offered a concrete example of how this understanding was achieved. The partnership that they

studied formed a steering committee to complete a needs assessment and to create community support for the collaboration. This steering committee also completed a common assignment by reading John Goodlad's (1990) *Teachers for Our Nation's Schools* so that the members could reach a shared understanding of what was meant by the term simultaneous renewal. After completing a year of research and planning, partnership leaders were able to begin implementation of the new initiative.

Another key issue that may crop up in the initial formation and ongoing management of a partnership is participant involvement. Therefore, leaders need to consider how they will involve, inform, influence, and incentivize all participants to encourage continued participation in the partnership (Young, Petersen, & Short, 2002).

School-university partnerships have characteristics that help determine the quality of their work. Ross (1995) identified four success factors and six obstacles that could hamper success. The four factors considered key to partnership success are: (a) a shared beliefs and mutual respect for overlapping competencies; (b) a facilitative school history; (c) funding from external agencies; and (d) strong leadership. The six obstacles to a partnership's success included: (a) the limited number of people who were involved in the partnership; (b) cultural differences between the partners; (c) the university's reward structure; (d) weakness in the network that supports professional development schools; (e) conflict with external agencies; and (f) destruction over time.

The formation and fostering of relationships are critical to the development of school-university partnerships. These relationships include the involvement of high-level

administrators and other key representatives from constituent groups as well as input from the entire faculty of the partnering organizations (Gayton, 1997; Ross, 1995, Teitel, 1994). The quality of these relationships is foundational in the formation of essential characteristics in a functional collaboration such as common goals, mutual trust and support, open communication, and ongoing clarification of shared responsibility for the partnership (Peel & Walker, 1995). However, Lefever-Davis et al. (2007) cautioned that partnerships can be jeopardized by a change in the relationship status from “the traditional concept of professor versus practitioner and the resulting communicative stance taken by the participants” (p. 205).

Partnerships are not set in time; instead, they have an evolutionary sequence that result in the emergence of different challenges. Evolutionary challenges faced by these initiatives include clarification of the partnership’s purpose, the emergence of new elements as the partnership grows, loss of power, difficulty moving the effort to the organization’s core, an incoherent and unsubstantial design, partner unreliability, ongoing funding issues, and commitment problems (Acar & Robertson, 2004; Darling-Hammond, 1994; Sockett, 1998; Teitel, 1992). Noticing the changing nature, Zetlan and Harris (1992) outlined eight evolutionary stages that partnerships normally go through. The first stage involves the stakeholders exhibiting hostility which is then followed by a stage in which mutual confidence is built. After the first two stages of this evolution are completed, the partners often form a closer connection and the partnership becomes more clearly delineated as it moves into the latter stages. A period of truce and equal participation are the hallmarks of the third stage. From that, mixed approval and short-

term successes emerge in the fourth stage. The fifth phase involves stakeholders from both organizations seeing mutual benefits and accepting the partnership. In the next phase, the partnership is challenged due to issues with attrition, faculty promotion or lack of funding. The seventh stage is marked by a period of renewal as new members bring new ideas to the collaboration. The collaboration continues in the eighth stage.

Additionally, as a partnership evolves, the actual relationship between the entities can change. Lefever-Davis et al. (2007) presented a case study that illustrated this change in paradigm in a partnership between two elementary schools and the university that resulted from the collaboration. This paradigm shift moved the K-12 schools from being in passive roles that were designed to fulfill the university's needs to a partnership that was more equitable in nature.

Leadership in Partnerships

Ongoing leadership is critical to the success of partnerships over the long term (Bullough & Kauchak, 1997; Edens, Shirley, & Toner, 2001; Firestone & Fisler, 2002; Ross, 1995). Bullough and Kauchack (1997) cautioned that the premature departure of top leaders from central decision-making increased the chances that the partnership would not succeed. They described one case in which decreased participation by the K-12 school representative resulted in the university representative taking a more dominant role. This change led to an imbalance in the partnership, resulting in the perception that the results of the partnership were tipped more in the university's favor. This type of

imbalance can lead to insufficient formation of goals, limited communications, and unequal responsibility among the various stakeholders.

Furthermore, a disconnection between policy and practice can arise among site-level leaders who are responsible for implementation and central administration leaders who are responsible for policy decisions. Honig (2003) analyzed these roles among K-12 leaders who were involved in supporting a school-university partnership in one school district. Collaborative education policy was implemented at the school level because principals understood the day-to-day needs of the partnership. In comparison, central office administrators who allocated resources and created the district policies that supported partnerships often lacked this day-to-day information. However, frontline central office administrators who recently had been at the campus level tended to display strong site knowledge and ties; nevertheless, they had limited system knowledge and understanding of policy formation. Senior district administrators were the opposite; that is, they had systems knowledge and knowledge of policy development, but limited site knowledge as well as day-to-day knowledge to inform policy-making decisions. Honig recommended increased coordination between senior district administrators and frontline district administrators so that district policy will be grounded in ongoing practice.

Financial Issues

Financial restraints are often seen in school-university partnerships (Bullough & Kauchak, 1997). These restraints can be fatal to the partnership unless the partners are able to work together to identify a solution, such as pooling their resources (Bullough &

Kauchak, 1997). Tensions about the partnership's finances may be greater in impoverished communities, which often experience a sense of isolation as well as limited resources (Davis, Emery & Lane, 1998).

Funders may have difficulty understanding a partnership's scope. For instance, Darling-Hammond (1994) posited that the lack of a common vision among funders may result in a decision to invest in "a plethora of small projects and demonstrations rather than on more coherent and substantial design. As a consequence of this project mentality, the most innovation-minded schools and schools of education are overwhelmed with innumerable (often temporarily funded) reform initiatives" (p. 25).

Boundary-Spanning

The term "boundary spanning" has emerged in the literature as organizational leaders have begun to look externally to try to build bridges to other institutions and experts who can join with them to solve problems and create innovation. Lee, Horth, and Ernst (2014) stated, "While the need for boundary spanning often is revealed in crisis or through one-off events, its greatest power lies in the transformation of organizational thinking and culture" (p. 6).

Boundaries can include vertical organizational boundaries, horizontal organizational boundaries, geographic boundaries, demographics, stakeholder boundaries, as well as knowledge and tasks (Hsiao, Tsai, & Lee, 2012; Yip, Ernest, & Campbell, 2011). Lee et al. (2014) delineated some of these boundaries as: (a) vertical boundaries, which include rank, class, seniority, authority, and power; (b) horizontal

boundaries, which include expertise, function, and peers; (c) stakeholder boundaries, which include partners, constituencies, value chains, and communities; (d) demographic boundaries, which include gender, generation, nationality, culture, personality, and ideology; and (e) geographic boundaries, which include location, region, and markets.

Increasingly, top leaders recognize the need for boundary-spanning, but they may find that they struggle to make these linkages. The Center for Creative Leadership surveyed 128 senior leaders who identified boundary-spanning as one of the top trends and challenges that faced their organizations (Yip et al., 2011). The survey results showed that 86 percent of these senior leaders believed it was “extremely important” to work effectively across the various boundaries. However, only seven percent considered themselves being “very effective” in this area. These senior executives described the ability to cross horizontal boundaries of function and expertise as their greatest challenge followed by geographic, demographic, stakeholder, and vertical boundaries.

The need to develop skills in boundary-spanning increasingly becomes essential for leaders at lower organizational levels who are seeking promotions. In the Yip et al. (2001) survey, 92 percent of senior leaders reported that the ability to work across boundaries is a necessary skill when moving from middle management to the senior level. Ninety-one percent of the respondents rated boundary spanning as an important capability among middle managers; however, only 19 percent said that middle managers in their organizations were effective in this capacity. Furthermore, 43 percent of the senior leaders surveyed said boundary spanning should be an important capability in

entry-level managers' leadership toolkits, yet only eight percent reported that entry-level leaders in their organizations had this capacity.

Learning becomes critical in boundary-spanning operations (Hsiao et al., 2012; Yip et al., 2011). Current literature suggests three boundary-spanning models: trading, sharing, and knowing (Hsiao et al., 2012). The trading model considers knowledge as an object that can be traded through a centralized mechanism. The sharing model uses knowledge as cognition and requires common meanings and interests. In their research on the knowing model, Hsiao et al. (2012) identified three organizing practices. The first practice involved identifying problem boundaries in order to organize the search for information, gathering resources, discovering cues that emerge from patterns, interpreting potential causes, and then sharing this diagnostic information with others. The second organizing practice involved orchestrating collective responsibilities in order to negotiate the ownership of the problem across boundaries. The third practice involved developing a systemic understanding in which the participant's understanding translated into action. To gain this understanding, materials were transformed into understandable symbols that allowed participants to identify and comprehend issues from a systemic view in order to troubleshoot the problem. Hsiao et al., (2012) posited that these three boundary-spanning practices, when taken collectively, demonstrate how adaptive learning can be facilitated in cross-boundary initiatives.

Boundaries are not always considered problems. For instance, Lee et al. (2014) suggested reframing boundaries as frontiers, which offer "potential for different ways of

working and new forms of collaboration. Boundaries can reveal new frontiers that can help solve pressing problems, drive innovation, and leading breakthrough change” (p. 3). These researchers recommended three strategies as ways to work with and beyond boundaries. The first strategy involves managing boundaries through strengthening or creating them in order to build safety and respect across these divides. The second strategy is forging a common group by identifying what is universal and shared. This strategy, which creates integration through building a shared vision and a unified force, is designed to build trust, engagement, and shared ownership. The third strategy is to discover new frontiers through the merging of differentiation and integration in order to support innovation, transformation, and reinvention.

Additionally, Lee et al. (2014) identified six practices as part of these three strategies. The first practice involves buffering, which creates space that allows individuals and groups to define who they are. This space offers protection from outside influences or demands. Buffering can be accomplished through a variety of tactics, such as creating a team charter, clarification of roles and responsibilities, creating communities of practice, and celebrating accomplishments. The second practice involves reflection, which creates respect by uncovering the differences and similarities between groups. Reflection can be accomplished through numerous tactics, such as rotating jobs, learning about others’ perspectives, and inviting other groups and their leaders as well as customers and suppliers to participate in team meetings to share their knowledge. Connecting, the third practice, encourages trust and the establishment of new networks and deeper relationships through the creation of a neutral third space where group

members can interact as individuals. Tactics for connecting include developing buddy systems, adding connection time on agendas, and encouraging social activities. The fourth practice is mobilizing, which develops community and ownership by developing a common purpose and shared identity across the groups. Tactics include identifying a core set of values, designing a unifying image, and launching a cross-functional team that is tasked with completing a key deliverable. Weaving, the fifth practice, involves merging group boundaries by establishing a creative space that fosters interdependence and collective learning. These efforts can lead to innovative ideas and new solutions. Tactics associated with this practice include using teams with flexible membership, establishing an after-action review process, and creating cross-sector efforts to tackle a shared problem. The last practice is transforming, in which multiple groups work together so they can reflect on the current state and then imagine the possibilities of what could be. Thus, these groups are able to find ways to get past the norms, practices, and identities that are being used in the current context.

In his MESO Theory of Organizational Behavior, House (1991) looked at boundary spanning from the perspective of a mechanistic organization (the characteristics of which mirror the functioning of a K-12 school) and an organic organization (the characteristics of which closely resemble the functioning of many universities). In a mechanistic organization, boundary spanning is formalized and concentrated in specialized units. The staff members report to top management on an established schedule using reports that are focused on codified problems. In these types of organizations, boundary spanners have low levels of influence. In comparison,

boundary spanners in an organic organization have high levels of influence. They do not hold a formal role. These individuals work vertically and horizontally within a system and report to managers at all levels. Their reports to leaders include both codified and ad hoc problems as well as events.

Collective Impact Initiatives

Cross-sector coordination is emerging as a way to make large-scale change within a societal sector. Kania and Kramer (2011) described these types of change efforts as “collective impact, the commitment of a group of important actors from different sectors to a common agenda for solving a specific social problem” (p. 36). Collective impact initiatives have five requirements that lead to alignment. The first requirement requires stakeholders to adopt an agenda that includes a shared vision for change, a common understanding of the problem, and a collaborative approach to reach the solution. The second requirement is a shared measurement system that involves collecting data and measuring results on a specific list of indicators across all participating organizations. This system also looks at data from the systemic level to ensure that the initiative remains in alignment and that all stakeholders are held accountable. The third requirement involves mutually reinforcing activities that encourage stakeholders to perform specific activities in which they excel in a way that is supportive and coordinated with other members of the initiative. The fourth requirement, continuous communication, is represented by regular meetings by top leaders and the development of a common vocabulary over a period of time. The fifth requirement is a

backbone support organization. This separate organization with a dedicated staff serves as the facilitator for the initiative since coordination takes time. This group is responsible for ongoing facilitation, technology and communications support, data collection and reporting, and handling the logistical and administrative details needed for the initiative.

Edmondson (2012) offers other ways that a collective impact differs from a collaborative effort. These differences are described in Table 1.

Table 1

Differences Between Collaboration and Collective Impact

Collaboration	Collective Impact
Participants convene to implement a program or initiative.	Participants work together to improve outcomes consistently over time.
Data is used as a way to prove.	Data is used to improve.
These responsibilities are in addition to participants' daily jobs.	These responsibilities become part of participants' daily jobs.
Advocate for implementing an idea found elsewhere, believing that what is successful somewhere else will be successful locally.	Advocate for best local practices that can get results. This perspective leverages the voice of community partners to protect and spread the best current practices.

Note. Adapted from Edmondson, 2012, Striving for Change Web Blog.

One example of a collective impact initiative is STRIVE, a nonprofit subsidiary of KnowledgeWorks in Cincinnati (Kania & Kramer, 2011). This organization, which

has a mission of improving student achievement in the greater Cincinnati and northern Kentucky area, involves 300 leaders of local organizations, including school district representatives and the presidents of eight universities and community colleges, as well as executive directors of area education-related non-profit and advocacy groups and city officials.

Effective leadership is required if a backbone organization is employed to help facilitate change in a collective impact. Hanleybrown et al. (2012) stated,

No collective impact effort can survive unless the backbone organization is led by an executive possessing strong adaptive leadership skills; the ability to mobilize people without imposing a predetermined agenda or taking credit for success. Backbone organizations must maintain a delicate balance between the strong leadership needed to keep all parties together and the invisible “behind the scenes” role that lets the other stakeholders own the initiative’s success. (p. 6)

Evaluation is another critical component of a collective impact initiative in terms of holding participants accountable and also using the data for improving the initiative’s efforts. Hanleybrown et al., (2012) called for a three-phase approach to evaluating and improving a collective impact. In the first phase, an analysis should be undertaken to review baseline data in order to identify key issues and gaps. In the second phase, stakeholders should establish shared metrics, including indicators, measurement, and approach. In the third phase, stakeholders need to collect, track, and report progress using a process designed to learn and to improve in order to sustain action and impact.

Some researchers suggest that collective impact initiatives may be a wiser use of financial resources for a variety of reasons (Kania & Kramer, 2011). First of all, no single organization has the resources or authority to trigger the large-scale change that is needed to solve the societal problem. Secondly, non-profits can maximize their investments through supporting a collective impact initiative. In the past, these funders typically backed initiatives that had an isolated impact. Instead, in a collective impact initiative these financial resources can be leveraged to focus the multiple participants on solving large-scale complex societal problems that have unknown answers.

Large-Scale Educational Partnerships

Partnership systems have begun to emerge in the literature (Clifford et al., 2007; Lawson, 2013; Yin, 2008). In this evolution, both the breadth of the missions undertaken in partnership and the need for stakeholder involvement have expanded exponentially. At the most basic level, large-scale educational partnerships involve the formation of interventions which Lawson (2013) described as collaboration interventions that target the formation of new relationships among people and partnership interventions that target new relationships among organizations.

The evolution of partnerships started with the voluntary, service-oriented partnership that was designed to increase civic engagement as well as to promote problem solving (Lawson, 2013). From there, larger partnerships emerged to focus on specific targets such as reducing school dropouts; increasing the rigor, relevance and alignment of curriculum standards; reducing postsecondary academic remediation; and

accelerating the learning and competence development in higher education while reducing the time and costs for completing degree programs. This progression has resulted in three generations of partnerships.

The first generation of partnerships created a vertical pipeline to link higher education with K-12 education in order to improve student academic achievement and success. This generation is described in Table 2.

Table 2

First-Generation Partnership

First-Generation Partnership	
Stakeholders	Schools, colleges or departments of education in higher education Individual K-12 schools School districts
Boundary-spanning effort	Creating a vertical pipeline
Outcome priority	Student academic achievement and success
Model	School improvement model
Higher education emphasis	Renewal of college of education's preparation programs for teachers, counselors, principals, and superintendents
Theoretical framework	Organizational learning
Partnership Needs	Low in relation to infrastructure, leadership, and resources

Note. Adapted from Lawson (2013), Peabody Journal of Education, 88/5, p. 637-656

The second generation of partnerships included both the expansion of the types of partners involved to include social service organizations, thus requiring the creation of horizontal linkages along with the vertical pipeline (Larson, 2013). The list of outcomes grew as did the need for resources. This type of partnership is described in Table 3.

Table 3

Second-Generation Partnership

Second-Generation Partnership	
Stakeholders	Schools, colleges and/or departments of education in higher education Individual K-12 schools School districts Social work organizations Health organizations Psychology organizations Community health organizations Social service organizations Local community leaders
Boundary-spanning effort	Creating horizontal linkages
Outcome priority	Student academic achievement and success Whole child development Family support Community development with a focus on children who face social and economic challenges
Model	Multi-service school Extended-service school Community school
Higher education emphasis	Renewal of college of education preparation programs Interprofessional education and training with emphasis on leadership strategies for students, parents, and local leaders
Theoretical framework	Organizational learning Ecological theory Social epidemiological theory
Partnership needs	Moderate after initial costly investments to recruit stakeholders, build capacity, develop competency, and institutionalization of the partnership.

Note. Adapted from Lawson (2013), *Peabody Journal of Education*, 88/5, p. 637-656

The third generation of partnerships expands the scope of work to take on systemic issues (Larson, 2013). This type of partnership is described in Table 4.

Table 4

Third-Generation Partnership

Third-Generation Partnership	
Stakeholders	Schools, colleges and/or departments of education in higher education Individual K-12 schools School districts Social work organizations Health organizations Psychology organizations Community health organizations Social service organizations Local community leaders Business/corporate leaders State education agencies Higher education agencies Local governmental officials
Boundary-spanning efforts	Systemic
Outcome priority	Professional and interprofessional practice in schools and among adults Competency development pipeline and pathway that begins at birth and includes life-long learning and career preparation
Model	Redesigning industrial-age schools and postsecondary education
Higher education emphasis	Renewal of college of education preparation programs Interprofessional education and training with emphasis on leadership strategies Creation of collaboration aimed at new institutional designs for education systems
Theoretical framework	Organizational learning Ecological theory Social epidemiological theory Complex systems theory
Partnership needs	Consistently high because of infrastructure needed to facilitate the novelty and ambiguity of the work. This generation of partnership also focuses on policy changes.

Note. Adapted from Lawson (2013), *Peabody Journal of Education*, 88/5, p. 637-656

Two specific types of third-generation partnerships have emerged (Lawson, 2013). The first is the P-16 system, which is focused on individuals beginning as they start preschool and then continue their education with the goal of enrolling in higher education and earning a degree as a credential. The second type is the Cradle-Through-Career Education System, which targets learners of all ages (including career and technical institutes for adults) and encourages certifications as credentials. Lawson (2013) stated,

Whereas a P-16 system focuses on connecting systems of schooling, a Cradle-Through-Career system focuses on the development of education systems, taking stock of opportunities for anytime, anywhere learning and competency development while developing innovative mechanisms for accounting for such learning and rendering them as employment-related resources. (p. 643)

The main difference between the two systems is that the Cradle-Through-Career system includes older adults, who are not mentioned in the P-16 system.

Various types of large-scale partnerships have emerged with a variety of missions and structures. As mentioned earlier, complex partnerships have their roots in the P-16 movement that began to emerge in the mid-1990s (Krueger, 2006). Rochford et al. (2007) identified many states that developed early P-16 initiatives, including Florida, Georgia, Illinois, Indiana, Kentucky, Maryland, Minnesota, Missouri, Nebraska, Oregon, Tennessee, and Pennsylvania. Other states that have newer P-16 initiatives include Arizona, Arkansas, California, Colorado, Delaware, Hawaii, Kansas, Maine, Nevada,

Ohio, Rhode Island, and Virginia (Rochford et al., 2007). Additionally, Louisiana has developed a system partnership spanning the state's public university system that is focused on redesigning teacher preparation and educational leadership programs (Burns, n.d.). I also learned of other university systems that have developed complex partnerships through my attendance at several National Association of System Heads conferences and, more recently, in conversations with a national expert.

Leadership

While the top executives in the various organizations provide critical leadership in systemic partnerships, having strong leadership exhibited by organizational leaders at other levels within an institution is important as the partnership develops. Birnbaum (1988) described the unique culture operating within colleges and universities as a loosely coupled system in which members often respond to influence than to traditional management strategies found in other types of organizations. Therefore, for a partnership to be successful the involvement of multiple university leaders at various organizational levels (department, college, and university) needs to be cultivated. Young et al. (2002) defined the leadership responsibilities for each level of university faculty in a partnership. The role of the university's president and provost includes supporting faculty members who focus on practitioners while also encouraging collaboration, focused student advising, applied action research, and internships. The dean serves as the liaison between the academic departments, the university, neighboring institutions, and state, national, and professional organizations. The dean also must engage external

stakeholders in conversations in order to increase their understanding of the university program's multiple purposes, including preparation of practitioners and research. The department chair needs to be able to build connections between preparation programs, the college, and the larger university community in order to establish a broad-based learning community involving all stakeholders. Practitioners also have a role that involves assisting with program development, student recruitment and selection, delivery of courses, mentoring, supporting internships, and student evaluation.

Sharing leadership responsibilities can be fraught with danger. Some researchers caution that distributed leadership can be problematic to the maintenance of the partnership (Firestone & Fisler, 2002; Young et al., 2002). Firestone and Fisler (2002) stated, "The problem raised by the distributed leadership perspective is from where transactional and transformational leadership should come and how they can be spread over various positions, particularly where micropolitics dominates and shared goals cannot be assumed" (p. 455). They noted that shared leadership can devolve into dispersed leadership that can take partnering organizations into chaos, conflict, and isolation.

Partnership Mission

These large-scale partnerships often face the difficult challenge of identifying societal needs to target. One way to identify these needs is through research into partnerships that are dynamic and focused on innovation (Lawson, 2013). This type of

research is grounded firmly in practice and is increasingly being used by governmental policymakers who are involved in third-generation partnerships to inform decisions.

Another challenge is to identify a meaningful way to accomplish the work. Leaders of large-scale education partnerships must come up with initiatives that are doable. These initiatives must be specifically targeted in order to chip away at the identified problem. Additionally, these undertakings need to match the skill set of the participating partners as well as the available time that can be allotted to work on these challenges. To incorporate emerging societal needs effectively into a P-16 partnership's mission, Dounay (2008) recommended that P-16 councils ask specific questions early in the partnership. One of the critical planning discussions needs to revolve around the question of what realistically can be done by convening various systems that would not be possible if the issue was approached by a single agency or institution.

Partnership Operation

Operating a large-scale partnership requires paying attention to multiple factors on many fronts. Clifford et al. (2007) analyzed 36 empirical studies about K-20 partnerships. Their analysis offered insights into common process outputs, which included the formation or formalization of the partnership, curriculum development, teacher professional development, articulation agreements, professional development schools, and research. The analysis also identified input factors, process factors, and outcomes as summarized in Table 5, Table 6, and Table 7, respectively.

Table 5

Input Factors in K-20 Partnerships

Input Factors	
Partnering organization characteristics	Policies and incentives to collaborate Leader's will and endorsement
Partner relations	Trust and respect among stakeholders Power relationships among stakeholders Expectation that mutual benefits will emerge from the partnership Shared purpose or problem
Partnership characteristics	Formal agreements
Environment	Social hierarchy Status quo

Note. Adapted from Clifford, Miller, Smith, Hora, and DeLima, 2007, Wisconsin Center for Education Research Working Paper No. 2008-3, p. 3-22.

Table 6

Process Factors in K-20 Partnerships

Process Factors	
Relationship characteristics	Open communications Maintaining focus on the goal Proactive leaders Trust and respect among various partners Analyzing pertinent practices Exchange of work and resources Stable leadership
Partnership characteristics	Formalized governance structure Adequate resources Boundary spanners Accountability measures Evaluation Numerous goals Cross-staffing Celebration of accomplishments Diversity

Note. Adapted from Clifford, Miller, Smith, Hora, and DeLima, 2007, Wisconsin Center for Education Research Working Paper No. 2008-3, p. 3-22.

Table 7

Outcome Factors in K-20 Partnerships

Outcome Factors	
Characteristics of partners	Organizational vitality Organizational learning Individual learning Identity shift
Partner relations	Trusting and respectful Equal power Enhanced collegiality Use of common language
Partnership characteristics	Dynamic Sustainable Outcomes/goal attainment leading to innovation
Environment	Social hierarchy Status quo

Note. Adapted from Clifford, Miller, Smith, Hora, and DeLima, 2007, Wisconsin Center for Education Research Working Paper No. 2008-3, p. 3-22.

Analyzing participation, learning, decision-making, and the pattern of change can provide data to help clarify how a partnership functions. To this effect, Callahan and Martin (2007) developed a school-university typology for organizational learning based on their analysis of two different types of school-university partnerships. One of the partnerships involved a network comprised of a single university and multiple school districts while the other was an alliance between one university and one school district. The typology focused on four sets of dichotomous characteristics. The first characteristic is the nature of participation in the partnership, which is based on whether partners are in a common or dispersed location. The second characteristic entails the mode of learning (regular access to continuous learning or periodic learning activities). The third trait

involves the decision-making process in that some partnerships make joint decisions whereas others make independent decisions. The fourth characteristic in the typology focuses on the nature of change patterns (unilateral change or reciprocal change).

Partnerships that are dynamic and focused on innovation develop dual pathways for knowledge development that can be disseminated and applied (Lawson, 2013). While one pathway translates research into practice, the other is grounded in practice to identify innovative interventions and advancements in theory.

Evaluation

Large-scale partnerships also have emerged in the evaluation literature. For instance, Yin (2008) developed a preliminary framework for the National Science Foundation's Math and Science Partnership (MSP) program evaluation that identified multiple potential partners, including colleges of arts and sciences, community colleges, business and industry, community organizations, and state education agencies working on K-20 mathematics and science education (Figure 1). In this framework, Yin emphasized K-12 student achievement and MSP-sanctioned activities and then developed a series of pathways to suggest the relationship between the actions of the various institutions. Students use these pathways to traverse from K-12 education through higher education and into the STEM workforce, which include becoming K-12 math and science teachers. This framework emphasizes K-12 student achievement as well as college preparation and success at both the undergraduate and the graduate level.

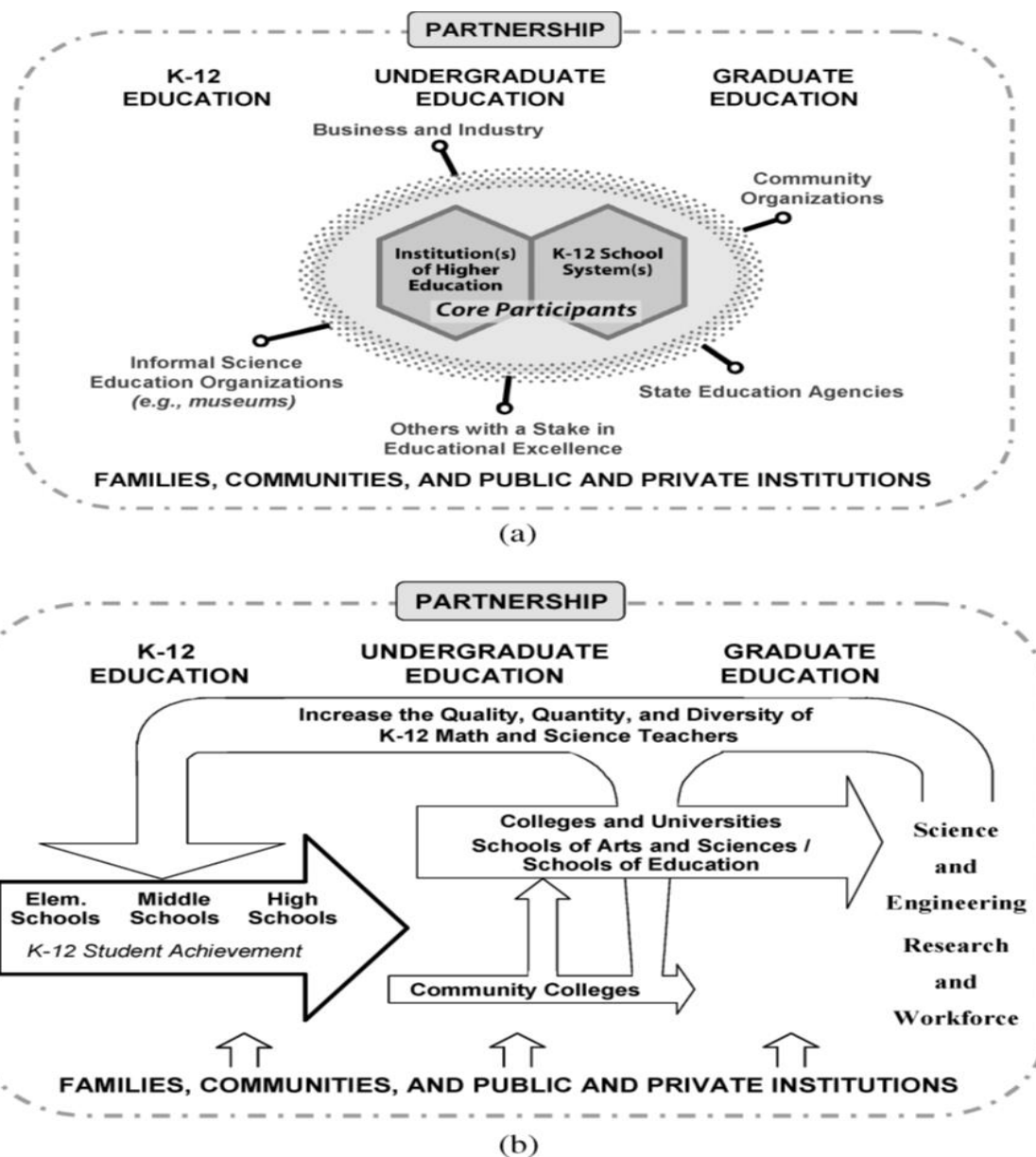


Figure 1. A Preliminary Evaluation Framework for the National Science Foundation's Math and Science Partnership Program (reprinted with permission from Yin, 2008)

Clifford et al. (2007) recommended that future researchers redefine success “in terms of organizational health/vitality, organizational alignment to effective schools indicators, and, depending on partnership goals, teacher quality improvement” (p. 9).

They also suggested examining policy and economic changes that might prompt the need for large-scale educational partnerships and exploring the formation and operation of these initiatives.

Policy Recommendations

As more complex initiatives have come to the forefront in the wake of P-16 initiatives, practitioners, funders and policymakers have looked for guidance in how to create, lead, enhance and evaluate these partnerships. In response, some non-profits and foundations have developed policy papers to encourage the development of complex partnerships.

A 2007 Education Commission of the States (ECS) Policy Brief focused on a number of potential landmines that have been found to threaten both the short-term and long-term success of large-scale educational partnerships as well as their continued existence (Dounay, 2008). In the brief, which is summarized in Table 8, Dounay (2008) stated,

Yet despite the best intentions of council participants and the promise of P-16 alignment for meaningful education reform, many councils are struggling to achieve their potential. Challenges – of membership, vague agendas, funding, politics – can overwhelm the best of intentions, but such challenges are not insurmountable. (p. 1)

Table 8

Landmines Facing P-16/P-20 Councils

Actors	Too few members – The council typically includes a state’s chief state school officer, higher education executive officer, member of the state K-12 and postsecondary governing boards, and representatives of business and economic development organizations. Other participants should be added, including one representative with a background in early learning, one participant from the legislative branch, and one participant from the executive branch.
	Too many members – A large council may have difficulty defining responsibilities, setting a vision and mission, developing an agenda, or finding common meeting dates.
	Not the right members – Participants need authority to adopt and/or implement policy and appropriate resources.
	Confusion about the council’s mission and members’ roles – Efforts may be limited if members do not understand the larger vision and mission. If members are unclear about their roles and responsibilities, the council may have limited traction in making policy changes.
	Inertia – Lack of quarterly meetings may lead to inertia.
Agenda	Too broad – An overly ambitious agenda may result in failure to make progress on the reforms.
	Too vague – A vague agenda can hamper the council’s ability to develop an actionable agenda.
	Difficulty agreeing on an agenda – Reaching consensus on an initial reform agenda may be difficult due to members’ varying backgrounds.
	No specific measurable goals – Lack of goals can hamper the effort since stakeholders will not be able to measure progress.
	No way to measure progress or have individual accountability – Overall goals are less likely to be achieved if annual progress is not measured.
Appropriation of resources	Limited financial resources – Lack of funding will hamper efforts since the cost of staff to run the initiative will not be covered. In addition, funds are needed to support communication expenses to build awareness and support for the reforms that emerge.
	Limited human resources - Lack of staff can hamper P-16 traction.
Political climate	This area can include: change in political leadership; political tensions about the P-16 effort due to partisanship; lack of continuity when elected officials change; the presence of similar entities doing similar P-16 work in the same state; an absence of P-16 finance structure to incentivize this collaboration; or an absence of a P-16 accountability structure to gauge student progress.

Note. Adapted from Dounay, 2008, Education Commission of the States.

Additionally, policy recommendations are encouraging the use of complex partnerships to improve programmatic components. For instance, a report by the Sid W. Richardson Foundation (Reaves, 2009) outlined core principles in redesigning teacher preparation. A call to involve stakeholders from various educational levels is woven through these recommendations is toward a common goal of improving teacher preparation. The core principles are: (a) prioritize teacher preparation university-wide; (b) involve university-wide leadership; (c) organize institutional data systems to promote teacher quality; (d) set goals and manage results; (e) recruit talent and market leadership; (f) train teacher candidates to be intellectual thought leaders; (g) engage and reward teacher preparation faculty from across the university; (h) nurture and involve school partners; (i) nurture and expand community college partnerships; and (j) expand research on teacher effectiveness.

Critical Issues and Gaps

Large-scale school-university partnerships have only recently emerged in the education and social sciences literature. These large-scale partnerships differ greatly from the traditional school-university partnerships that were created in the 1980s. Unlike their predecessors that involved a more didactic relationship between university faculty and K-12 teachers that often took place in only a few classrooms, complex partnerships involve three or more organizations working on initiatives that are aligned with the core mission of P-16 educational entities. Because of the central nature of these efforts to the organizational mission, university-system and university leaders and mid-managers have

an active role in guiding these efforts, which is a major departure from traditional school-university partnerships.

In this new role, university and university-system leaders are faced with a multitude of challenges. First of all, they must span organizational boundaries to work with colleagues in participating organizations that have differing cultures in order to work on a common mission. This common effort translates into an organizational development efforts designed to help the participating organizations solve a particularly pressing problem that they could not solve on their own. Furthermore, the initiatives at the heart of complex partnerships often lead to organizational change since the partners are faced with revisions to a number of areas, including policies, curriculum, and accountability.

However, little is known about what it is like to work in a complex partnership. This study begins to fill in those blanks through learning from the experiences of ten university and university-system leaders at the mid-management level who have been involved with complex partnerships. Their experiences offer insights into what it is like to work in a complex partnership, the challenges that can occur, and the promise that a complex partnership can hold for bringing numerous organizations together to work on some of society's most difficulty problems.

Summary

This chapter provided an overview of the literature on human resource development, traditional school-university partnerships, boundary spanning, collective

impact initiatives, and large-scale educational partnerships. While this review highlighted the evolution of school partnerships during the four decades, the increased size and scope of these efforts, and the challenges related to crossing organizational boundaries to work in collaborations, the literature did not describe the experiences of mid-level university or university-system leaders who were involved in leadership roles in these partnerships.

CHAPTER III

METHODOLOGY

This chapter describes the methodological issues related to this study. The first section restates the purpose and research questions. The second section provides a discussion of why a qualitative approach is appropriate to use in this study. The study's research paradigm and methodological implications then will be described. This chapter concludes with the research design considerations, including methods used for sampling, data collection, and data analysis. I also describe the provisions taken to ensure trustworthiness in the research findings.

Restatement of Purpose and Research Questions

The purpose of this study was to explore university-system and university leaders' experiences with complex partnerships in which they were involved. Two major areas comprise the focus of this inquiry: (a) the leaders' perceptions about working in and facilitating complex partnerships, and (b) factors that shaped these leaders' practices in relation to complex partnerships. The following two questions were investigated:

1. How do university and university-system leaders describe their practice in complex partnerships?
2. What factors shaped the leaders' practice in complex partnerships?

Given the limited theory and knowledge about complex partnerships, this study is timely in providing additional empirical evidence that may enable HRD professionals

to better understand the issues facing higher education leaders who participate in complex partnerships.

Rationale for Qualitative Research

Qualitative research is an umbrella term that covers several types of inquiry specifically designed to increase the understanding of phenomena involving social or human problems (Creswell, 2007; Merriam, 1998). One form of is general or generic qualitative research, which was used for this study. Often utilized when studying applied fields of practice, general qualitative research is the most common form undertaken in qualitative research and is especially prevalent in the field of education (Merriam, 2009).

Unlike quantitative research, qualitative research studies consistently: (a) have a focus on meaning and understanding; (b) use the researcher as the primary instrument for data collection and analysis; (c) employ an emergent design; (d) utilize purposive sampling; (e) employ fieldwork; (f) involve an inductive approach; and (g) offer thick descriptions (Creswell, 2003; Lincoln & Guba, 1985; Merriam, 2009; Schwandt, 2001).

Qualitative research focuses on trying to understand how people interpret their experiences (Merriam, 2009). This approach uses open-ended questions, emerging approaches, and text or image data to study the context or setting of participants (Creswell, 2003). The interviewer positions himself or herself within the study in order to collect participants' understanding of a single concept or phenomenon. The qualitative researcher collaborates with the participants to come to this understanding and uses the collected data to make an interpretation.

The researcher's role in a general qualitative study is to collect and analyze the data. The researcher as the human instrument is able to be responsive and adaptive by enhancing his or her understanding of the collected data through verbal and nonverbal communication with the study participants (Merriam, 2009). Furthermore, data analysis by the researcher can begin immediately in a general qualitative study. As the human instrument, the researcher is also able to clarify and summarize materials, confirm the accuracy of interpretation with the study participants, and explore unanticipated responses. However, Merriam (2009) warned that researchers who serve as the human instrument for a study bring shortcomings and biases that could affect the study. For example, Schwandt (2001) cautioned that researchers who rely on one particular informant or who cross the line between rapport and friendship when dealing with the study participants can lead to prejudicial inferences being drawn from nontypical or nonrepresentative persons or events. Therefore, qualitative researchers need to identify and monitor their biases during the data collection and analysis through "the process of reflecting critically on the self as researcher, the 'human as instrument'" (Lincoln & Guba, 2000, p. 183). As a general qualitative study, this research used an emergent design. Schwandt (2001) described an emergent design as being flexible and adaptive as the researcher encounters unanticipated issues or circumstances.

Purposive sampling is another key part of a general qualitative study. This strategy involves selecting participants based on "their relevance to the research question, analytical framework, and explanation or account being developed in the research" (Schwandt, 2001, p. 232). Relevance can include selecting a participant

because his or her experiences are essential to understanding a process or concept or to test or expand a theory. Schwandt (2001) described two critical issues in using purposive sampling. The first is explicitly explaining the relevant criterion that is used to select the sample; otherwise, the results become ad hoc, unspecifiable, and convenient. Secondly, this sampling strategy should not be chosen simply to ensure that the participants support the developing account. Purposive sampling requires that selection criteria be developed first prior to choosing the people or sites to be studied (Merriam, 2009). These criteria reflect the purpose of the study and help with the identification of “information-rich cases” (Patton, 1987, p. 56).

Typically, qualitative research is conducted in the natural setting of a physical place or site, known as fieldwork (Merriam, 2009; Schwandt, 2001). However, Schwandt (2001) suggested that this traditional conception is less applicable and that the idea of the field should be redefined as a particular relation between the researcher and others.

Data in a general qualitative study are collected through interviews, observations, and/or documents, which are determined by the study’s theoretical framework. This framework guides the questions that are asked, the observations, and any documents that need to be analyzed (Merriam, 2009). Schwandt (2001) posited that data that is collected should be informed by the inquiry’s purpose and the research questions to be answered.

An inductive data analysis approach is utilized in a general qualitative study. This type of analysis is generally defined as “working from the data of specific cases to a

more general conclusion” (Schwandt, 2001, p. 125). Schwandt (2001) pointed out that the use of inductive analysis, which is more like a discovery than a prespecified process of testing and verification, may also be a way that researchers openly state that they are rejecting the hypothetico-deductive method that is used in the natural sciences. The analysis in a general qualitative study results in the establishment of patterns or themes. The analysis of themes is not for the purpose of generalizing; instead, this analysis is undertaken in order to understand the complexity that is inherent in the collected data.

Data analysis is used to determine recurring patterns and themes, which are then used as the study’s findings (Merriam, 2009). The notion that the researcher is the primary instrument is a key concept in any qualitative research (Merriam, 1998). Merriam (2009) explained, “The overall interpretation will be the researcher’s understanding of the participants’ understanding of the phenomenon of interest” (p. 24). The researcher begins with a set of assumptions, a view of the world, and a theoretical framework (Creswell, 2007). The data is collected in a natural setting that is sensitive to the needs of the participants and the places that are being studied.

The final written report includes not only the voices of the participants, but also the researcher’s reflections since the researcher serves as the instrument (Merriam, 2009). The report also offers a complex description and interpretation of the phenomenon being studied. Qualitative inquiry uses richly descriptive narratives instead of numbers to confer what the researcher has learned (Merriam, 2009). These descriptions illustrate the context, the participants who are involved, as well as the

activities of interest. These narratives also can incorporate quotes from documents, field notes, participant interviews, excerpts from videotapes, and electronic communication.

Research Paradigm and Implications for the Study

Qualitative research focuses on understanding how people construct their worlds and interpret their experiences (Merriam, 2009). Thus, general qualitative research is informed by constructivism. While this term can have different interpretations depending on the focus of the research, Schwandt (2001) offered the following definition,

...constructivism means that human beings do not find or discover knowledge so much as construct or make it. We invent concepts, models, and schemes to make sense of experience, and we continually test and modify these constructions in the light of new experience. (p. 30)

These interpretations are not developed in isolation. Instead, shared understandings, practices, and language are used. When incorporating this epistemological perspective into a general qualitative research design, Merriam (2009) stated,

...qualitative researchers conducting a general qualitative study would be interested in (1) how people interpret their experiences, (2) how they construct their worlds, and (3) what meaning they attribute to their experiences. The overall purpose is to understand how people make sense of their lives and their experiences. (p. 23)

Because this study focused on understanding the lived experiences of university-system and university leaders who were involved in complex partnerships, a constructivist perspective for this study made sense. Participation in a complex partnership offered a unique experience that might call for different behaviors, understandings, and reactions than would be found in the participant's employing organization. These complex partnerships have no formal policies or norms to guide participants' behaviors since they span organizational boundaries as a way to collaborate. Instead, while working in a complex partnership, participants must develop a new reality based on their interactions with stakeholders from other organizations and their own interpretations of those interactions. Therefore, the participants are discovering and developing a new world that must be continually interpreted, thus making their participation in a complex partnership an appropriate phenomenon to examine through a general qualitative study.

Design of the Study

The purpose of this general qualitative study was to discover and understand the experiences of mid-level university and university-system leaders who have been involved in complex partnerships (Merriam, 2009). The study was explorative, inductive, constructive, and subjective in nature (Merriam, 2009). The study began with a broad question, which was then continually refined in the interview process.

Furthermore, I have incorporated the paradigm assumptions of an emergent design as well as inductive data analysis (Merriam, 2009; Schwandt, 2001) in order to

understand how the participants constructed and developed meanings in relation to their involvement in complex partnerships. Lincoln and Guba (1985) argued for the use of an emergent design in a qualitative study because this design enables

...the research design to emerge (flow, cascade, unfold) rather than to construct it preordinately (a priori) because it is unconceivable that enough could be known ahead of time about the many multiple realities to devise the design adequately; because what emerges as a function of the interaction between the inquirer and phenomenon is largely unpredictable in advance; because the inquirer cannot know sufficiently well the patterns of mutual shaping that are likely to exist; and because the various value systems involved (including the inquirer's own) interact in unpredictable ways to influence the outcome. (p. 41)

Sampling Procedures

In qualitative studies, sampling is purposeful, not random. Purposive sampling begins with the determination of the people and sites to be studied (Merriam, 2009). Identified criteria directly reflect the study's purpose and guide the researcher in the identification of information-rich cases.

In this study, I used two sampling strategies. The first was criterion sampling (Patton, 1987). In this sampling participants meet some predetermined criterion that is of importance in informing the quality of the study. Patton (1987) stated, "The point of criterion sampling is to be sure to understand cases which are likely to be information rich because they may reveal major system weaknesses which become targets of

opportunity for program or system improvement” (p. 56). To recruit participants, I first contacted national, state, and regional leaders in P-16 education through my professional networks to ask for their recommendations of university or university-system leaders at the mid-management level who were involved in complex partnerships. Doing so helped me identify seven participants who met the study criteria. All of the seven individuals agreed to participate in my study.

The second strategy I utilized was chain referral (snowball) sampling (Biernacki & Waldorf, 1981). Biernacki and Waldorf (1981) stated, “The method yields a study sample through referrals made among people who share or know of others who possess some characteristics that are of research interest” (p. 141). As interviews progressed, I asked study participants to recommend other university or university-system leaders at the mid-management level who were involved in the complex partnership. Three individuals were recommended and contacted. All three leaders agreed to participate in the study. I discontinued the snowball sampling procedure once the data I collected through interviews became redundant (Biernacki & Waldorf, 1981).

Study Participants

I did not start contacting study participants until I received the approval from the Texas A&M University Institutional Review Board (IRB) (Appendix A). The study participants were recruited based on criteria. First, all participants were employed in a university or university system in the United States. Therefore, other complex partnership stakeholders – such as university faculty members, representatives from K-

12 schools, community colleges, municipalities, businesses, and non-profits—were not included in this study. Secondly, all participants either were or recently had been involved in facilitating a complex partnership at the time of the interview. This criterion ensured that participants had enough recent involvement to be able to provide a rich description of their involvement in the complex partnerships. Thirdly, all participants were at the middle-management level on the organizational chart when they were part of the partnership. This criterion was developed to ensure that the participants were not only able to describe the big picture related to the complex partnership but also had actual experience with the day-to-day dealings in managing and facilitating a complex partnership and could speak of the challenges that were faced in these types of collaboration. Finally, participants had to be easily accessible for data collection.

The selected interviewees were ten expert informants comprised of university and university-system leaders at the mid-management level. These participants were employed by United States universities or university systems and had worked the complex partnerships. I gathered names of potential participants from discussions with national, state, and regional leaders in P-16 work who had extensive knowledge of the current P-16 education environment as well as functioning complex partnerships. I invited these leaders by email to participate in my study and included my definition of complex partnerships so they could understand the phenomenon at the heart of this study. A copy of my initial contact letter is included in the Appendix B. At this point, seven leaders agreed to participate in the study. As the interview progress progressed, I

received three referrals from the interviewed study participants. I sent the three potential participants the introductory letter and all of them agreed to participate.

Prior to the first interview, all participants were sent by email an Informed Consent Form (Appendix C). Informed consent was used to protect the participants' rights and ensure voluntary participation. The informed consent form outlined the overall purpose of the study and any possible risk and benefits of participation. This form also clarified that involvement in the study was voluntary and the participant had the right to withdraw from the study at any time without any penalty.

The concern about confidentiality did emerge at one time during the study. One of the participants expressed concern about sharing demographic data for use in describing participants because she believed there was a small universe of people who were involved in this type of work. To alleviate her concern, I asked her to provide only the information that she felt comfortable sharing, and that seemed to quell her concern. No other participants expressed a similar concern. However, to protect the participants' confidentiality, I have tried to be mindful when writing the descriptions to avoid providing any identifiable information/data such as the formal names of advisory committees or titles of initiatives that were undertaken in relation to the complex partnership.

Methods of Data Collection

Data in general qualitative research is collected from interviews, observations, or document analysis (Merriam, 2009). However, interviewing is the primary source of

qualitative data needed to understand the perspective of the participants (Merriam, 2009). In this study, interviews and document review were the primary means for data collection. I did not conduct any on-site interviews due to time and financial constraints since the study participants were located across the United States. Using purposive qualitative interviewing helped me learn about the ten participants' experiences within complex partnerships and to understand their terminology (Patton, 2002). Furthermore, interviewing allowed me to capture the complex nature of their experiences, which covered their past, present, and future involvement (Lincoln & Guba, 1985).

Opdenakker (2006) stated that face-to-face interviews are preferred when the social cues provided by the interviewee are important information sources, standardization of the interview situation is considered important, and the interviewer has easy access to the interviewee, either through close proximity or an ample travel budget and flexible schedule. However, he suggested that other interview methods can be useful. For instance, telephone interviews are appropriate when the social cues of the interviewee are not considered as important in relation to the research problem and when standardization of the interview situation is not considered critical. Additionally, telephone interviews can benefit an interviewer who has a limited budget and a tight schedule (Opdenakker, 2006). Given the diversity of the geographic locations where my study participants resided as well as my own financial and personal constraints, I decided to conduct individual telephone interviews following Opdenakker's (2006) suggestions.

First-Round Interviews

In order to generate as much useful information as possible within a limited time frame, I developed an interview guide (Appendix D) that consisted of semi-structured, open-ended questions. The interview guide enabled me to both decide how to wisely use the limited time available with study participants and make the interviewing process more systematic and comprehensive (Patton, 2002). In total, I conducted two rounds of interviews with each participant. The first-round interview included ten open-ended questions designed to elicit the background information on the complex partnership, descriptions of how the partnership functioned, and stories about the participants' involvement in this collaboration. The second-round interviews served as further probing and follow-up to clarify issues that surfaced from the first interviews and to ask additional questions that remained.

I used the first-round interviews to build a rapport with the participants and also to delve into their experiences. At the start of the conversation, I reiterated the definition of complex partnership to each participant and gave examples describing this type of collaboration when requested. This step helped to ensure that each participant understood the focus of my study. My interview questions were broad and were designed to elicit descriptive information about the participants and the complex partnerships (Merriam, 2009). These interviews each lasted approximately 60 minutes on average. All interviews were audiotaped after I received the participants' written consent. This practice ensured that the participants' responses were preserved for

analysis. In addition, I took notes to help me record the concepts being discussed and to identify areas for clarification as well as topics to address through additional probing questions (Patton, 2002). As this data collection process continued, I started to see themes emerge and posed questions about these emerging themes to participants (Merriam, 2009).

Immediately after each interview, I wrote memos that captured my observations of the interview. These memos included my impressions and speculations as well as additional questions to ask in the follow-up interview. A sample of this memo is in the Appendix E. This reflection practice helped me develop the follow-up questions that needed the participants' clarifications. It also helped me clarify their experiences through member checking, which Schwandt (2001) described as soliciting feedback from respondents in order to verify the researcher's findings.

Second-Round Interviews

Because of one family member's serious health issues, I faced additional time constraints in completing this study. Based on the advice of my dissertation chair, I gave the study participants two options for the second interview. One option was emailing participants the follow-up questions and allowing them to respond in writing. My follow-up questions were embedded in the Word transcript of their first interview in order to jog their memory of the conversation. A sample of the Word document with follow-up questions is included in the Appendix F. The second option involved conducting a telephone interview. Nine of the participants opted for answering my

follow-up questions in writing. One participant chose to be interviewed by phone. In this case, I followed the same process of transcription and member checking that was used in the first round of phone interviews.

The written responses I received from the nine participants varied in both quantity and depth. In other words, some participants provided additional rich data while others made limited comments. All of these participants offered to provide additional clarifications if their written responses did not make sense. The one phone interview generated more in-depth information than the written responses. In hindsight, a second round of phone interviews would have provided deeper insights into this study.

Document Review

Documents and records serve as useful sources for information in a qualitative study (Lincoln & Guba, 1985). Documents can include public records, personal documents, and physical materials (Merriam, 2009). Public documents include program documents, mass media, government documents, and previous studies. Personal documents consist of diaries, letters, photo albums, and other information related to a person's attitudes, beliefs, experiences, and worldview. Another type of document can be generated by the researcher, such as photographs or documents that the researcher requests from the study participants after the study has started. These documents help the researcher learn more about the situation, person, or event being studied.

To supplement my interview data, I gathered relevant documents when available that helped describe complex partnerships. The documents included a book chapter co-

authored by one of the participants, a conceptual model of a proposed complex partnership, a proposal to a foundation, and a mission and vision statement for one of the complex partnerships. These documents were placed in a chart and then coded using the coding scheme that emerged from the interviews.

Data Analysis Process

Data collection is not a linear, step-by-step process (Creswell, 2007; Merriam, 2009). Instead, the collection of the data and its analysis are simultaneous. The analysis began with the first interview and was ongoing throughout the remainder of the research process. Creswell (2003) suggested a three-step process for analyzing the data. The first step entails transcribing interviews, scanning materials, completing field notes, and sorting and arranging the data into different types depending on the source of information. The second step involves reading through all the data to get a general sense of the information and to reflect on its overall meaning. The third step uses a detailed analysis with a coding process, which allows materials to be organized into chunks in order to bring meaning to the information. Thus, data is segmented into sentences and paragraphs, which are then developed into categories. These categories are then labeled with a term that is often based on the actual language of the participant.

In this study, data analysis was comprised of two separate processes. The first process involved data transcription of the participant interviews while the second process was analysis of the collected data through the constant comparative method (Merriam, 2009).

Data Transcription

All audio-taped interviews were thoroughly transcribed verbatim in English by the researcher or a professional transcription service. Transcriptions were then organized in Microsoft Word software in plain text format. Second-round interview data provided by the participants in writing were later added to the Microsoft Word document. In the case of the one second interview that was conducted by phone, this transcription was completed by a transcription service, member-checked with the participant, and then merged with the first interview into the Microsoft Word document.

Data Analysis Procedure

I conducted the data analysis for this study in four phases. The various procedures that I used in each phase of analysis are summarized in Table 9.

Table 9

Data Analysis Procedure

Phase One	- Transcripts reviewed and approved by participants
Phase Two	- Transcripts read and meaningful segments of text highlighted and segmented. - Interviewed text sorted and coded. - Three interviews analyzed in-depth for pilot testing - Peer review #1 - Three interviews were cross-analyzed to identify common and unique themes. - Peer review #2
Phase Three	- Three additional interviews analyzed in-depth. Coding scheme evolved. - Peer review #3

Table 9 Continued

Phase Four	<ul style="list-style-type: none"> - Remaining four interviews analyzed in-depth. Coding scheme evolved. - Peer review #4 - Coding scheme finalized - Documents coded using coding scheme. - All themes were sorted based on coding.
------------	---

Phase One. All individual transcripts were member checked by the participants. Participants provided any requests for changes and clarifications and then approved the texts.

Phase Two. Three transcripts were read and meaningful segments of the text were highlighted and segmented. These segments were put into a table format using Microsoft Word with columns for coding, listing of the participant’s quotes, and researcher’s note. A few pages of an interview coded in the table format are provided in the Appendix. These three documents were peer-reviewed by my doctoral advisor. These three interviews were then cross-analyzed to identify common and unique themes. Again, these documents were peer reviewed by my dissertation chair.

Phase Three. At this stage, three additional interviews were analyzed in-depth, which resulted in an evolution of the coding process. Following a third peer review by my doctoral advisor, the previous interviews were recoded.

Phase Four. The four remaining interviews were analyzed in-depth and coding schemes evolved and interviews were recoded as necessary. A fourth peer review was

conducted and all coding schemes were finalized. Coding was reorganized based on the final emergent themes and final sets of coding were compiled for use in developing the final report.

My analysis was an on-going, interactive process that involved data collection, data analysis, and data representation. The criterion used for selecting the coding was phrases or sentences that had to do with participants' involvement and experiences in complex partnerships. When possible, I used participants' exact phrases or sentences to illustrate the *emic* perspective of the insider of the culture (Merriam, 2009).

Through constant comparison, the codes and categories were refined and reexamined (Merriam, 2009). Some codes were merged or dropped due to overlaps and redundancies based on my understanding of the literature. This process continued until I believed the level of saturation was reached and the data showed the same or similar issues repeating regularly. Once at this stage, I could portray the connections and interconnections of themes.

Reporting the Findings

The reporting of findings involved interpretation and representation of the data in order to make sense of the data (Merriam, 2009). This process is continuous with the data collection and requires sorting, selection, and weaving the data into a coherent narration. The reporting process should include a focus that includes the purpose of the study, but there is no standard format in reporting qualitative research. The contents depend on the audience's interest and the researcher's purpose in conducting the study.

In my study, participants provided regular feedback through the research process. They provided feedback on emerging study issues during interviews, reviewed transcripts, and answered follow-up questions. This process enabled the participants to comment on emerging issues, correct misunderstandings, and provide additional insights. I also asked an HRD professor to review my findings and interpretations.

In reporting the findings, I made sure that ethical issues did not influence the writing (Creswell, 2003). These issues include avoiding the use of biased language; the suppression, falsifying, or inventing of findings to meet the needs of the researcher or the audience; anticipating repercussions on certain audiences; and reporting details of the study so that readers can determine the credibility of the study for themselves.

Trustworthiness and Credibility

As a researcher I made an effort to ensure the rigor of my study. This section addresses the issues related to trustworthiness and credibility and the strategies I used.

Trustworthiness

“Trustworthiness” describes a set of criteria used to judge the quality of qualitative inquiry. Lincoln and Guba (1985) outlined four criteria: credibility, transferability, dependability, and confirmability.

Credibility provides assurances of the fit between respondents’ views of their experiences and the inquirer’s reconstruction and representation of these issues (Lincoln & Guba, 1985). These strategies include triangulation, member checks, adequate

engagement in data collection, reflexivity, and peer review. I used member checks, triangulation, peer debriefing, and researcher memos to establish credibility in this study.

Transferability deals with the issue of generalization in relation to a case-to-case transfer. Merriam (2009) described transferability as the researcher's responsibility for providing readers with sufficient information on the subject being studied so that readers could establish a degree of similarity between the study's findings and other cases to which the findings might be transferred. While this study cannot be generalized, I tried to accomplish a level of transferability through using rich thick descriptions.

Dependability focuses on the process of the inquiry and the inquirer's responsibility that the process was logical, traceable, and documented (Lincoln & Guba, 1985). Merriam (2009) also suggested that triangulation, peer examination, investigator's position, and the audit trail are strategies. I used triangulation, peer examination, the researcher's position, and an audit trail to ensure dependability.

Confirmability parallels objectivity. This criterion is concerned with establishing that the findings and interpretations were based in the study's results and not figments of the inquirer's imagination. I used an audit trail to address confirmability.

Credibility

Credibility is used to address the issue of validity in qualitative studies. Merriam (2009) described credibility (or internal validity) as the extent that research findings match reality. Researchers offered multiple validation strategies to support internal

validity (Creswell, 2003, 2007; Merriam, 2009). These strategies along with the steps I took to address them are listed as follows:

- Prolonged engagement in the field to build trust, learn the culture, and check for misinformation. This enables the researcher to make decisions related to the study's purpose. Although I was not able to do these interviews in person, I do have more than 15 years of experience in K-12 schools as well as five years spent on intensive work in a complex partnership that was facilitated by a university system. I had the opportunity to interact with many university leaders who were involved in P-16 work as well as leaders who were involved in the administration of these large-scale partnerships. These experiences allowed me to gain an insider's knowledge of the topic under study.
- Triangulation. Researchers use multiple and different sources, methods, investigators, and theories to provide corroboration to the evidence. In my study, I used the participants' interviews and documents as data sources. Further I engaged participants and my dissertation chair in verifying the accuracy of my data report and interpretation to ensure internal validity.
- Peer review or debriefing. I regularly debriefed with my dissertation chair throughout the data analysis to discuss my findings and to receive feedback as to the course of my study.
- Clarifying researcher bias from the outset of the study. Throughout this study, I used researcher memos to continually reflect on how my past experiences, biases,

prejudices, and orientations might influence the way I examined and interpreted data.

- Member checking for participant's views of the credibility of the findings and interpretations (Creswell, 2007). This effort involves taking data, analyses, interpretation, and conclusions back to the participants to review for accuracy. In this study, I engaged the study participants in two areas: (a) to review the transcripts for accuracy; and (b) to discuss emerging categories.
- Rich, thick description. The detailed descriptions that the participation offered during the interviews were incorporated into the study. Where possible, I used direct quotes of the participant's responses in order to illustrate a point.

The Researcher's Role

The researcher serves as the primary instrument for collecting and analyzing data in a qualitative study (Merriam, 2009). Because the researcher is the instrument, the potential exists for mistakes and missed opportunities. Furthermore, a researcher's own biases may hamper the inquiry. Therefore, researchers need to be cognizant of their own personal biases and the potential influence these can have on the study. In this section, I articulate my background and professional experiences.

I credit my passion for learning and interest in the field of education to my mother, who was a high school teacher before moving into retail sales and becoming a co-owner of a small business with my father. I earned a bachelor's degree in journalism with a concentration in business administration from a liberal arts university in the

United States. After spending three years in newspapers, I transitioned into school public relations and served 16 years in this role for two K-12 school districts and one state education association. After receiving state and national awards and serving in leadership position in state and national school public relations associations, I wanted to expand my professional horizons and joined a university system to help establish a P-16 partnership that was focused on increasing both the quantity and the quality of teacher candidates graduated by the system's institutions. It was at this point when I began to understand the challenges of working in a P-16 system that requires spanning boundaries in order to accomplish a common goal. At this time, I also was admitted to graduate school to pursue a PHD degree in human resource development so that I could gain more understanding and influence the complex partnership in which I was immersed.

Having worked in K-12 education for a significant part of my career, I have a solid understanding of the operation and culture of those education entities. My knowledge of university operation is limited to my five years working with a third-party organization that was tasked with facilitating the complex partnership. In that role, I interacted regularly with colleagues who had a higher education background (both in community colleges and universities) as well as other colleagues who came with a background in K-12, governmental agency, policymaking and corporate backgrounds. At times, these interactions showed the power of collaboration when bringing together a group of people who had such widely-ranging backgrounds and experiences to work together in a complex partnership. However, I also witnessed the conflict that emerged when these different perspectives clashed and interrupted the daily work flow.

In the same way, I interacted regularly with leaders and faculty members from the system universities. I tried to make sense of these universities' operations, but focused primarily in the mission at hand of trying to make progress toward the initiative's five-year goals. I finally had an "a-ha" moment when I took a graduate course on higher education that incorporated *How Colleges Work* by Birnbaum (1988) as the text. That book, along with the professor's deep knowledge, gave me a framework to understand the universities that were involved in the initiative and the differing responsibilities among faculty who work at a research university and their colleagues at the system's regional universities. As a result, I have a better understanding of how these institutions operate and the regular and partnership demands on the leaders' time that informed this study.

Summary

This chapter presented the research methodology, and procedures for sampling, data collection, and analysis. I used a general qualitative approach to answer the two research questions and collected data from ten participants through a set of pre-developed, semi-structured, open-ended interview questions. The interview data along with documents provided by my participants were analyzed through the constant comparative technique. This chapter also addressed the strategies used to ensure the study's rigor. It concluded with my subjectivity statement as the researcher concerning any potential influence that my background had on the study.

CHAPTER IV

FINDINGS

The goal of this chapter is to provide descriptive and interpretative accounts of these administrators' practices in complex partnerships as well as the influences they believe have shaped these partnerships primarily through excerpted quotes from interview transcripts. Five themes (emerging needs, relationships, leadership, accountability, and staffing/infrastructure) and three subthemes (communication, collaboration, and driving force) emerged from the analysis of 181 pages of interview data.

My analysis was guided by the following research questions under investigation:

1. How do university and university-system leaders describe their practice in complex partnerships?
2. What factors shaped the leaders' practice in relation to complex partnerships?

In order to answer the above research questions, I conducted the first round of interviews, and each lasted an average of about 60 minutes. These interviews were conducted by phone because of the varying geographical locations of the participants, were thoroughly transcribed by me or by a transcription service and then were member checked by the participants. For the second interviews, participants were given a choice of responding to questions in writing or doing a follow-up phone call. Nine participants

opted to respond to my follow-up questions in writing with only one choosing to do a phone interview. This interview was thoroughly transcribed and member checked.

A constant comparative method of analysis was employed to make meaning out of 181 total pages of data generated from interviews with the university and university-system administrators. Summary tables were used to present major themes and subthemes under each coding category. Emerging themes and subthemes were also listed and reported in terms of the frequency of their occurrences in the coding of the interviews. Direct quotes from the interviews are italicized, indented, and single-spaced. In the remainder of this chapter, I started with a description of the ten study participants. I then move to present the major findings from the data analysis.

Study Participants

This study involved ten administrators who were serving in or had just left middle management positions in universities or university systems. These participants had worked at some point in their careers in a complex partnership; most were in the midst of working in this type of initiative when I interviewed them.

Table 10 provides his/her background information about each participant. I have assigned a pseudonym to each participant to maintain his/her confidentiality. The management level for each participant is consistent with the title on his or her vita. I also described the type of organization (public university, private university, or university system) for which they currently worked at the time of the interview. Both genders were represented in the group of participants. However, the gender distribution of eight

women and two men happened by chance and not by choice. The participants also represented different types of universities (public and private). All of the participants had worked at least a decade in higher education, with the longest tenure being 43 years and the shortest tenure being 14 years. The average tenure of these participants was 31.3 years. Seven of the ten participants had worked in K-12 schools sometime during their career. However, no one reported that they had worked at a community college.

Table 10

Demographic Profile of the Study Participants

Pseudonym	Position	Organization Type	Gender	Year Started Working in Higher Education	Previous Work in K-12 or Community College
Mary	Middle Administrator	Public University	Female	1988	K-12
Brenda	Middle Administrator	Public University	Female	2000	K-12
Sondra	Senior Administrator	University System	Female	1984	K-12
Leslie	Senior Administrator	University System	Female	1988	K-12
Mara	Middle Administrator	Private College	Female	1976	K-12
Eric	Former Middle Administrator	Public University	Male	1971	None
Jackie	Middle Administrator	Public University	Female	1980	K-12
Kaye	Middle Administrator	Private University	Female	1981	None
Howard	Middle Administrator	Public University	Male	1972	None
Chris	Senior Administrator	University System	Female	1987	K-12

Table 11 presents the location of each participant, based on the U.S. Census regional map. Six participants worked in universities or university systems in the South whereas four participants were employed by Midwest universities or university systems.

Table 11

Study Participants' Location Based on U.S. Census Regions

Pseudonym	Regional Location
Mary	South
Brenda	Midwest
Sondra	South
Leslie	South
Mara	Midwest
Eric	Midwest
Jackie	South
Kaye	Midwest
Howard	South
Chris	South

Mary

Mary is a dean at a regional university that serves 9,500 students. She has an extensive background in education. After earning a bachelor's degree in Elementary

Education in 1970, she began her career as an elementary teacher. She returned to her alma mater to earn a master's degree in Reading in 1973, but continued as an elementary teacher. Mary was selected as a state Master Teacher in the mid-1980s, but then moved to another state where she worked as an elementary teacher from 1986-88. After earning a doctorate in Curriculum and Instruction in 1989, Mary joined her current university in 1989 as an assistant professor. She became an associate professor in 1996 and a professor in 2000 before being named the dean in 2002.

Mary has extensive experience working in partnerships. She established the university's first professional development school in the early 1990s. A few years later, Mary assumed the directorship of the College of Education's complex partnership that involved multiple public school districts and university faculty members in periodic professional development programs. In addition, Mary was an integral member of the university's leadership team who coordinated the institution's efforts in a university system-wide education initiative. Many of the strategies in this initiative involved forming complex partnerships between K-12 schools, community colleges, and universities.

My initial interview with Mary took place in the summer. She promptly answered when her assistant alerted her to my call. Mary was very warm on the phone, telling me that she was very happy to serve as my guinea pig since she was the first interview I was conducting for my dissertation. She answered each question very thoughtfully, taking her time to choose her words carefully. Mary was not fazed when I

asked follow-up questions which aimed at generating deeper insights into the subject matter. We also had the opportunity to talk a bit about mutual acquaintances since Mary and I had met previously in a professional setting. This part of the conversation also opened up a line of discussion that was relevant to the research project – her work on a new complex partnership that was still in the planning stages.

Brenda

Brenda serves as director of dual enrollment programs for a research university that enrolls more than 42,000 students annually. Her position is in the university's Department of Undergraduate Studies, which is responsible for helping students academically succeed by providing extensive advising services and coordinating advising support across the university.

Brenda has earned three degrees – a Bachelor of Science degree in Elementary Education, a Master's of Education in Curriculum and Instruction in Reading and Language Arts, and a doctorate in Educational Administration – all from the university where she works. She also holds a permanent teaching certificate in grades 1-8, an administrative specialist license in curriculum instruction and professional development, and a principal license for P-12.

After working as a teacher and curriculum specialist in a P-12 district, Brenda moved into higher education as a professor in middle childhood education. She also served as the university's GEAR UP coordinator for seven years. In that role, she assisted the area school district in preparing urban students so that they would be ready

for higher education and would succeed academically at that level. Brenda then transitioned into a position working with pre-college and outreach programs. One of her responsibilities was the university's P-16 initiative.

As director of dual enrollment program, Brenda helps different academic departments create dual enrollment programs that provide high school students with the opportunity to earn both high school and college credits for courses taken. She also facilitates the accreditation of high school teachers as adjunct professors so that they can teach dual credit courses at their respective high schools.

My phone interview with Brenda took place a few weeks after I made the initial contact with her about my study. That initial conversation was prompted by her response to my introductory email when she asked for additional information on my dissertation project. After briefly talking about what I was studying and what her work in complex partnerships entailed, she agreed to serve as a study participant.

The initial interview happened during a mid-morning phone call in August. I was especially appreciative of Brenda's willingness to schedule an interview during the timeframe when she was in the middle of preparing for the beginning of the fall semester. The young man who answered the phone – possibly a student worker – was very courteous and quickly alerted Brenda to my call. Upon answering, she immediately projected a sense of professionalism and enthusiasm in her voice. She described her work as “fun” and said she enjoyed working with a variety of people. She also stressed that she valued having the opportunity to impact students' lives. As the interview

progressed, it was evident to me that Brenda had developed a template for organizing complex partnerships that worked well for her university. Therefore, my additional probing questions on the formation of some of the university's other complex partnerships led back to these processes and tools.

Sondra

Sondra is a senior administrator in a university system. Her job responsibilities include leading the system's P-20 agenda, including teacher preparation, student assessment, and collaboration with P-12 schools and community colleges.

After earning a bachelor's degree in History, Sondra worked as a teacher in two school districts over a five-year period. During this time, she also pursued a master's degree in English Education. After working in a policy setting, she earned her doctorate in Education and transitioned her career into higher education. Sondra has held positions ranging from administering university writing programs to coordinating a university's Center for Teaching Excellence. She also developed a residential learning program for academically talented university freshmen and sophomores.

In her role with the university system, Sondra has authored successful grants for more than \$30 million. She has also been responsible for multiple P-20 reports and organized conferences that had included representatives from all educational levels. In addition, Sondra was recognized for her work in education by the alumni association at the university where she earned her undergraduate degree.

My initial interview with Sondra occurred at the start of the fall semester. I had not officially met Sondra, but had been at meetings where she was in attendance. Therefore, I saw how highly respected she is professionally by national educational leaders. In the early part of the interview, Sondra displayed a good sense of humor and a warm laugh. Her comments on complex partnerships highlighted the desire to be as inclusive as possible through the involvement of both public and private entities when possible. Based on her experiences, Sondra was able to describe different layers of complex partnerships and offered insights detailing the conceptual models as well as the day-to-day inner workings of these partnerships.

Leslie

Leslie is a senior administrator in a university system. Her responsibilities include P-16 oversight and coordination, as well as external fundraising and oversight of policies for this area.

Leslie has worked at some level of education for the past four decades. After earning a bachelor's degree in Elementary Education with a minor in Special Education, Leslie worked as a K-12 teacher for seven years. During that time period, Leslie returned to graduate school to earn a master's degree in Special Education. She also earned an educational specialist degree in Reading/Language Arts and a doctorate of Education in Literacy with cognate in Elementary Education. At that point, Leslie transitioned to higher education where she became an assistant professor in elementary

education and literacy. She has served as a department chair and School of Education dean.

Leslie has extensive experience working with school-university partnerships. She founded a university-based center that focused on strengthening connections between K-12 schools and higher education, as well as developing innovations in these collaborations. In her various roles, Leslie has helped generate more than \$30 million in grants and contracts, many of which support P-16 work and partnerships. Her work has been recognized nationally by various organizations. In addition, Leslie received an alumni achievement award from the university where she earned two of her degrees.

My initial interview with Leslie had to be postponed due to a family issue, but she graciously accommodated my request by rescheduling our conversation in mid-September amid the press of duties that herald the start of an academic term. Speaking with warmth and energy, Leslie warned me that she was experiencing a hacking cough that might emerge during the interview. Early in the interview, Leslie pointed out that she currently has a staff member who serves as the system's liaison to complex P-16 partnerships across the system; however, she said that she still tried to stay involved in working with partnerships "because it's where my heart is." This commitment was evident in her voice as she described the various aspects of the partnerships in which she had been involved. Leslie described her own experiences at the university level as well as the system level, thus providing a good contrast of the differences between complex partnerships at these levels. She also credited her predecessor at the system who had

initiated much of the work in complex partnerships that continues today. Leslie expressed sensitivity to regional needs in her system and shared her desire to encourage the formation of partnerships that meet those specific needs. Leslie also displayed an idealistic streak, noting that the reason for the formation of these partnerships is not about the individual college, but instead, about the students “and about, I would dare say, the future of our country.”

Mara

Mara is a dean of the School of Education at a private college. The university’s enrollment in 2011 was approximately 2,600 students. The university has historically served first-generation college students as well as students from middle-income and lower-income backgrounds.

Mara has worked in the field of education for almost 50 years. After earning a bachelor’s degree in English, French, and Secondary Education from the university where she now works, she started her career in education as a high school teacher. While still teaching at the K-12 level in private schools, Mara earned a master’s degree in English. A decade after she started teaching, Mara transitioned professionally to higher education. She started as a graduate assistant while earning a doctorate in Communications and has since assumed a variety of roles, ranging from instructor to graduate dean. Mara has received numerous honors during her career, including being named Outstanding Alumna by two universities and being recognized by various local organizations.

In her role as dean of the School of Education, Mara encourages the formation of relationships with K-12 schools so that K-12 educators are engaged in the teacher preparation process and university faculty can assist schools with their change efforts. She has also served as the leader of an area education consortium and the board chair of a local high school.

During our initial phone conversation at the start of the fall semester, Mara appeared to be an attentive listener as I explained the rationale for my study. She provided a very valuable perspective as a dean at a small private college. Mara sounded frustrated when discussing how her college's participation in the partnership at times had been limited due to organizational and financial issues as well as benign neglect by public universities in involving private colleges. She also displayed a tenacious side when she used the term "fight your way in" to describe her efforts to remain an active member in this complex partnership. Mara has made sure that her university is involved in top-level decisions by stepping into an open leadership position in the complex partnership. Mara's comments at times also were idealistic as she stated that she wanted to make a difference and that higher education's participation in K-16 partnerships is "a civic responsibility." Additionally, Mara encouraged an inclusive focus through trying to open up the partnership to all K-12 schools, not just public schools.

Eric

Eric currently serves as a professor in the School of Education at a university that educates more than 30,000 students annually. He previously held a mid-management

administrative position where he was involved in the day-to-day operations of a complex partnership.

Eric progressed steadily in attaining higher learning by earning three degrees within the span of a decade. His bachelor's degree in English with a minor in Mass Communication was bestowed in the early 1970s. Two years later, Eric received a master's degree in Educational Policy Studies with a major in Social Sciences of Education. He was awarded a doctorate in 1979, majoring in Public Policy and Educational Institutions with a concentration on Institutions of Higher Education.

Eric has pursued a wide range of positions in higher education for approximately four decades. His first position involved working in a multicultural education center, which he followed by accepting other posts related to minority affairs and ethnic studies. During much of the 1980s, Eric served as the director of special projects at a university. In this capacity, he focused on providing academic assistance to under-prepared, low-income, first-generation, and physically handicapped students. While in this role, Eric entered the faculty ranks and eventually advanced to full professor in 1993. Eric moved to administration as an assistant provost in 1984 before transitioning to associate dean in the university's College of Education three years later. He became the college dean in 1996. In 2001, Eric accepted the position of dean of the School of Education at his current place of employment. In this role, Eric worked closely with university system officials to implement a complex education partnership before leaving the deanship in 2011.

Although he has not worked as a staff member in P-12 schools, Eric has extensive experiences interacting with these organizations through his service on committees and boards as well as his work in complex partnerships. He has served as a member of the board of directors of a school district's education foundation as well as a member and chairman of the district's multicultural education committee. Eric has been involved on an advisory board for a charter school network planning project and served as a member of the board of commissioners for a high school. Eric has also chaired the city's early childhood council. He held a key leadership position in a major complex partnership that involved community organizations and more traditional P-16 partners.

My first phone interview with Eric was scheduled during late afternoon in the early part of the fall semester. Eric was very warm and displayed a courtly and formal demeanor, consistently addressing me as "Miss Martin" (which he also had done in his correspondence with me). He was very willing to share his history in working in a complex partnership, describing in detail his experiences in these endeavors. When he could not remember a specific detail, he would pull resources to jog his memory. Eric patiently described how the partnership was built and functioned, the issues that arose during his tenure, and the community and P-16 stakeholders.

Jackie

Jackie serves as a middle manager in a College of Education at a research university that annually enrolls more than 26,000 undergraduate students. She has held this position since 2008.

Jackie's formal education and career have focused on education. She holds a bachelor's degree in Elementary Education, a master's degree in Reading, and a doctorate in Reading. She worked as a public school teacher before moving to higher education where she is now dean and a professor in Teaching, Learning, Policy, and Leadership Development. Jackie's professional and scholarly interests have included school-university partnerships and teacher professional development, both of which are often key components of P-16 work. She has also worked to develop linkages between higher education and P-16 education, specifically through trying to connect teacher education initiatives to public school student achievement.

Jackie has worked in a range of school-university partnerships. As a faculty member, she worked in more traditional school-university partnerships. She also has extensive experience in a variety of complex partnerships. For example, one of these complex partnerships involved the justice system, the social work system, a school district and a university that together worked with students who were attending what she described as a "a tougher school."

During my phone interview with Jackie in the middle of the fall semester, she sounded very warm and accommodating. The conversation was very congenial, especially after we identified that we shared some commonalities in places where we had lived. Jackie made a point of stressing that she was committed to each partnership's success. Her descriptions indicated that she was very cognizant of the politics of the various stakeholders who were involved in partnerships. Jackie was also aware of the

challenges for someone in her position, noting she sometimes felt she needed to be in five places at the same time in order to do the work required to keep the partnership functioning. While Jackie exuded competence during our conversation, she also displayed a realistic and pragmatic side by pointing out that if the partnership was not “clicking,” she had learned to back away. She then tried to identify a different way to approach the partnership in order to encourage stakeholder engagement and, thus, movement.

Kaye

Kaye holds an administrative position in a private university. She has held this position since 2002.

Kaye earned a doctorate in Educational Psychology. While she had not worked in K-12 schools or community colleges, Kaye had extensive experience in higher education, having worked in both student affairs and academic affairs. She started working as an administrator at a public university in 1981 where she remained for three years. Kaye then moved to a public college where she worked for almost two decades. In 2002, she joined the university where she currently works. Because of concerns about confidentiality, Kaye asked that I not provide any additional details about her career.

During our phone interview in the middle of the fall semester, I found Kaye to be very warm, cooperative, and thoughtful in answering my questions. Her extensive experience working in complex partnerships was quickly evident. I also found Kaye to be very pragmatic as she discussed how difficult it could be to work in these types of

endeavors with only a limited number of faculty members. Because of these limitations, her college had decided to only work intensively with a few specific partnerships. Kaye also stressed that the faculty and university students were benefitting from these partnerships, as opposed to the school districts only receiving services. Kaye described the challenges she faced in involving the business community in these partnerships since these specific stakeholders often did not have a good understanding of the university's culture or educational jargon. Kaye was aware of the importance of relationships in making these partnerships succeed and also understood the role that politics played in these collaborative efforts.

Howard

Howard served as a dean of a College of Education at a public university. This university enrolls 22,550 students annually.

Unlike the other study participants, Howard's educational degrees were in a discipline other than education. He earned a bachelor's degree in Psychology and French in the late 1960s. After receiving a fellowship in Psychology, Howard completed his doctorate in Clinical Psychology in the early 1970s.

Howard has worked extensively in higher education and mental health organizations for more than 40 years. While he has moved through the normal progression in his higher education career in order to achieve full professor, Howard also was engaged in private practice and worked in clinical settings. Presently, he holds appointments as adjunct professor at three other universities and directs a research

center. Howard has not been employed in a school district, charter school, or community college, but he has held P-12-related positions as director of the university's partnership schools. Howard also served in advisory and consultative positions on a variety of committees that focused on other educational levels at the local, regional, and state level.

My initial interview with Howard occurred in the middle of the fall semester. I found him to be very professional and task-focused when responding to the questions in my interview protocol. During our conversation, Howard projected a very serious demeanor, opting not to participate in any discussions on topics that were unrelated to the interview protocol. His responses about his work in complex partnerships were thorough, but extremely concise. However, Howard was very accommodating in answering the initial questions as well as additional probes for the second interview.

Chris

Chris serves as an administrator at a postsecondary education system that coordinates the efforts of more than 30 public colleges, universities, and professional schools. She is responsible for teacher and educational leadership initiatives.

After earning a bachelor's degree in Special Education in the mid-1970s, Chris began her career as a special education teacher in a county school district. She then moved to another state, where she worked as an educational consultant and special education teacher for a decade. During that time period, Chris earned both a master's degree and a doctorate in Curriculum and Instruction. Her emphasis was on Reading with a minor in School Psychology. After completing her doctorate, Chris moved to

another state where she worked as a teacher instructional specialist for a county school board for seven months. She then transitioned to higher education, beginning as an assistant professor at a private, nonprofit university in that state. Chris began working in her current university system in the late 1980s, accepting a position as an assistant professor. She was promoted to associate professor before taking leave to work on university system-wide efforts where she has been responsible for many reform efforts.

I previously met Chris at national and state conferences when I was working in higher education in the mid-2000s. Even though I had not spoken with her in the time since our last meeting, Chris quickly established a collegial relationship during the phone interview scheduled in the fall. Our prior professional relationship may have helped Chris feel comfortable in the interview since she talked for an hour-and-a-half about the start of the complex partnership in the 1990s as well as the various iterations the partnership has taken since its inception. Chris also offered a lot of critical details and insights into the organization and operation of complex partnerships. In fact, she often would expand upon her answers in different and informative ways that I had not anticipated before stating "...going back to your original question."

Study Themes

Five themes and three subthemes were identified in my analysis (Table 12). Emerging needs was the most prevalent theme in this study, followed closely by the theme of relationships. The themes of leadership, accountability, and staffing/infrastructure also were evident in the data.

Table 12

Study Findings

Theme	Subthemes	Frequency
Emerging Needs		41
Relationships	Communication, Collaboration	40
Leadership	Driving Force	25
Accountability		22
Staffing and Infrastructure		18

Table 13 describes the five themes in terms of being mentioned by participants.

The “X” shows if an individual participant mentioned a specific theme.

Table 13

Major Themes by Participant

	Emerging Needs	Relationships	Leadership	Accountability	Staffing & Infrastructure
Mary	X	X	X	X	X
Brenda	X	X	X	X	X
Sondra	X	X	X	X	X
Leslie	X	X	X	X	X
Mara	X	X	X	X	X
Eric	X	X	X	X	X
Jackie	X	X	X	X	X
Kaye	X	X	X	X	X
Howard	X	X	X	X	X
Chris	X	X	X	X	X

Theme 1: Emerging Needs

Many of the complex partnerships that are featured in this study focus on emerging needs that cannot be solved without significant, wide-spread involvement by a variety of organizations. These needs, which are described as “wicked” by Lawson (2013), often can’t be addressed easily and, therefore, call for collaborations among organizations. Table 14 describes the frequency rates that the theme of emerging needs was found in the coding of this study.

Table 14

Frequency of Occurrence of Emerging Needs Theme

Theme	Frequency
Emerging Needs	41

Emerging needs that were addressed in complex partnerships ran the gamut. The list provided by the study participants included teacher quality, literacy initiatives, math initiatives, science initiatives, college readiness, and support for rural K-12 schools.

One example of addressing an emerging need was the quality of the teacher preparation programs in the university system where Chris worked. While the campus administration and staff believed they were doing a good job preparing future teachers, the data showed that some of the campuses had a high percentage of new teachers who were graduating from these programs but could not pass the state teacher licensure

exam. Therefore, these teachers could not be certified to teach in the state. The complex partnership was created to help campuses redesign these teacher preparation programs and develop an accountability system in order to measure progress toward this goal.

Other complex partnerships identified emerging needs through other avenues. Some partnerships used key stakeholders such as the representatives in their advisory boards as a sounding board to identify these needs. For instance, a series of conversations between K-12 and higher education stakeholders uncovered critical issues regarding teacher quality within the complex partnership that Sondra guides. She described the concerns identified by the K-12 leaders as follows,

Their main issues were that teachers were coming into the public schools without all of the preparation that principals thought they needed. Some of that had to do with varied and nonstandard curriculum for teacher preparation like one university, which had a different set of requirements than another university. And some of it had to do with the fact that community colleges were teaching students for the first two years and then they'd transfer and some of them would have different backgrounds than others. Some of it had to do with the different levels of quality of internship experiences. And we basically parsed out a lot of challenges and what the principals and the superintendents in the state were unhappy about and I (then) would take that message back and convened a group of education deans (to come up with a plan of action).

The complex partnership that Brenda facilitated was designed to focus on pipeline issues in schools that served students who were underrepresented in higher education. This Precollege Program was established so that high school students were able to take college-level classes to improve their chances of being accepted into higher education and qualifying for scholarships. She described the progress in dealing with the original emerging issue as follows,

We have transformed a community over a five-year period where you (once) saw the parents were not considering their kids would go to college, didn't think they could afford it, didn't think they had college or career aspirations, weren't involved in post-secondary. This area had a 72-percent poverty rate based on free-and-reduced lunches and a 30-percent college-going rate. So now we have put the dual-credit classes in the high school their senior year. We have about 40 kids enrolled in those (dual-credit) classes and an additional 30-40 of those students at the school are at the university their junior or senior year. You didn't see that before.

Some complex partnerships focused on multiple emerging needs at the same time. Eric reported that the partnership that he facilitated focused on increasing the teacher pipeline as well as implementing K-12 literacy and mathematics initiatives as a way to engage the community. The partnership utilized a variety of stakeholders, including local churches, service agencies, and the zoological society in both initiatives.

Interestingly, many of the partnerships have adapted to deal with other emerging issues in the years since they started. Chris reported that since the state-wide partnership's inception, a commission that included higher education and public education representatives meet annually to identify emerging needs and develop a charge and recommendations. She described the effect of these evolving goals as follows,

It hasn't been possible to implement every single recommendation, but going back to that initial set of recommendations in 1999-2000, the 60 recommendations, we've implemented almost all of those. The next year we had 40. We implemented all of them. This year, our focus has been on the Common Core State Standards. We've already started to implement some of them. Last year the focus dealt with needing to change what's happening with the preparation of counselors within our state. Since those recommendations we now have changes in state policy for counseling and all of our universities now need to be CACREP accredited in order for them to continue to offer their programs. All of our campuses that had programs are either now going after CACREP accreditation or they're already accredited.

Similarly, Mara was working to get the complex partnership to broaden its focus to embrace the emergence of charter schools. Mara stated,

If we really care about the community, it's not just the kids who are in the public schools, it's all the kids. Because any school that serves kids serves the public good is my mantra. So we are moving in some directions and some efforts we're doing in the dean's group to broaden out the scope of our work. Not to say we aren't helping the public schools or working with them, because we are. They're a very important part of the mission. But focusing a little bit more on "Are there broader questions? Can we involve more people so that any efforts we do have more impact?"

Another partnership focused on the needs of rural school districts that often did not have the same financial or personnel resources available to them as urban and suburban school districts. Mary said at the inception of the complex partnership, the emerging need was the state requirement to implement school improvement plans. From there the partnership expanded to program evaluation and professional development based on feedback from K-12 leaders. This approach has allowed the university to do a better job of targeting emerging needs. For instance, many of the partnering schools had difficulty finding certified English as a Second Language (ESL) teachers, which was one of the state's teacher shortage areas. Upon hearing this need, the complex partnership held ESL workshops so teachers so could earn this certification and fill these roles.

Theme 2: Relationships

All ten participants identified relationships as a critical component in complex partnerships. In fact, one participant, Mary, used the word "relationship" 11 times when discussing her experiences in a complex partnership. In addition, two subthemes were

discovered in my analysis. The first is communication, which was described by nine participants as a way to establish and maintain relationships. The second subtheme, collaboration, was identified by eight participants. Because of the type of work that happened in a complex partnership, participants stressed the importance of taking a collaborative stance when building these relationships. The “X” sign in Table 15 indicates which participants described these subthemes.

Table 15
Subthemes under Relationships

	Communication	Collaboration
Mary	X	X
Brenda	X	X
Sondra	X	X
Leslie	X	X
Mara		X
Eric	X	
Jackie	X	X
Kaye	X	X
Howard	X	
Chris	X	X

Frequency also is an informative indicator of how important a topic is in a study based on the coding of the participants' interviews. Table 16 provides this information on both the relationship theme as well as its two subthemes.

Table 16

Frequency of Occurrence of Relationship Theme/Subthemes

Theme/Subtheme	Frequency
Theme 2: Relationship	40
Subtheme 2.1: Communication	20
Subtheme 2.2: Collaboration	35

While relationships are important in a traditional school-university partnership, the sheer number of stakeholders who have some role in a complex partnership makes it more time-consuming to manage. Individuals who are tasked with facilitating these initiatives can expect numerous responsibilities and demands related to the maintenance of these additional relationships. Depending on the specific partnership, these participants could include state and local elected officials, state policymakers, municipal leaders, non-profit leaders, business leaders, and higher education and K-12 representatives. Mary described the difference between working in a traditional school-university partnership and a complex partnership as follows:

When it's working with just one school, then I'm in control of my side of the house, my interactions with the school personnel, and developing relationships with the principal and the teacher there. [Complex partnerships] involve multiple institutions, and therefore...more relationships to build, more change, and turnover.

Leslie, Jackie, and Chris described how relationships formed by participating in a partnership have the power to influence people and change what Leslie described as “hearts and minds.” However, it might take time for those changes to take place. Interestingly, two participants, Jackie and Chris, pointed out that the people tasked with facilitating the complex partnership may not be fully appreciated during the early part of the initiative. Jackie described the frustrations others had with her in a leadership role during the early stages of a complex partnership as follows:

...if you have experience in developing partnerships, you're trying to be aware of everyone and everybody, and the politics get pretty interesting in that there are people working with you who really don't understand or think the way you do about how to form collaborative relationships.

In a similar vein, Chris recounted her experiences serving as a change agent within the complex partnership and the evolution of her relationships. In the early stage of the partnership, she found that people were either strong supporters or vocal detractors of her efforts in the complex partnership. However, after those participants saw positive results based on the partnership's efforts, they usually became very supportive not only of the process but also of Chris herself.

Spending time together, whether through meetings or other avenues, was seen as critical by four participants in helping individual stakeholders build relationships and gain a deeper understanding through hearing differing perspectives about the issue based on the viewpoints of stakeholders from the different participating organizations. Leslie recalled a day-long retreat with key leaders in the College of Arts and Sciences as well

as the College of Education. The head of the history department, who was a staunch opponent to the College of Education's initiative, had to bring his infant to the retreat. Recounting the events that happened at the meeting, Leslie remembered,

I said, 'You know, Baby Larry is why we are here today and I want you all to look at this baby. And if we're doing what we do today right, life will be better for this baby.' Of course, the baby's papa was horrified. I'm sure it was the worst possible thing, but I meant it. For me, it was like speaking the truth. And the father became one of the greatest advocates for all of this.

Other study participants shared similar experiences. Sondra described how relationships were built during regular meetings of P-16 representatives when participants had a chance not only to share their perspectives, but also to hear from participants in other organizations. This 'give-and-take' allowed participants to understand and learn from one another, thus deepening their relationship. Eric echoed this sentiment, pointing to his efforts to bring together the College of Education deans from area universities. He believed these meetings, which he convened, were critical in getting those deans involved in changing their college's approach to teaching and learning. Jackie noted that she regularly brought the deans at her university together to address issues such as developing a curriculum for a high school charter school that would include some university coursework, and to recommend subject-area faculty members who would be willing to work on the curriculum committee. Kaye tried to nurture relationships within the complex partnership. Her strategies included meeting with K-12 leaders to get feedback on what the university could be doing better, requesting that faculty members participate in the K-12 training on the state's teacher

evaluation system, and developing proposals based on the needs expressed by the K-12 partners.

Ultimately, the goal for having these types of regular interactions was to develop a synergy among participants. Describing how she was working with other university administrators on a proposal for a new complex partnership, Mary said,

The dean from the College of Science and Technology really gets it and has lots of great ideas. We work well together, and have worked on a number of grants and projects. Again, spending time together is important, developing a trust.

As Mary noted, these regular interactions could lead to trust, which was also identified by Howard and Mara as being an important factor in the creation of working relationships in a complex partnership. However, according to the participants, this trust must be earned. Describing his experiences working with community partners, Howard recounted,

The reason that they don't trust universities is that universities regularly take what they need and then say good bye, regularly don't say thank you, almost never share what they've found in ways that are understandable and useful to local participants, be they teachers or residents. To send somebody a copy of a reprint is insulting and useless. Universities rarely give as much as they get out of these partnerships. I think that's part of the difference if you want a long-standing partnership. In one community partnership, I literally made visits across the neighborhood for almost a year and a half before probably the most influential person in the community was willing to meet with me one-on-one. Essentially, she has been an avid supporter of ours since 2006, but before that she said, "I just need to know if you are going to still be around or if you're going to do like everybody else and be just sort of 'Okay, been there, done that. Thanks a lot. Goodbye.'"

In another example, Mara admitted feeling stymied when she realized that private universities received unequal treatment in the complex partnership. She voiced her frustrations as follows:

The public institutions – our local public university and the public technical/community college – in my experience talked a better game about involving everybody than they led up to. But if you wanted to be part of it, you could fight your way in, but if you didn't fight your way in, they weren't making it easy.

Three other qualities -- accountability, responsiveness, and transparency – also were identified by the study participants as critical in creating meaningful relationships within a partnership. Howard said he made sure that the partners knew what he and his team were doing and he made himself available at all times to take phone calls from the partners. He reported that if the stakeholders determined a meeting was needed, it would be scheduled within a 36-hour period. Howard regularly stressed to the partners his ability to keep specific work confidential and created a process to get input from key stakeholders on drafts of all documents prior to final publication and dissemination.

Participation in complex partnership activities also can influence the perceptions of individuals who do not have a day-to-day role in the actual partnership, thus resulting in the creation of new relationships that may have an important effect on the future of the partnership. Leslie recalled an event that was coordinated by the complex partnership that brought fifth graders to the university for a full-day visit. The university officials sponsored a number of activities for these students, including a tour of the campus and the chance to attend a college class. While the trip caused the students to realize they had

a wider range of future options than they previously had considered, Leslie stressed that another important group – school board members who were specifically encouraged to attend the day’s events by one school district superintendent -- also had their perspectives changed by the day’s activities. She said,

The school board members got so excited about what they saw and how they saw kids who wouldn’t have perceived themselves as going to college suddenly realizing that this thing called college was attainable....And so the board then started saying, “What do we need to do as a board to encourage kids to go on and what classes should they be taking? And we as a board need to be taking a more active role.

According to four participants (Eric, Jackie, Leslie, and Kaye), having relationships with specific stakeholders can lend additional influence to individuals who are involved in leading the partnership. Eric relied on this type of influence when he was newly hired at the university and needed to get a foothold in the complex partnership’s operation. He approached the handful of people who had worked on the initial grant to fund the complex partnership and asked them to accompany him to meet with faculty members. Their visible presence helped him gain credibility as he ascertained faculty members’ interest in participating in the initiative. In another example, Jackie used relational influence through her interactions with a consultant who was brought in by the university to provide guidance on the complex partnership. She asked the consultant to introduce her to participants in a successful complex partnership in another state. Jackie was then able to bring the lessons learned from these stakeholders back to her university.

The relationships that have developed in the complex partnership over time also allow for the various participants to connect efficiently in order to focus on emerging issues and opportunities. Mary described how departmental leaders and faculty members regularly tried to approach the K-12 schools that were part of the partnership when new programs, research opportunities, or grant funding became available. Mary believed that faculty members used the partnership's membership as a way to screen schools because of the ease in starting a new initiative when the foundation of the relationship was already in place.

The formation of these relationships also can result in the development of a smaller traditional school-university partnership as a subset of the larger initiative. Providing an example, Mary explained how several faculty members met a small group of K-12 teachers from one school during an activity sponsored by the complex partnership. These faculty members continued the conversation after the activity had ended and decided on their own to partner with the individual school to conduct research.

Subtheme 2.1: Communication

Communication sits at the core of the development of stakeholder relationships in complex partnerships. Whereas a traditional school-university partnership might mean one faculty member communicated regularly with one teacher or the staff of one school, a complex partnership by nature increases the number of communications that

need to happen, as well as the chance for miscommunication. Mary described the difference as follows:

I think the difference is in terms of volume. More relationships means more communication is needed (in a complex partnership) than when you are working with a single school with one principal and 20-25 teachers.

Participants described a variety of types of communication avenues to involve and inform stakeholders. Brenda, Leslie, Jackie, Kaye, Chris, and Howard scheduled a variety of regular meetings that were for specific stakeholders. Jackie said that while the partnership's sounding board met at least once a month as a group, these meetings were supplemented by regular emails, conference calls, and individual phone calls. In addition, she participated regularly in community meetings to share the partnership's progress. A newsletter specific to the initiative was being published and disseminated to stakeholders in two complex partnerships.

The regular communication that is necessary to facilitate a complex partnership can result in an intensive time commitment. Sometimes these opportunities to communicate came up unexpectedly, as Jackie explained,

Tonight I'll be here until the wee hours because the community now wants to see the drawing and the design for the historical school that we're going to turn into this charter. The city officials organized the community meeting and all of a sudden I got this frantic call, 'Oh, God, I hope you're coming because you need to talk about the curriculum and you need to talk about the campus involvement.' Sometimes there are so many moving parts....

However, most participants believed that regular communication helped them become proactive. Six participants said that regular communication improved the flow of information, allowing early identification of issues that could be addressed in a timely manner. For instance, Kaye remembered how business leaders who were involved in the complex partnership complained about the poor performance of high school students in STEM areas. Noting that she took that concern to a deans' meeting, Kaye stated,

The associate dean of arts and sciences comes to me and says, "What are you hearing from these business communities? Our science program is looking at getting more stakeholder involvement. Can you help me think about that?" And then subsequently I was able to recommend to him a variety of ways to pursue that, ways to be more deliberate to do that outreach to the community. It just became an interesting spin-off and I think it has some potential to really bring needed voices to the table if the sciences are going to reconceptualize their curriculum....

Additionally, regular communications can help stakeholders develop a realistic understanding of why the complex partnership needs to be in place and what the initiative is designed to accomplish. Chris described how the university system brought campus leaders together to redesign all of the teacher preparation programs because teacher candidates were not passing the PRAXIS exams and, thus, could not become certified teachers. Those conversations, which included each institution's top administrators, were guided by national experts who helped the group develop the redesign process. These meetings created a great deal of anxiety among campus leaders, who voiced concerns about the impact upon faculty, the long-term effect of having accountability labels placed on their universities when recruiting students, and the stress of being evaluated by national experts. Chris said she and other system leaders listened

to these concerns and developed a way to offer additional support to assist the higher education institutions as they moved through the redesign process.

While only mentioned by one participant, it is important to note that communication could be especially important in building a relationship when the stakeholders in the partnership change or new partners came on board. Mary described an orientation process for the complex partnership at her university. Anyone new to the partnership – whether the individual worked for a school that was just joining the partnership, was a new faculty member, or was a new principal in a school that was a long-term participant – was invited to attend. The participants spent the meeting revisiting the complex partnership’s theoretical foundation as well as learning about the partnership’s history, vision, and expectations for the participant’s commitment.

Subtheme 2.2: Collaboration

In some sense, the quality of a complex partnership can be gauged not only by the relationships, but also by whether there is a sense of collaboration among the stakeholders. Jackie pointed out,

If it's not supposed to happen, you can't force it. You can't even pour enough money into it to make it happen. You've got to get it where the right people are together and if you're working and working and working and it's still not clicking, then you know what – I back away because I feel like I'm not going to push it in the right direction. I back away and try a different direction. That's sort of my mantra with this partnership work.

However, three study participants reported that many stakeholders in these initiatives did not understand what collaboration looked like. Mara described three styles of working with others. The first style was “we’re equals concerned with our children” in which the work was more important than who received credit for the effort. The second style was “noblesse oblige,” where higher education representatives acted as they had all the answers and were sharing their wisdom. These representatives did not listen to the experiences of K-12 participants. She described the third style as a combination of the two previous ways of operating in which higher education representatives believed that research could provide guidance to K-12 schools, but they were also willing to listen to what K-12 educators had to say and then made linkages between research and practice. In a similar vein, Brenda made a point of differentiating between collaboration and competition. She stated,

A competitive organization is one that thinks that they’ve got all the knowledge; they’ve got all the answers. They’ve developed this. They’re the ones who are the people to go to. They take others people’s work and say they did it. But a collaborative group doesn’t do that – they’re the opposite.

Believing that many participants in complex partnerships had not experienced a collaborative environment, Jackie suggested that these stakeholders need to take a leap of faith when first working in a complex partnership. She explained,

People have to have experience (in collaborative work) and understand that that (progress) will happen. Otherwise, they want to be sure they reach their goal. We’re goal-driven so much in our country and our goals are often our own and maybe a unit that we worked with, so that when you start working across units, you have to have boundary crossers. You have to have people who understand how to do that and be models (for others).

Furthermore, unless well established, the commitment to collaboration may waiver as the complex partnership evolves. Mara explained that the partnership leaders initially involved all stakeholders in major decisions. Later, these leaders took action without getting input and did not share what they were doing. Eventually the leaders started to collaborate more on the initiative, but eventually reverted back to what she described as “their own silo of action.” She stated,

There is a strong bureaucracy that makes it very difficult to put children at the center (in our city). Working together to achieve anything is made difficult because some don't want to give up their turf, some aren't invested in doing what's best for kids, and some don't listen.

Negotiation was described by three participants as a critical element in creating a collaborative environment. Sondra provided one example of negotiation that occurred as part of a complex partnership as follows,

We would talk about how we could make this more rational system (for preparing teachers). So ultimately we came up with a working group that redesigned the teacher preparation program for the state and it became a set of state regulations. But developing those regulations was the work of that high-level partnership so it wasn't developed just by K-12 schools; it was developed in a partnership. What do we expect the universities to do? What experiences do we expect teacher candidates to have? And what are the standards that we want a teacher candidate to pass before they go into pools of teachers? And what is the responsibility of the school to provide internship experiences?

At times, the ability to negotiate was tied to walking in the other person's shoes. Leslie recalled how faculty members who were assigned to teach a methods class on-site at a K-12 school expressed the concern that the amount of work they were doing for

these classes should qualify for a double credit load. Leslie was skeptical about the faculty's claim, but agreed to teach a special education course on-site. She said,

So I taught one of the courses in the sequence and it was about double time. They were not kidding me!... Well, the problem was, as an administrator, I couldn't get double time for them. We then had to come together to figure out (a solution). I said, "OK, you're going to have to walk a mile in my shoes now and I cannot go to the provost and say, 'You're going to charge double for this program.' So I get what you're saying and you need to get what I'm saying. And how are we going to solve this problem? We figured out kind of a compromise, but it underscored the problem of really doing these programs well because they were doing it extremely well.

Some unintended benefits to the university may emerge from collaborating in complex partnerships. For example, Kaye believed that university faculty could learn cutting-edge practices such as new technology and budget-based learning from what was happening in the K-12 schools. The faculty members then were able to bring the theoretical perspective and help K-12 staff think about these issues conceptually.

Theme 3: Leadership

Complex partnerships live or die by the strength of the leadership that is involved in these collaborations. All of the participants emphasized that the involvement of strong executive leaders was crucial in developing the vision for the complex partnership and identifying stakeholders from other organizations who should be involved in providing guidance to the partnership. Additionally, the study participants also believed that strong leaders were needed at the mid-management level. These leaders often were responsible for coordinating the day-to-day activities and encouraging faculty involvement.

A subtheme, driving force, emerged from seven participants' interviews (Table 17). This subtheme described someone in a leadership position who displayed a strong will and tenacity in relation to the partnership. These leaders took upon themselves the primary responsibility of bringing the complex partnership into reality through reaching out to colleagues in other organizations, calling meetings, and constantly setting the agenda for the partnership.

Table 17

Subtheme Under Leadership

	Driving Force
Mary	X
Brenda	
Sondra	X
Leslie	X
Mara	X
Eric	X
Jackie	X
Kaye	
Howard	
Chris	X

Frequency of occurrence also provides valuable information about themes and subthemes that have emerged in the process of analyzing the interview transcripts. The frequency data about the theme of leadership and the subtheme of driving force are presented in Table 18.

Table 18

Frequency of Occurrence of Leadership Theme/Subtheme

Theme/Subtheme	Frequency
Theme 3: Leadership	25
Subtheme 3.1: Driving Force	18

A critical part of a leader's role is to use his/her networks to identify stakeholders who have the influence to help move the partnership forward toward its established goals. Sondra explained,

There's always a challenge when you have a complex system like this to figure out who the key stakeholders are. That's one of the first things you need to do when you're thinking about partnership work, is think about who the stakeholders (are) and how do you bring them into the tent without manipulating the agenda in a way that favors one or another of the potential partners.

Sondra believed those key stakeholders in a complex partnership between the state K-12 system and the state higher education system should be the state superintendent of schools and the chancellor of the public university system, along with representatives

from community colleges, independent universities and colleges, and the higher education regulatory commission. Howard, Leslie, and Chris also described similar high-level involvement by state leaders in their complex partnerships. The smaller complex partnerships that Eric, Jackie, and Mara detailed included appropriate leaders from the university system and the university, the school district, non-profits, and other parts of the community.

The need for strong leadership is not limited to the top levels in these initiatives. Complex partnerships also need leaders at the mid-management level as well as from those who are responsible for coordinating the initiative's efforts. In three instances in this study, participants reported that their work in these partnerships changed their roles and resulted in the emergence of new leadership responsibilities. For example, Eric said he frequently attended community meetings with a wide range of stakeholders and visited university-authorized charter schools. He commented,

Maintaining this work climate was – how should I phrase this – it was more time consuming than my deanship at a previous university.

While the need for outreach and community involvement increased, several participants said they also had to remain focused on the university-wide efforts related to the initiative. When the university president asked the College of Education to provide leadership for the complex partnership, Jackie found herself in a new role on campus:

He didn't ask us to do all of the work. He asked us to provide the leadership. As a result, as a dean, he has asked me to provide leadership for the whole campus.

Eric concurred, stating that when he was on campus he focused on integrating the work of the complex partnership into the university culture. He explained,

When I was on campus, selecting chairs and faculty to carry out this work from within the school took quite a bit of time. Many of the faculty here considered the partnership work to be part of their regular work load; it is part of their service activity. Not everyone treats it that way. But over time, the faculty really did begin to understand why this was so important for us. And the teacher ed folks bought in faster than anybody because they were the ones who were already out in the schools and had seen what was going on and were very hopeful that their engagement in the schools would help improve the schools.

These participants also described the importance of leaders setting expectations about faculty involvement in the partnership. In her role as dean, Mary said she followed up if faculty members were not participating in the complex partnership since the initiative brought in cutting-edge educational speakers and offered the chance to connect with public school staff. She took faculty participation one step further by tying it to the approval process for additional resources for faculty. Mary explained her rationale,

If someone was not participating and they wanted travel money to go to a conference, I would question that. But if they have been sparked by something that we've done in terms of the professional development in the complex partnership, certainly then I would support it. Or if they have a research initiative that's come out of that partnership with public schools, then I'm more likely to say, "Great! What resources do you need to make that happen?"

While taking action to keep the complex partnership moving is important, symbolic leadership from top and middle-level leadership was seen as equally critical in order to keep other stakeholders engaged and involved. Jackie described one such

situation when the complex partnership was coming under fire from the area school board. The university president decided to underscore his commitment to the initiative by speaking at the board meeting. Jackie described the meeting as follows:

...he went and sat through an entire board meeting in order to speak three minutes about the school. His presence at that board meeting really changed the whole way the community looked at the school. I said, "You are a rock star at this board meeting," because people walked out that night just to say they were so excited because he sat there. The Board of Education tried to make him a special case and he said, "No. I'm just a member of the community like everybody else. I'm going to sit here." They tried to give him more time than the three minutes that every other community member gave. He said, "No, I am a member of the community and I'm going to take my three minutes." It was really interesting to watch. That was a year ago this summer. We didn't know if they were going to approve the opening of the school. It took him attending the school board. He told me later it was like sitting in the dentist chair. It was really boring. They were going over item by item the budget. It was bad, but he sat through the whole thing with me down on the front seat and waited for his three minutes. But it changed the way that people thought about the school and the university.

Symbolic leadership also can be seen in the mid-management level of these partnerships. Mary continued to run the complex partnership when she was named interim dean and still maintained day-to-day oversight when she was officially appointed to the deanship. After approximately five years of handling both jobs, she realized that she could no longer give the complex partnership the amount of attention it needed. With the appointment of a faculty member to the directorship of the complex partnership, Mary decided to use her role in the partnership to provide symbolic leadership. She said she wanted to send a strong message of her commitment to the value of the partnership by participating in planning meetings and attending the advisory committee meetings.

Some leaders also resorted to using the bully pulpit as a way to keep the effort in front of stakeholders. Reflecting on his own experiences, Eric stated,

I held a meeting with the entire faculty about a month after I got to campus. I explained to them what our work was in helping the city improve its schooling and that as the largest educational institution in the city and since we claimed to be an urban research university, then we had to prove that. And I talked this talk every day.

While these leaders could help guide complex partnerships in making substantial progress toward goals, Mary, Mara, Eric, and Jackie reported that leadership transitions often slowed down, if not completely imperiled the functioning of a partnership. Mara explained,

In fact, all the major players at a certain point were gone and the complex partnership was still going. Then it had a really rough patch where nothing much was going on. So I think it was in grave danger of shutting down a couple of years ago, but it's had a new lease on life (with the hiring of a new administrator) and is up and running again.

Subtheme 3.1: Driving Force

While leadership consistently was identified by the study participants as key in complex partnerships, seven of the ten participants identified a specific person who was a driving force in making the partnership happen. In some cases, this person was a staff member or administrator who was charged with organizing the partnership's efforts. However, in five partnerships in this study, the driving force was a high-level leader such as a chancellor, a member of the Board of Regents, a member of the Board of

Elementary and Secondary Education, or a senator who would do whatever was needed to leverage his/her network and resources to get a complex partnership started.

Describing the chancellor of the convening university as a “force of nature,” Mara explained,

She was really eager to have a partnership that would do the kind of work that she and I both care about – the improving schools kind of work. She really pushed to make it happen. And in some ways, that’s part of the story. It continued when she moved on, which is a tribute to her work.

Often at the state or system level, the driving force was a top policymaker.

Describing the formation of the complex partnership in her university system, Sondra credited the chancellor with being the driving force behind the formation of the initiative in 1997. The chancellor contacted the state superintendent of schools and the higher education commissioner to encourage the creation of a P-16 council. He then wrote a grant to a major foundation and asked the two state policymakers to provide letters of support. The foundation awarded the university system \$3 million over a period of three years in order to develop the partnership. Once the initiative was underway, the chancellor used his network as well as management tools to reinforce the importance of university-wide participation in this complex partnership. She explained,

He [the chancellor] needs to make it a priority for (university) presidents. So for example, science and math teachers are a high priority in this state so he can actually get some traction with his agenda with the governor. If he says, “This university system is going to step up its production of science and math teachers” – once he says that to the governor, he has to make sure that the presidents actually pay attention because he doesn’t have control over who comes into the university and what they’re doing. Then he makes it a priority for the presidents on their agenda. And on their annual review, he says, “What have you been

doing recently to increase math and science teachers?” So it’s a little of governance and influence and politics.

The driving force behind the creation of a complex partnership also can be outside the involved educational entities. For instance, Jackie said the impetus for the partnership that was being used to create a charter school was a state senator. She explained the senator’s role as follows:

He is too involved in the school, number one, and he thinks he has too much control over the campus. I am still the point person for him and I try as hard as I can with my assistant’s help to know what the senator is doing.... We have to all work together to keep him in check. I mean he’s a near-to-bully to tell you the truth but he does get things done. I think this is his legacy. I think his heart is in the right place. That’s why I continue to work with him.

Some complex partnerships were formed due to the vision of a leader at the middle-management level who had worked in the field for a significant amount of time and had gained the trust of potential partners. Mary credited a previous dean who had a working relationship and credibility with K-12 schools with starting her university’s complex partnership. That dean recognized the need in the area’s rural K-12 schools for professional development and brought key stakeholders together so that the university could create a complex partnership to provide that service.

Theme 4: Accountability

Not surprisingly, some form of accountability was identified in every response to the interview question: “How is success defined and measured in the partnership?”

However, this theme also emerged in participants’ answers to other questions, although

progress measures varied based on the goals of the specific complex partnership. Table 19 describes how frequently the theme of accountability emerged in the coding for this study.

Table 19

Frequency of Occurrence of Accountability Theme

Theme	Frequency
Theme 4: Accountability	22

Accountability was a regular topic in these interviews; however, what was interesting was that the accountability measures did not look at the actual effectiveness of the complex partnership itself. Leslie commented,

We're not measuring right now, at least, the success of the partnerships. We're measuring the success of the programs and the success of our graduates. So how are the partnerships doing isn't a question that we've been deliberately asking. Now we're asking "Should we be asking that question?"

Because of the large scale of these partnerships, accountability measures that were used in complex partnerships often were tied to state- or nationally-mandated measurements of student or school performance or accreditation results. Accountability measures that were described by the participants included teacher production, teacher certification exam performance, teacher retention, teacher preparation program certification requirements, teacher involvement in professional development, K-12

student assessment, high school graduation rates, and scores on college entrance exams. Participants in eight of the ten partnerships confirmed they used or would use this data to track progress on the partnership's initiatives.

While many of these accountability systems were already in place, one complex partnership actually was actively involved in the development of several accountability systems and helped various stakeholders adopt these systems. Chris described how the complex partnership she facilitated brought teams together to provide input as the accountability system for teacher preparation was developed. That involvement was important since university representatives were concerned about possible repercussions based on ratings from the new system. The anxiety levels increased when the decision was made to label campuses based on the effectiveness of their teacher preparation programs. However, Chris reported that once most universities saw their results and found that their programs were actually strengthened, the stress levels lessened.

Three partnerships used different measures that were specific to the goals of the initiative. For instance, the partnership that Brenda facilitated focused on meeting annual quantifiable objectives using metrics such as graduation rates, grade point averages, and ACT scores of the high school student population in relation to college readiness. The partnership maintained a common annual objective in order to track longitudinal progress. Another example was the complex partnership that Jackie facilitated which focused on opening a charter school at the time of the interview. Jackie stated,

If we can get those kids settled and they stay in and they do well, our ultimate way of measurement – and we have this in the charter school proposal – is going

to be the success of the kids. This is a college prep, so in 5-7 years (we'll measure) who have gone to this school who enter college or higher ed of some sort, either two- or four-year college. So that's going to be our success.

Organizational learning and development emerged in three interviews. Sondra and Chris described using the data collected as part of the complex partnership's efforts for organizational improvement at the university level. Sondra posited,

I think that institutionally the learning happens as the reports are written and recommendations are made publicly and then we take the recommendations to our various governing boards and make presentations to those governing boards. Then the issues surface at the highest level of governance – Board of Regents level, Board of Education level – and like anything else, once it's on people's screens and they have something to sink their teeth into, they see that these things are worth investing time and money and energy. And then they want reports on effectiveness. They want to know, "Has this helped? Are we retaining more teachers because of these changes?"

Chris made a similar point, stating that involvement in the process of building the accountability system had helped university leaders become comfortable with data. Furthermore, she found that the deans of the Colleges of Education had a better understanding of the data and could analyze it to make programmatic improvements.

However, data was not always used in this manner. For instance, Brenda said she did not want to collect data that focused on student success in college. She explained,

We're (currently) looking at the number of students who graduate from high school and transition to post-secondary institution. It could be a two-year or four-year. And so when you have 100 percent, that gives you some motivation. Not all of them stay, so I don't want to add that as an objective, but it may end up becoming one. I don't have the capacity to implement that so I'd like to stay away from it. That's a whole other ballgame, that's a whole other group of people – can you keep them at the university?

Other partnerships used different types of measures. For instance, the complex partnership that Mary described focused on process measures (the evaluation of the professional development offerings) instead of product measures. She said that the partnership's leaders tried to tie participation in the professional development offerings to K-12 student achievement through analyzing school rankings and ratings, but were not able to develop a model in order to do so. She also pointed out that because the state's K-12 accountability system and assessment program change regularly, finding any relationship between the professional development provided by the partnership and student achievement would be especially difficult to prove over time.

Other study participants described the use of qualitative methods to determine accountability. For instance, Sondra believed that the success of the various initiatives in the complex partnership underscored that the various participants knew what they were doing. This success was further validated through receiving grants from major funders such as the National Science Foundation and the U.S. Department of Education to support future initiatives. Accountability for the complex partnership that Howard directed was focused on timely completion of the evaluations that were being conducted, ensuring they were scientifically rigorous, and providing oversight for 150 projects supported by the state department of education.

Finally, an evaluation system can provide data to support participants' continued applications for additional funding to support the complex partnership's work. Because most of the study participants were recipients of multi-million dollar grants, they would

have been required to have some form of evaluation in order to ensure that they were meeting the deliverables described in the grant application. The participants were able to use these evaluative outcomes to show the progress toward the initiative’s goals, thus burnishing the partnership’s reputation and building a case for additional funding from the same or new sources.

Theme 5: Staffing and Infrastructure

Facilitating and maintaining a complex partnership is time-consuming. While some of the participants assumed these duties as part of their current roles, many felt overwhelmed and advocated for additional staff to handle the day-to-day operations.

The coding frequency of this theme, which was described by the ten participants, is detailed in Table 20.

Table 20

Frequency of Occurrence of Staffing and Infrastructure Theme

Theme	Frequency
Theme 5: Staffing and Infrastructure	18

The staffing and organizational infrastructure varied depending on the level of the partnership, the goals of the partnership, and the availability of funding. For instance, seven participants said that organization support was provided by the

institution either through creating a new position or adding additional duties to an already established position. Two participants identified a third-party organization tasked with coordinating the partnership.

The participants agreed that a specific person needed to be tasked with facilitating the complex partnership. Mary explained,

There needs to be somebody in charge, somebody who has the responsibility and yet again, the passion or the commitment to that. I just think that leadership is important and also it's saying that this partnership is important enough that we're devoting resources. And one of the most precious resources of course we have in the university -- and probably everywhere -- is time, so providing someone with release time, making it clear that it is part of their job description I think is one way that we structure that organization.

As an example, Sondra recounted how the university system allocated a portion of the funds that were initially received to fund the complex partnership's initiatives. These funds were used for staffing and then as additional external funds were received, a portion was used to hire dedicated staff members to guide the partnership's various programs. She stated,

The first thing they did was hire a staff director and that was me. So to really get something like that started requires paid staff because you can have the concept but someone has to do the work. My job in the beginning was to attend meetings at the department of education and learn everything I could about what their initiatives were and how we could work with them and what their issues were. In the beginning it was just me, but then as I got grants, I hired an assistant and project managers. I now have a staff of seven people who are all grant funded. But it was all grant-funded staff, so that is a challenge, because unless there's a real investment in this work, it doesn't have as much traction. (Our staff) is still all grant-funded, which is a big liability/risk for any P-20 work.

In some of the system-wide or state-wide partnerships, positions also were created at the campus level. Chris said one of the complex partnership's initiatives resulted in the addition of coordinator roles at the universities. Larger universities hired a full-time coordinator while some of the smaller institutions gave a faculty member release time to facilitate the campus's efforts. Chris reported that federal and state funds were used to pay for these positions.

When the complex partnership took place at the campus level, universities often used existing faculty or administrators. Jackie described how the university president assigned the responsibility for the partnership to her. Initially, she was able to handle the additional workload, but eventually she became overwhelmed.

I don't have the time needed to do this, and I've been talking to the president and the representative of the president about getting someone who works directly under me like an assistant dean or a program director who would begin to do some of the meetings and some of the talking and some of the working together with the faculty on campus to keep the faculty pulled together because I have a college to run and I'm not going to desert my college to get this other thing done. And it's becoming a real full-time job.

As dean in the school of education, Eric headed up the complex partnership's implementation team at the university. He worked with faculty members to create faculty work groups for specific initiatives.

Two study participants created infrastructure to support the partnership through faculty assignments. For example, Kaye created an infrastructure within the complex partnership in her college by assigning faculty members to serve as liaisons. These

individual faculty members were to be notified of any collaborative effort between the university and the school district that was undertaken. In another example, the partnership at Mary's university used a leadership team that included a faculty member who served as executive director and other faculty members who held key roles, such as editor of a journal that was focused on the work of the complex partnership. Mary described these roles as follows:

So throughout the year, they (the journal editor) are always connecting with the schools and listening to the presentations and thinking about soliciting the articles, thinking about what could be in that journal. Someone else is more of the social director who keeps the activities and the team building and those kinds of things going on. And then below that, there's a leadership team and that's really everyone that has any kind of a role with the complex partnership, whether it's just that they attend – within the university, even if they just attend the conference or they help with registration or that kind of thing.

Depending on the type of complex partnership that was undertaken, the designated facilitator or university representative might not be part of a specific college. For example, Brenda was an administrator in undergraduate studies and was assigned the duties of the complex partnership on top of her regular duties. She noted,

I call the meetings; I have all the meeting agendas. If the school counselors want an activity, I oversee that if they come to the campus for college visits (or) if they go to other campuses for college visits. And I'm the one who admits for post-secondary so they have to work with me anyway.

Much like partnerships evolve, these positions can change as new initiatives emerge or end. Chris offered one example of how these positions evolved:

Where we had full-time (PK-16+) coordinators, needless to say, we saw greater involvement of K-12 as well as faculty from across the campuses as compared to where a person was doing it as a release from one course because, again, the whole thing dealing with partnership is extremely time consuming. Once the funding for the coordinators went away -- and actually there wasn't the need for the coordinator in the way in which we had coordinators in the past -- some of our campuses ended up having those people continue in a role of the PK-16+ Assessment Coordinator.

Summary

This chapter presented the major findings of this study. Five themes emerged from the analysis: emerging needs, relationships, leadership, accountability, and staffing/infrastructure. In addition, three subthemes were identified. These subthemes were (a) communication and collaboration as part of the relationship theme and (b) driving force as part of the leadership theme.

CHAPTER V

DISCUSSION, RECOMMENDATIONS, AND CONCLUSIONS

This chapter presents an interpretation of the data analysis, which is guided by this study's overarching research questions. I start this chapter by revisiting the research questions and then moves to an analysis of my findings based on the research base that informed the study. I then propose a new conceptual model derived from these findings and discuss the implications for human resource development research and practice as well as future research directions. Finally, the conclusions of the study are presented.

Research Questions

To promote greater insight into university and university-system leaders' involvement in complex partnerships, the following two research questions guided this inquiry:

1. How do university and university-system leaders describe their practice in complex partnerships?
2. What factors shaped the leaders' practice in relation to complex partnerships?

In my analysis, Theme 2: Relationships, Subtheme 2.1: Communication, Subtheme 2.1: Collaboration, and Theme 3: Leadership emerged to answer the first research question. Furthermore, I identified Theme 1: Emerging Needs, Subtheme 3.1: Driving Force, Theme 4: Accountability, and Theme 5: Staffing and Infrastructure to

answer the second research question. Data on these themes and subthemes were presented in Chapter IV.

Findings in Response to Question 1

In this section, I discuss the themes that emerged during the data analysis to answer the study's first research question: How do university and university-system leaders describe their practice in complex partnerships? The areas to be covered include relationships, collaboration, communication, and leadership.

Theme 2: Relationships

One key challenge that emerged from my data analysis was that participants in complex partnerships had to maintain good working relationships even as the number of relationships expanded exponentially due to the number of organizations – and thus, other stakeholders -- that were part of the complex partnership. One way to think of these relationships is through the lens of complex adaptive systems and boundary spanning. Hill (2011) stated that complex adaptive systems have a number of elements – in this case, organizations and relationships – that interact and link with each other to help bind together the system. Thus, university leaders must be prepared to regularly span vertical, horizontal, stakeholder, and demographic boundaries that are part of complex partnership (Lee et al., 2014). Since participants in a complex partnership scan both the complex adaptive system (in this case, the complex partnership) and their own organizational environment to develop a set of rules, an imperative exists for the development of norms concerning relationships, the establishment of a common

language, and identification of criteria for inclusion and exclusion in the collaboration (Dooley, 1997).

The multitude of relationships described by the participants also fits into the organizational development literature (Du Chaternier et al., 2009; Ingram & Simons, 2002; Kanter, 1994). For instance, all of the participants described how they and other participants developed numerous relationships through meetings that allowed them to work to plan and share knowledge, which was aligned to Kanter's (1994) tactical integration in a partnership and the Du Chaternier et al. (2009) description of knowledge creation in a partnership. The study participants also recounted having regular interactions with stakeholders from other parts of the university and university system as well as from other participating organizations. These interactions helped the study participants develop the dense network of interpersonal ties that Kanter (1994) identified as necessary for interpersonal integration within a partnership and Mohrman et al. (2003) posited as necessary to support organizational change.

Specific relational characteristics – trust, acceptance, respect, and transparency – were identified by study participants as necessary in maintaining relationships within a complex partnership. Building trust also was identified in the organization development literature as a challenge for open innovation teams when working in a nontrusting environment (Du Chaternier et al., 2009). Furthermore, transparency was identified as being necessary for the transference of knowledge in an organization development effort by Larsson et al. (1998). However, the traits identified by the study participants are just

the tip of the iceberg of the qualities needed to build relationships. Researchers have identified specific relational characteristics and traits beyond trust and mutual respect that are exhibited in successful collaborative efforts: common goals, common interests, collaboration, open communication, the ability to span boundaries, safety, engagement, shared ownership, and maintaining a positive predisposition regarding change (Cornelissen, van Swet, Beijaard, & Bergen, 2011; Day & Smethem, 2010; Lee et al., 2014; McCray, Rosenberg, Brownell, deBettencourt, Leko, & Long, 2011; Peel, Peel, & Baker, 2002; Rosenberg, Brownell, McCray, deBettencourt, Leko, & Long, 2009).

Three participants described the ability to be influential as a critical relational skill when working in complex partnerships. The Center for Creative Leadership (2013) described influence as the ability to personally affect another's actions, decisions, opinions, and thinking to allow a person to achieve desired outcomes. Genuine commitment gained through influence differs from compliance since influence involves working effectively with stakeholders over whom a person does not hold authority. Three tactics help create influence: (a) logical appeals to a participant's rational and intellectual position; (b) emotional appeals to connect goals, project, or message to another's values and goals; and (c) cooperative appeals that involve collaboration, alliances, and cooperation in working toward a common goal.

My study participants did not describe fostering organizational relationships, as documented in the literature (Kanter, 1994), although Kaye started to consider the concept as she answered one of my interview questions. However, the concept of

organizational relationships is important since, as mid-level administrators, the study participants can have a strong hand through their own actions as well as those of faculty and staff they lead in informing the perceptions of their organizations to outsider stakeholders. Kantor (1994) identified eight requirements that are necessary to develop the best organizational relationship among partners. The first requirement is individual excellence, in that each organization is strong and brings value to the partnership. The second requirement, importance, means that the partnership is aligned with major strategic objectives of each partnering organization. Interdependence, which is the third requirement, involves the partnering organizations needing each other and providing complementary assets and skills. The fourth requirement involves investment so that the organizations invest in each other to demonstrate their commitment to the partnership. The fifth requirement, information, is shown by open communication between the partners. Integration, which is the sixth requirement, suggests that the partnering organizations develop shared ways of operating. The seventh requirement is institutionalization in which the relationship between organizations has a formal status, clear responsibilities, and specific decision-making processes. The final requirement, integrity, requires the partnering organizations to behave in an honorable way toward each other to build and enhance mutual trust.

Subtheme 2.1: Communication

It is anticipated that communications would emerge as a subtheme of relationships since these leaders in complex partnerships need to maintain relationships,

especially since the number of relationships grows as various organizations take part in collaboration. Study participants identified meetings, conference calls, individual phone calls, newsletters, orientations, and presentations as strategies they used to open and maintain communication lines to various stakeholders. This finding is in line with the literature of both complex adaptive systems and collective impact initiatives which hold that communication creates a common language that enhances interconnections and leads to a common understanding (Dooley, 1997; Kania & Kramer, 2011).

As noted by the study participants, using meetings to build relationships also played a role in establishing the complex partnership's culture because these university and university-system leaders became learners and had an opportunity to demonstrate an interest in and respect for the other stakeholders (Kanter, 1994). Furthermore, having regular meetings in which the various stakeholders worked together and shared their perspectives is aligned with Kanter's (1994) recommendation of creating an infrastructure for learning in a change effort. Additionally, holding meetings is an effective organization development strategy since these gatherings allowed for the transfer of experiences, analysis, the creation of new knowledge, and identification of next steps in the initiative (Du Chatenier et al., 2009; Ingram & Simons, 2002; Kanter, 1994; White, 2014).

The study participants did not report having difficulties in communicating complex messages. This finding is different from what we know in the literature. For example, Dooley (1997) posited that leaders in complex adaptive systems are faced with

the challenge of finding ways to explain the unexplainable. These leaders also need to understand that information can undergo a multiplier effect in a complex adaptive system. This effect increases in a nonlinear fashion, resulting in messages permeating the complex adaptive system because of the numerous interconnections. Obviously, leaders will embrace this multiplier effect when they have good news to share. However, if negative messages emerge and are transmitted through the multiplier effect, the ability of the complex adaptive system to function can be imperiled.

Therefore, leaders face challenges to make sure that their messages are clear and effective, that they are using multiple communication strategies, and that they are covering all communication channels. In their review of the school-university partnership literature, Martin, Egan, McWilliams, Wilson, Holt, and Reaves (2008) identified unaddressed or unresolved communication breakdowns as common practices in ineffective partnerships. Maintaining these channels in a complex partnership can be problematic. For instance, mechanistic organizations, which are bureaucratic in nature, primarily used vertical communication whereas organic organizations, which are non-bureaucratic and open to the environment, focused on multidirectional communication (House, 1991).

The boundary-spanning literature offers lessons to help leaders deal with the multidirectional communication that are part of complex partnerships. Hsiao et al. (2012) described two models to consider. One possibility is a sharing model that is designed to increase knowledge as cognition through transferring, translating, and

transforming. This model relies on creating common meanings through metaphors and shared interests. Another option is the knowing model, which involves identifying problem boundaries, orchestrating shared ownership, and creating systemic understanding through the use of understandable symbols.

Subtheme 2.2: Collaboration

All of the participants described a commitment to collaboration in a complex partnership. However, responses by Brenda, Mara, and Jackie suggested that in their experiences, others stakeholders did not always understand the tenets of collaboration. Therefore, a definition of collaboration may be helpful. Using a soccer team and a track team to metaphorically describe the difference between collaboration and competition, Ryan (2010) stated,

Regardless of their position, when players look at the scoreboard at the end of the game they can tell whether they worked together effectively or not. On a track team, though, the team could lose, but individual stars might look at their own outstanding performance and conclude it was a successful day. (p. 4)

As captivating as the image of a soccer team is when considering collaboration, the truth is that different partnering organizations have different cultures and expectations of employees. House (1991) offered one example by pointing out that collaboration as a norm in organic organizations whereas the common norms in mechanistic organizations include obedience, conformity, conservatism, respect for authority, loyalty, and maintenance of status quo. This suggests that what is considered

collaboration in a mechanistic organization would seem stifling in an organic organization. Therefore, it is important for partnering organizations to come to agreement on what collaboration looks like and communicate that information as early as possible to all stakeholders who are involved in the complex partnership.

For example, negotiation can be an important part of the leadership toolbox when working in these complex partnerships. However, negotiation – which has connotations of collaboration – actually may differ in reality. In fact, collaborative negotiation is only one style of collaboration (Coburn, n.d.). The other styles involved competition, accommodation, avoidance, and compromise. Collaborative negotiation was defined by Coburn as ensuring that both parties' needs are met and significant mutual value is created. This type of negotiation often takes more time and energy in finding innovative solutions.

Collaboration has a foundational place in complex partnerships when these collaborations are seen as complex adaptive systems that are by nature self-organizing and adaptive with emerging behaviors, simple rules, and unpredictable order (Dooley, 1997; Plesk, 2001; Van Beurden et al., 2011). Dooley (1997) posited that complex adaptive systems create an environment of consensus through agreeing on the mission, values, strategy, goals, means, measurement, and correction. A common vision, development of a unified force, and shared ownership also are present in the boundary-spanning literature and the collective impact literature (Kania & Kramer, 2011; Lee et al., 2014). Finally, these systems encourage divergent thinking and natural continual

creativity, thus providing an environment ripe for collaboration (Dooley, 1997; Plesk, 2001; Van Beurdern et al., 2011).

Collaboration is also a critical component of human resource development, particularly for organization development, culture, and change in partnerships. For instance, collaboration as described by the study participants was aligned with White's (2014) socio-networked learning.

The collaborative efforts described by study participants also can be analyzed through using the five levels of integration described by Kanter (1994). Level 1 is strategic integration in which top leaders regularly interact to discuss the goals or changes in each company involved in the collaboration. Level 2 involves tactical integration in which middle managers co- create plans for specific projects or joint activities and also to transfer knowledge. These managers also identify organizational or system changes that can help the partners better align and link their efforts. Level 3 is operational integration, which gives timely access to information, resources or contacts to people who carry out the day-to-day work. Level 4 is interpersonal integration, which involves the creation of a dense network of interpersonal ties among the various partners. Level 5 is cultural integration, requiring partners to have the communication skills and cultural awareness to successfully handle differences. Most of the participants offered descriptions that reflected these five levels of integration, as presented in Table 21.

Table 21

Analysis of Participants' Collaboration through Kanter's Five Levels of Integration

Level of Integration (Kanter)	Participants' Description
Level 1: Strategic Integration	Use of steering committees to guide work Involvement of top leadership in the complex partnership
Level 2: Tactical Integration	Regular meetings involving complex partnership's middle managers
Level 3: Operational Integration	Use of data to guide partnership decisions Access to grant funding to support complex partnership Staffing to lead complex partnership
Level 4: Interpersonal Integration	Regular interactions through meetings
Level 5: Cultural Integration	Previous involvement in K-12 schools Regular interactions with K-12 administrators and teachers

Note. Adapted from Kanter, 1994, Harvard Business Review, p. 96-108

Researchers also described collaboration as being important in creating knowledge for an organization development effort when multiple organizations are involved (Cutler White, 2014; Du Chatenier et al., 2009; Knight & Pye, 2005; Larsson, et al., 1998). This point matches the participants' descriptions of the various types of meetings that took place. These meetings allowed individuals from the various partnering organizations to build relationships and then work together to identify next steps to further the initiative's progress. Participants' identification of collaboration through a shared vision, goal, and leadership was consistent with the organizational change literature (Franz, 2003; Kania & Kramer, 2013; Knight & Pye, 2005). Furthermore, participants also recounted the need to create new understandings and

develop new approaches to address emerging issues in these large-scale partnerships (Mohrman et al., 2003).

Theme 3: Leadership

Study participants described different levels of leaders in complex partnerships. For example, executive leadership often was identified in relation to the complex partnership's formation and also in relation to advisory councils, meetings, and funding. With that said, the role that these leaders had in the operation of complex partnerships is a better fit in discussion about second research question.

Because the study participants also provided information about their own role as leaders, I am focusing this section specifically on this aspect to address the first research question, "How do university and university-system leaders describe their practice in complex partnerships?"

As a result of working in a complex partnership, many of study participants described an evolution in their role to include overall campus leadership of the initiative. In effect, these study participants were responsible for integrating the initiative's work into the culture and setting expectations as well as performing community involvement and outreach functions. These findings overlapped with some of the leadership qualities -- adaptive leadership skills and the ability to mobilize people -- that were espoused by Hanleybrown et al. (2012) in the collective impact literature. Kanter (1994) also described the importance of managers serving as teachers, learners, and ambassadors to other organizations through establishing respect and goodwill. Additionally, the

participants' responses about trying to integrate the initiative's work into the university culture coincided with Lee et al. (2014) in the boundary spanning literature. However, I could not determine whether the study participants met the Hanleybrown et al. (2012) other criteria: a) strong leadership skills; b) the ability to lead people without imposing a predetermined agenda or taking credit; and c) the ability to keep all parties together while also serving in what they described as a "behind the scenes role" (p. 6).

The study participants described working with mid-level leaders within their own organizations as well as those from other organizations in the complex partnership. This finding was aligned with that of Kanter (1994) who identified tactical integration (mid-level leaders who plan joint activities, share knowledge, and identify changes to strengthen organizational ties), interpersonal integration (the creation and expansion of a strong network of interpersonal ties), and cultural integration (developing the necessary cultural awareness and communication skills to bridge differences). Leadership also emerged in the Du Chatenier et al. (2009) factors influencing collaborative knowledge creation in organization development efforts; this type of leadership was described by several participants in regard to their participation in meetings. Mid-level leaders' facilitation work begins early in the partnership's formation. For instance, the Harwood Group and the Charles Stewart Mott Foundation (1999) identified the catalytic stage in which these leaders join with their counterparts in other organizations in efforts to bring change, which participants also described as happening during meetings. The role of leadership at the middle levels of an organization also meshed with boundary-spanning

literature, which identified vertical and horizontal boundaries that may be spanned (Lee, 2014).

Another area where this study supports current organization change literature was in delegation of leadership to guide the change efforts (Kanter, 1994). Two participants (Eric and Jackie) described how their roles changed and they could make partnership-specific decisions.

Finally, several study participants described using influence through symbolic leadership to reinforce the importance of complex partnerships. The use of influence makes sense when thinking about a complex partnership as a complex adaptive system since leaders in these systems are successful when they distribute power and status and develop norms for relationships (Dooley, 1997).

Findings in Response to Question 2

In this section, I discuss the themes that emerged in the analysis that answered the study's second research question: What factors shaped the leaders' practices in relation to complex partnerships? The areas that will be covered include emerging needs, driving force leadership, accountability, and staffing and infrastructure.

Theme 1: Emerging Needs

The theme of emerging needs in relation to complex partnerships was a major finding in my study. In many ways, this theme is not surprising. Much of the earlier literature on school-university partnerships focused on traditional partnerships that were

formed on the edges of the partnering organizations (Burstein et al., 1999; Field, Hoffman, & Cohen, 1999; Teitel, 1992). While useful in their own right, these types of partnerships were inherently not designed to deal with large-scale issues.

Complex partnerships that were designed to focus on systemic change and major societal problems only started to emerge in the late 1990s. In the ensuing years, these large-scale partnerships have evolved and now are in the third generation of design, which is systemic in nature and designed to tackle what Lawson (2013) called “wicked” societal problems (p. 646). Therefore, little research has been published regarding the ways that complex partnerships identify and react to emerging needs. For example, Siegel (2010) stated,

As theory and empirical research offer little acknowledgment of the specific role of universities in these arrangements, an understanding of the initiating factors and motivations may help predict collaborations, activate them, or cast situations as potential collaborative opportunities, thus contributing to an acceleration of social problem solving. (p. 36)

This theme fits into organizational development, organizational culture, and organizational change literature. For instance, Du Chatenier et al. (2009) identified team emergent states – the cognitive, motivation, and affective states that often result when partners start to collaborate – as key factors in collaborative knowledge creation. Additionally, an innovation goal and level of uncertainty are factors that influence collaborative knowledge creation. The team emergent states as well as the factors of an

innovation goal and level of uncertainty were evident in several participants' narratives, such as Jackie's description of various stakeholders coming together to create a charter school despite major differences in the surrounding communities. Additionally, the Du Chatenier et al. (2009) four-process stages (externalizing and sharing; interpreting and analyzing; negotiation and revision; and combining and creating) were highlighted by several participants, most noticeably by Chris when she described how the complex partnership brought university leaders together to discuss, analyze, negotiate, and create the enhanced teacher preparation program for the university system.

Organizational culture came into play when university leaders and teacher preparation faculty displayed discomfort during discussions about changing the teacher preparation program in the complex partnership facilitated by Chris. This finding was consistent with that of Kania and Kramer (2013) who pointed out that the solutions and resources often are emergent, which can be very uncomfortable for participants who were not used to working in that style.

Finally, the participants' comments aligned with the Mohrman et al. (2003) recommendation to help participants concurrently develop new understanding and create new approaches. Examples were seen in the interviews with Chris, Eric, Mara, Mary, Sondra, and Brenda.

While only some of the complex partnerships in this study would be defined as a third-generation partnership, all 10 study participants described the complex partnership's formation as being tied to critical state or regional issues. What differed

was how these needs emerged. For instance, a state policy mandate requiring K-12 school improvement planning served as the driving factor for the creation of the complex partnership in which Mary worked. In comparison, a disconnection between the perceptions of teacher preparation administrators and faculty about the quality of their programs and the actual teacher quality data resulted in the establishment of the complex partnership that Chris guided. Thus, the participants' descriptions of these emerging needs suggest that the university or university system's involvement in a complex partnership was an effort to reframe pre-existing boundaries and establish new frontiers to address emerging issues (Lee et al., 2014).

In the collective impact literature, Hanleybrown et al. (2012) identified an urgent need for change around an issue, stating, "Has a crisis created a breaking point to convince people that an entirely new approach is needed? Is there the potential for substantial funding that might entice people to work together....?" (p. 3). However, differences emerge between complex adaptive systems theory and collective impact initiatives in relation to complex partnerships. Van Beurden et al. (2011) posited that probes were the best method to identify emergent patterns in complex adaptive systems and also cautioned that analytic techniques would not work. His position runs counter to what was described by several study participants who described making data-driven decisions and also the collective impact initiatives literature (Edmondson, 2012; Kania & Kramer, 2011). Therefore, more research on how emergent patterns are identified is needed.

Subtheme 3.1: Driving Force

While not widely prevalent in the frequency descriptions, this subtheme offered some interesting contrasts to the literature and may be an area of interest for future researchers.

As mentioned in Chapter I, institutional decision-makers were normally not involved in traditional partnerships, thus allowing the collaboration to develop on the organizational edge instead of its core (Teitel, 1994). However, study participants reported that higher education executive leaders (such as chancellors and university presidents) served as the driving force in the inception of complex partnerships. Interestingly, two study participants identified other driving force leaders – a senator and state policymakers – while another participant described the previous dean as the driving force. Thus, these examples suggest that the driving force leader who takes the initiative in starting a complex partnership can come from any partnering organization or any level within a university or can be an influential individual who has a significant number of connections in the community. This leader's emergence is in alignment with the unpredictability of a complex adaptive system (Van Beurden et al., 2011).

Study participants described driving force leaders as being effective in spanning boundaries because of their credibility and network of relationships. These leaders seemed to embrace the notion that boundaries offered new frontiers to solve pressing problems and to encourage innovation (Lee et al., 2014). Several characteristics of these driving force leaders that emerged in this study matched the Lee et al. (2014) description

of forging a common group, creating a shared vision, and mobilizing a unified force. In Chris's case, it could be argued that the efforts of several state-level driving force leaders created the synergy to spark a systemic transformation through getting past norms, practices, and identities (Lee et al., 2014).

This type of leadership also is emerging in the collective impact initiatives literature. Hanleybrown et al. (2012) identified an influential champion or small group of champions as the most critical precondition of a collective impact. This champion is able to use his or her respect to bring cross-sector executive leaders together and then can sustain their active engagement in the collective impact. Hanleybrown et al. stated,

It requires a very special type of leader, however, one who is passionately focused on solving a problem but willing to let the participants figure out the answer for themselves, rather than promoting his or her particular point of view. (p. 3)

Furthermore, adaptive leadership is considered by some to be for leaders to embrace (Heifetz, 1998). Heifetz, Kania, and Kramer (2004) pointed out that leadership differs from authority and power, which requires an established power hierarchy. Instead, leadership is considered an activity rather than a formal position and may not be tied to authority. They posited,

Those who lead social movements often have a small base of *formal* power in their own organization or constituency. They also may have a wide network of *informal* authority in the community at large, where their words and actions carry

influence despite having no enforceability. Often, however, their leadership extends far beyond their spheres of both formal and informal authority, influence the behavior and thinking of people who may not even know they exist. (p. 23).

Heifetz, Kania, and Kramer (2004) suggested that these leaders must work on adaptive problems that are not well defined and do not have answers in advance. Furthermore, these leaders must work with numerous stakeholders who bring their own perspectives and must change their outlook before a solution can emerge.

The theme of driving force leadership also supports the organization development literature. For instance, the continual contact between top leaders to discuss broad goals and changes (Kanter, 1994) matches with the concept of a driving force leader since this person is often the convener of meetings of top-level executives who are involved in the complex partnership. Du Chatenier et al. (2009) also identified power distribution, hierarchy, and leadership. Additionally, team stability as a team composition input fits with the subtheme of driving force since two participants (e.g., Eric and Mara) described how the complex partnership faltered when the driving force was no longer involved in the initiative.

Driving force also aligns with the organizational change literature. The Harwood Group and the Phillip Stewart Mott Foundation (1999) identified the catalytic stage of community partnerships in which a small group of people and organizations take risks and experiment. Thus, one of these members could be the driving force. One example that emerged out of my interview data was the senator who continued to push for the

charter school in the complex partnership that Jackie facilitated. Another example involved the chancellor who pulled other top leaders together in the complex partnership that Eric described. These examples also are aligned with Hanleybrown et al. (2012), who called for the involvement of key players in the first phase of starting a collective impact initiative.

Theme 4: Accountability

Accountability of some kind has been a regular part of the school-university partnership since its origins. Teitel (1994) identified the development of a regular evaluation process as a critical step in determining whether the collaboration is meeting all participants' needs; furthermore, he stressed that this step should be taken when forming partnerships. Two decades later, researchers still concur. Cornelissen et al. (2011) described accountability as one of the 15 critical elements in a network designed to create new knowledge. Rosenberg et al. (2009) stated that effective partnerships should use appropriate measures to “deliver on promises and ensure that goals are met. Specifically, those investing their time and effort should be able to see firsthand that their work is contributing to teacher education reform and renewal” (p. 5). However, this type of accountability system was rarely described by the participants. In the early iterations of partnerships, governments and private funders often supported a number of small projects and demonstrations focused on encouraging change at the institution's margins instead of the organizational core, thus avoiding substantial redesign and the resultant need for a thorough and ongoing evaluation process. Noting this mindset may

be challenging, Darling-Hammond (1994) stated, “As a consequence of this project mentality, the most innovation-minded schools and schools of education are overwhelmed with innumerable (often temporarily funded) reform initiatives” (p. 25).

Accountability is also part of the HRD literature. For instance, this theme is evident in the second level of integration identified by Kanter (1994), who called for middle managers and professionals to plan specific projects and to identify organizational or system changes that are needed to improve the bond between organizations or to transfer knowledge. Middle managers can use an accountability system to access data that can inform decisions, as exemplified by the deans who were involved in the complex partnership described by Chris. Accountability also was implied in several factors influencing collaborative knowledge creation that were identified by Du Chatenier et al. (2009). According to these authors, cognitive distance, which is a team emergent state that has an effect on interpretation and negotiation, requires creating common meanings, goals, and work plans. Establishing these common points of work requires some level of accountability in order to know that partners are making progress toward the agreed-upon goals. Additionally, accountability is aligned with nature of knowledge, which involves sharing complex information (Du Chatenier et al., 2009). Again, both of these are best highlighted by Chris in her account of work in the complex partnership. Ingram and Simons (2002) also posited that a critical mechanism in interorganizational learning is providing access to knowledge and know-how to organizational groups. A key way to create this type of knowledge is through analyzing

data collected in the partnership, as identified by the study participants such as Chris, Eric, and Howard.

In addition, organizational culture and change can be affected by accountability. Kania and Kramer (2013) called for identifying common measurements that can also be used to inform a collective impact's culture. Mohrman et al. (2003) believed the creation of new knowledge was important in a change effort since concurrent development of new understanding and creation of new approaches are required. The creation of both requires the collection and analysis of data, both at the start of the initiative and as it continues in order to allow for organizational alignment (Hanleybrown et al., 2012).

The literature on collective impact initiatives calls for the design of such a system around shared measures that are used to share results, spark learning, and refine the work in initiatives (Hanleybrown et al., 2012). Ideally, an accountability system spanning the P-16 spectrum would be in place to enable leaders of complex partnership to measure progress and to refine the complex partnership's efforts. However, this wasn't the case among many of the complex partnerships that were part of this study. In fact, the participants described being in varying positions of having an accountability system that spanned the P-16 system. Chris described efforts to build an accountability model that has sustained the partnership's work in her university system. Furthermore, two study participants were in various stages of implementing value-added accountability systems. In comparison, Mary pointed to continual changes in state K-12 accountability standards

as making it impossible to link the partnership's efforts to the improvement of the partnership's network of K-12 schools.

Interestingly, none of the study participants spoke about accountability in relation to the actual operation of the partnership. This finding is consistent with Rosenberg et al. (2009), that is, there are few studies that evaluated the impact of partnerships on pre-service teachers or school-aged children. Furthermore, the reality of multiple partners working in partnership toward a common goal does not lend itself easily to measurement. Hanleybrown et al. (2012) stated, "The traditional paradigm of evaluation, which focuses on isolating the impact of a single organization or grant, is not easily transposed to measure the impact of multiple organizations working together in real time to solve a common problem" (p. 5).

While often mentioned among participants, the concept of using data in large-scale partnerships for programmatic improvement was mixed in the literature review. Some researchers in complex adaptive systems called for simple rules, minimum specifications, and no analytical techniques while others called for rapid feedback loops (Burnes, 2005; Dooley, 1997; Plesk, 2001; Van Beurden et al., 2001). In comparison, the creation of a shared measurement system and use of data for improvement was a critical component of collective impact initiatives (Edmondson, 2012; Kania & Kramer, 2011).

Several study participants described other types of accountability measures such as grants, recognition, and process measures. This finding was firmly established in the literature since many researchers stressed that other criteria that fit a specific

partnership's purpose and are appropriate for the context and stage of the partnership should be used when looking at partnerships (Kronick, Lester & Luter, 2013; Lawson, 2013). Kronick et al. (2013) stated,

We suggest that community-school-university partnership work, by its very nature, makes defining effective partnerships difficult, as involved families, schools, universities, children, community-based organizations, and community members expect different things from these partnerships. Their voices and perspectives on what makes a partnership 'effective' matter in the evaluation of these partnerships. (p. 662)

Complex partnerships bring a significant amount of resources – including human and financial – to bear on solving pressing issues that are too large and too broad to be addressed by a single entity. However, because the collaborative efforts are so large, these partnerships' missions can be significantly affected by funding. Most of the participants described receiving national, state, or foundation grants to support the complex partnership's initiatives. This finding is in line with Kania and Kramer (2011), who suggested that collective impacts may be a wiser way for funders to distribute limited financial resources. Hanleybrown et al. (2012) posited that to function, collective impacts need sufficient financial resources to cover two to three years of operation. These funds typically come from at least one anchor funder who is engaged from the beginning and also can be influential in helping identify other funders to support the initiative's efforts.

With that said, leaders in some collective impact initiatives may have difficulty getting funding to support the work of the backbone organization, even though this organization often is responsible for coordinating the evaluation of the initiative.

Hanleybrown et al. (2012) stressed,

Adopting a collective impact approach requires a fundamental shift in the mindset of many funders who are used to receiving credit for supporting specific short-term interventions. Collective impact offers no silver bullets. It works through many gradual improvements over time as stakeholders learn for themselves how to become more aligned and effective. (p. 6)

Theme 5: Staffing and Infrastructure

Collective impact initiative research was the primary source for the emergence of the theme of staffing and infrastructure in complex partnerships. Many of the concepts described in this research base matched the organizational change literature in relation to large-scale partnership.

Described as a backbone support organization in the literature, this separate organization employs dedicated staff to facilitate the initiative (Kania & Kramer, 2011). Hanleybrown et al. (2012) outlined the six functions of the backbone organization as providing strategic direction, facilitating dialogue between partners, managing data collection and analysis, directing communication, coordinating community outreach, and seeking funding.

Hanleybrown et al. (2012) further identified six types of backbone organizations. The first type was fund-based, in which a funder served as the collective impact's planner, financier, and convener. The second type involved a new nonprofit that was created specifically to serve as the backbone organization. The third type comprised an existing nonprofit that took the leadership role in coordinating the initiative. A governmental entity at the local or state level was identified as the fourth type. A fifth form involved numerous organizations sharing the backbone organization. The sixth form involved a steering committee that had ultimate decision-making power.

Funders often avoid supporting this type of infrastructure. Hanleybrown et al. (2012) posited that making the decision to not fund infrastructure is a mistake since the cost of funding a backbone organization is typically less than one percent of the total budgets of the collective impact's participating organization, yet it can dramatically increase the effectiveness of the initiative. Additionally, these organizations can help attract new funds to support the collective impact.

While all of the study participants described having some sort of advisory or oversight board, I focused my analysis on the actual day-to-day operations of the complex partnership instead of the governance structure. While each of the complex partnerships in this study did have someone specifically assigned to serve as facilitator of the complex partnership, the collective impact recommendation was not always adopted. For instance, two of the study participants described working in a complex partnership that had an external third-party backbone organization while three others

worked at the state or system level and served in what could be described as a modified backbone system located at the system level. In comparison, five study participants either (a) assumed the role themselves, (b) hired someone for this role, or (c) assigned another administrator or faculty member who worked at the university to handle the duties related to the complex partnership. Therefore, there are other staffing structures that are employed to run a complex partnership. I was not able to ascertain whether these five participants decided to keep the staffing that facilitated the complex partnership in-house because of lack of funding, a desire to maintain control, or other reasons.

A New Conceptual Framework

Based on the participants' interviews and the major themes that emerged, I propose a new conceptual framework that looks at organization development through the lens of a partnership. This framework (Figure 2) captures the essence of the study's findings and is built on the action research model described by Cummings and Worley (2005). This model is also in alignment with the three phases of implementation described by Hanleybrown et al. (2012): Phase I, in which the leaders of the complex partnership initiate action; (b) Phase II in which stakeholders organize for action; and (c) Phase III, in which stakeholders sustain action and impact. The arrows in the framework represent the sequence of events in the formation and operation of the complex partnership. However, by no means does this model represent the best practice of forming and operating complex partnerships due to lack of generalizable data. Therefore, additional research is needed in this area.

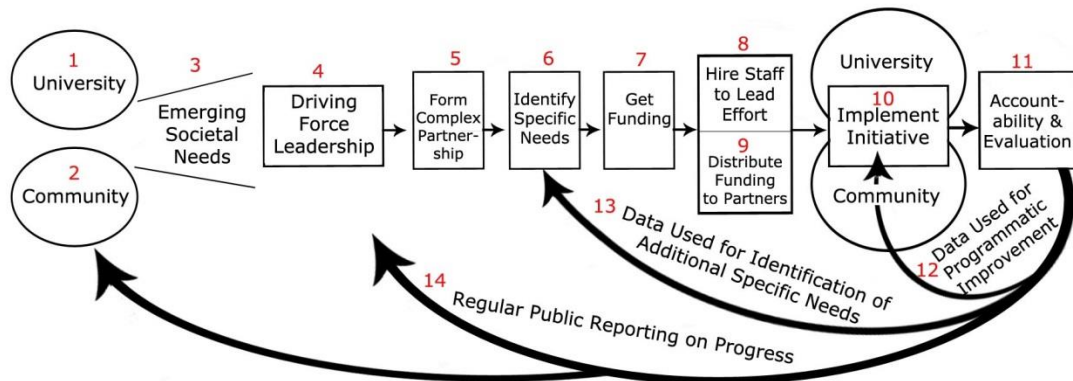


Figure 2. Organization Development Model for Complex Partnerships

In the framework, the university (# 1) and other organizations that eventually become part of the partnership (# 2) are separate and focused on their respective missions. Community in this framework describes institutions such as state agencies, K-12 schools, community colleges, cities, companies, or non-profits. These organizations are not involved in structured interactions designed to work toward addressing a common issue.

A societal need that is prevalent enough that action is required begins to emerge (# 3). Furthermore, these emerging needs are so disruptive and large that no single organization can address them. Therefore, a coalition of organizations offers the best chance for the community to change the trajectory of the societal issues. A driving force leader (# 4) convenes leaders of potential partnering organizations. This driving force leader can be someone within the university-system or university leadership (e.g., a

chancellor, president, or dean) or a person from another participating organization (e.g., a state policymaker, corporate leader, or superintendent of K-12 schools). This individual takes the role of organizer by bringing together leaders from the various stakeholder organizations to initiate discussions to learn more about the emerging needs.

At this point, the complex partnership (# 5) is formed. This formation includes identifying a dedicated person to facilitate the effort as well as a partner who will handle the financial aspect of the partnership. The central leader can be a person who takes on the partnership as an additional part of his or her job responsibilities or a person who is specifically dedicated to this effort. In the latter scenario, one or more of the founding organizations contribute to this person's salary. The person who is facilitating the partnership convenes the participants in the complex partnership to identify specific initiatives to address the emerging need (# 6). These leaders develop a plan of action with specific outcomes and agree on their respective roles and duties in their organization related to the plan of action.

Once a plan of action is determined, leaders in the complex partnership often seek funding to support identified initiatives (# 7). This funding, which can be substantial because of the large-scale efforts that are needed to tackle the emerging need, often comes through state or federal agencies or foundations. Once funding is secured, specific staff members are hired to facilitate the complex partnership's initiatives (# 8). These staff members are usually tasked with assisting stakeholders in accomplishing the deliverables that are written into the grant applications. At the same time, any funding

that will be used to support specific initiatives at the partner level is distributed (# 9) and implementation of the complex partnership's initiatives begins (# 10). These initiatives involve the university system and/or university along with partnering organizations in the community.

As the partners begin to implement strategies, an evaluation framework is developed that is specific to the goals of the complex partnership (# 11). At this point, data are regularly collected, and analysis begins in order to generate regular reports that are sent to participants in the partnering organizations for programmatic improvement toward the initiative's goals (# 12). Data collected also is mined to identify additional emerging needs that the partnership can address in the future. This information is taken back to the partnering organization's leaders to develop a plan of action (# 13). Thus, the complex partnership offers several feedback loops that allow partnering organizations to hone their work in the initiative and also to identify emerging needs that are being to arise. Additionally, regular reports to the partnering organizations, funders, policymakers, the media, and the public on the complex partnership's progress on the initiatives (#14). This step serves as an accountability measure for the complex partnership.

Based on the responses of the participants, the complex partnership's initial formation unfolds in a sequence for Steps 1-7. The remaining steps (# 8-14) happen concurrently as the partnership's work on the identified initiatives begins. Additionally, as data analysis continued, participants described identifying additional emerging needs

(# 6), thus creating new lines of work for the complex partnership even as the original efforts continued or in some cases, concluded.

Implications for Practice, Research, and Theory

Large-scale educational partnerships began to emerge in the late 1990s and have only recently been addressed by researchers in academic literature. Thus, this study provides not only important insights into the experiences of the study participants, but also implications for practice, research, and theory.

Implications for Practice

While school-university partnerships have been in existence since the late 20th century, these efforts have evolved and grown to include organizational partners (as opposed to a single professor working with a single teacher, or a department working with a school). In fact, complex partnerships are increasingly involving multiple organizations working together toward common goals in an effort to address significant societal challenges. Therefore, even though findings from this study should not be generalized to the entirety of higher education or to all complex partnerships, the experiences shared by the participants offer valuable lessons about complex partnerships.

One recommendation for practice calls for greater involvement by human resource development practitioners and researchers in complex partnerships. Cummings and Worley (2005) posited that organization development (OD) will increasingly be

applied in more education settings as well as in more diverse organizations. While not bounded by specific organization boundaries, complex partnerships are diverse systems that present a wide range of challenges. These challenges require various HRD/OD interventions. For instance, complex partnerships involve a change management initiative at the partnership/community level, the organizational level, and the individual level. Therefore, HRD practitioners have a place in helping facilitate these change efforts by designing interventions that are aligned with a complex partnership's shared vision and goals. Furthermore, HRD practitioners can help various stakeholders gain new skill sets focused on adaption since the changes in complex partnerships are often emergent, thus differing from the work that stakeholders undertake in their employing organization.

Complex partnerships also require leveraging and integrating multiple organizational cultures. The effectiveness of such an effort can either trigger positive cultural changes as organizations becomes more aligned with the complex partnership's efforts, or derail progress due to stakeholders' inability to move past cultural conflicts. In this regard, HRD practitioners can provide assistance by helping stakeholders understand the cultures of different organizations involved in the complex partnership, and facilitating the development of simple rules that will allow stakeholders to collaborate effectively in a cross-boundary context.

Another challenge involves leadership development at the executive and mid-management levels. As noted by Yip et al. (2011), these leaders often lack the necessary

understanding and skill set of how they can lead beyond the boundaries of their organization. Therefore, HRD practitioners who are involved in these large-scale partnerships can provide a valuable service in helping leaders at all organizational levels develop these boundary-spanning and adaptive skills.

Another implication for HRD practitioners involves facilitating the analysis of the continuum of P-16 education. Participants in this study described a number of vertical disconnects between K-12 education and higher education, as well as horizontal disconnects between various higher education institutions. Therefore, in order to create a more seamless educational system, attention needs to be paid to these vertical and horizontal linkages in areas such as curriculum, accountability, and policy. By facilitating these types of conversations and subsequent decisions, HRD practitioners can help identify the disruptions that tend to emerge in complex partnerships and then work with stakeholders to make the appropriate changes in addressing these challenges. As a result, various stakeholders are likely to be better prepared for working together more effectively in the complex partnership.

Implications for Research

Due to time and financial constraints, this study was bounded to a specific set of criteria. Therefore, any generalization of findings from this study would be inappropriate. However, because complex partnerships often include participants from other entities outside universities, many avenues for research are available to better understand these types of undertaking. Furthermore, as complex partnerships continue

to emerge as a way to develop viable solutions to societal issues, numerous potential research topics will also continue to emerge.

One avenue for research involves leaders who serve as the driving force for the partnerships. How did these leaders identify critical issues to be addressed? How did they recruit peers in other sectors to work with them? What hurdles did they face in bringing the complex partnership from a concept into reality? How did they translate the vision of the partnership into something that a variety of organizations could embrace and want to join? What steps did they take to give mid-level leaders and employees at lower organizational levels the necessary freedom to span organizational boundaries?

A second area of inquiry involves how learning happens among various stakeholders within a complex partnership. In this study, the focus was on university and university-system leaders who were at the mid-management level. Since these leaders were either serving as facilitators of the complex partnership or originally had this initiative under their purview, their interest in and understanding of these efforts could be stronger than other stakeholders. Therefore, it would be meaningful to understand how other partnership participants – such as K-12 administrators and teachers, university administrators and faculty from other colleges, community leaders and members, business representatives, and non-profit leaders – develop an understanding of the complex partnership's initiative. These types of studies would help paint a more complete picture of participation in a complex partnership.

Another area for research is the facilitation of the complex partnership. The collective impact literature stresses the need for a third-party backbone organization who takes the responsibility for coordinating the partnership. Yet this study found different types of staffing and infrastructure that had been put in place to facilitate the partnership. Researchers need to look more deeply into which type of facilitation provides the optimal support. This insight is important because it can inform foundations' decisions about funding infrastructure as they consider grant applications. Additionally, this type of research can also provide important information to organizational leaders who are considering investing in staffing to facilitate the complex partnership in their own organization or contributing funds to the creation of a third-party backbone organization.

A fourth area of inquiry involves determining whether complex partnerships are truly able to mitigate the major societal issues that they have been designed to address. Are these partnerships effective in bringing a broad group of stakeholders together successfully to work on an initiative? Or would these types of changes be possible through another type of intervention that does not have such a wide range of participants? Furthermore, what are the economic impact of complex partnerships on the communities they serve?

While this study was designed to elicit new insights into complex collaborative efforts based on the experiences of participating university and university system administrators, future research needs to gather the perspectives of faculty members as well as those of administrators from other colleges who are not represented among the

participants interviewed for this study. Additional areas of inquiry include learning about the experiences of stakeholders from other organizations that are involved in these partnerships. These studies, when looked at together, can provide a window into the multi-faceted effort that emerges in a complex partnership, thus allowing HRD researchers and practitioners to make more informed choices.

Implications for Theory

While initially exploring potential theories to use in this study, I used my own experiences of working in a complex partnership that involved multiple universities, community colleges, K-12 schools, and state agencies to gauge the appropriateness of each theory to my study. Therefore, I selected complex adaptive systems theory as the conceptual framework for this study.

After completing data collection and analysis, I determined that overall this theory does provide a useful lens for understanding large-scale complex partnerships such as the ones in this study. For instance, researchers have identified characteristics and features that are manifested in complex adaptive systems, such as self-organization, an environment that experience frequent change, simple rules, nonlinearity, emergent behaviors, a focus on learning, adaptable elements, co-evolution and context within a larger system (Dooley, 1997; Hill, 2001; Plsek, 2001; Van Beurdern et al., 2001). These characteristics are evidenced by findings from the complex partnerships that were described by the participants in my study (Table 22).

Table 22

Elements of Complex Adaptive Systems Seen in Complex Partnerships

Characteristics of Complex Adaptive System from the Literature	Evidence from My Study
Large number of elements that interact and link with each other	These partnerships involved multiple entities, such as universities, K-12 schools, local municipalities, local policymakers, state policymakers, local non-profits, and businesses that interacted regularly in working in the complex partnership.
Environments that experience frequent change	<p>Several participants described frequent changes in state or national educational policy at the K-12 or university level.</p> <p>Some participants described changes in the local environment (changing local norms, changing needs of school districts, etc.)</p>
Self-organizing	Complex partnerships were organized based on a steering committee that is separate from the participating organizations.
Focused on learning	Participants talked about learning from meetings and interactions with participants from partnering organizations.
Consensus about mission, strategy, goals, rules, measurement, correction	<p>Development of a shared vision, goals, strategies, measurement, and correction through the steering committee and regular meetings.</p> <p>Continued involvement of the steering committees to provide guidance to complex partnership.</p>
Context within a larger system	All partnerships were part of a larger state and national educational system. In some cases, some complex partnerships were part of a region or municipality that was dealing with a specific societal issue.
Creation of simple rules	Simple rules were identified through steering committees.

Table 22 Continued

Characteristics of Complex Adaptive System from the Literature	Evidence from My Study
Nonlinearity	Smaller traditional school-university partnerships formed as a result of faculty members and K-12 stakeholders involvement in the complex partnership.
Emergent behaviors	New issues emerged among the partners that needed to be addressed by the complex partnership such as changes in avenues for certification of ESL teachers, changes in counselor preparation program, and inclusion of charter schools in complex partnership.
Observed instead of predicted detail	Changes in stakeholder views' about the efforts of the complex partnership were not predicted at the start of the complex partnership, but were observed by participants.
Inherent order	Participants described how some faculty members believed that involvement in K-12 efforts were an inherent part of their job.
Adaptable elements	As relationships in complex partnerships matured, the initial efforts undertaken as a result of the partnership adapted and deepened to involve more significant work.
Co-evolution through constant tension and balance	Feedback from participants in partnering organizations about problematic issues was used to inform future efforts in the complex partnership.

While Table 22 shows empirical evidence from my study supporting the use of complex adaptive system theory, there is also ample evidence that does not entirely align with what is known about complex adaptive systems theory. For instance, several participants in this study described using quantitative methods to look at P-16 alignment and K-12 teaching and learning. The use of these quantitative techniques may be

attributed to the increased availability of P-16 data sets that have continued to be refined since P-16 systems emerged in the 1990s. However, these findings run counter to the complex adaptive systems theory literature that calls for the use of probes instead of analytic techniques to understand these systems (Keast, Mandell, Brown, & Woolcock, 2004; Van Beurden et al., 2011).

To address this disconnect between practice and theory, I recommend that researchers explore the use of data in several ways. One recommendation would involve additional study as to whether these data were used in feedback loops to both inform the complex partnership's efforts and to identify emerging needs. If this is the case, the use of qualitative analysis might be aligned with complex adaptive systems theory.

A second option for exploration is whether a multi-dimensional evaluation that incorporates a mixed-methods approach would provide a more accurate picture of complex partnerships in a way that aligns with the complex adaptive theory. Most participants in this study identified one approach (a qualitative interpretative approach that provided rich, informative data) but three participants (Sondra, Mara, and Howard) did describe using both quantitative and qualitative data to measure the partnership's success. While these three participants did not describe a formalized evaluation process, this type of analysis would provide a broader picture. For instance, Rychtenik, Frommer, Hawe, and Shiell (2002) suggested an evaluative approach that looked at intervention effectiveness on three dimensions. The first dimension is the strength of evidence, as determined by the study design, methodological qualities, and statistical precision. The

second dimension is the magnitude of measured effect while the third dimension is the relevance of the measured effects in the context of implementation. Rychtenik et al. recommended distinguishing between intervention components that were highly dependent on context and those that were less so. For instance, contextual factors such as literacy, income, cultural values, and access to media and services can influence the generalizability of evidence. Rychetenik et al. also posited that a distinction should be made between a systematic and rigorous analysis of available evidence and the complex socio-political process that results in policy and practice decisions. I encourage future research to be conducted with these points in mind.

Another example of a multi-dimensional evaluative framework was described by Eoyang and Berkas (1999). These researchers believed that this type of evaluation should have the following features: (a) capture an emerging model of causal relationships, especially through a baseline representation that is frequently revised; (b) evaluate and revise the evaluation design regularly through creating options for frequent iterative reconsideration and design; and (c) capturing, preserving, and learning from the system's unexpected behaviors. Because complex adaptive systems have complex interrelationships and multiple efforts, the evaluation system should incorporate multiple strategies, time horizons, dimensions, and informants. The evaluation system also needs to be explicit about the language and meanings of evaluation findings. One potential strategy involves the use of emergent evaluation principles in which quantitative data is used in time series analysis after being collected at regular intervals over a specified period of time. Therefore, in the evaluation designs described by Eoyang and Berkas,

and Rychtenik et al. (2002), quantitative analysis would have a place in a complex adaptive system.

Summary and Conclusions

This study explored the experiences of university-system and university leaders in working in complex partnerships. This study was designed to learn more about these multi-organization partnerships through mid-level leaders who could describe both the systemic initiatives as well as the day-to-day operations.

The two research questions were explored from a qualitative perspective through extensive opened-ended individual interviews and document review. Ten mid-level leaders from universities and university systems were purposefully selected. A constant comparative analysis was employed to analyze the data and interpret the results.

The major finding in this study indicated that these complex partnerships are constantly challenged to address emerging needs that are so large that they cannot be addressed by one organization alone. This finding was aligned with Lawson (2013) who identified third-generation partnerships that are focused on solving these types of systemic challenges. Examples of these needs include K-12 student achievement, teacher quality, and college readiness, access, and success. A second major finding was the challenge of maintaining relationships in complex partnerships. Other themes that emerged included leadership, accountability, and staffing and infrastructure.

REFERENCES

- Acar, M., & Robertson, P. J. (2004). Accountability challenges in networks and partnerships: Evidence from educational partnerships in the United States. *International Review of Administrative Sciences*, 70(2), 331-344. doi: 10.1177/0020852304044260
- Baker, P., Gardner, D., & Curry, L. (2008). *Structural configurations of school/university partnerships: An exploratory paper*. Normal, IL: Illinois State University Center for the Study of Education Policy. Retrieved from <http://centereducationpolicy.illinoisstate.edu/initiatives/schoolcollege/structuralconfigurations.pdf>
- Bidwell, A. (2014, March 19). Report: 1 in 10 community college transfers lose nearly all course credits. *U.S. News & World Report*. Retrieved from <http://www.usnews.com/news/articles/2014/03/19/report-1-in-10-community-college-transfers-lose-nearly-all-course-credits>
- Birnbaum, R. (1988). *How colleges work: The cybernetics of academic organization and leadership*. San Francisco: Jossey-Bass Publishers.
- Biernacki, P. & Waldorf, D. (1981). Snowball and techniques of chain referral sampling. *Sociological Methods & Research*, 10(2), 141-163. Retrieved from http://www.columbia.edu/itc/hs/pubhealth/p8462/misc/biernacki_lect4.pdf

- Bullough, R., & Kauchak, D. Jr. (1997). Partnerships between higher education and secondary schools: Some problems. *Journal of Education for Teaching*, 23(3), 215-233.
- Burns, J. (n.d.). *Brief biography*. Baton Rouge: Louisiana Board of Regents. Retrieved from <http://regents.louisiana.gov/wp-content/uploads/2014/11/BIOforJeanneBurns12.2009.pdf>
- Burnes, B. (2005). Complexity theories and organizational change. *International Journal of Management Reviews*, 7(2), 73-90. doi: 10.1111/j.1468-2370.2005.00107.x
- Burstein, N., Kretschmer, D., Smith, C., & Gudoski, P. (1999). Redesigning teacher education as a shared responsibility of schools and universities. *Journal of Teacher Education*, 50(2), 106-118. doi: 10.1177/002248719905000204
- Callahan, J. L., & Martin, D. (2007). The spectrum of school-university partnerships: A typology of organizational learning. *Teaching and Teacher Education*, 23, 136-145. doi:10.1016/j.tate.2006.04.038
- Center for Creative Leadership. (2013). Three ways to influence [Leading Effectively Web log]. Retrieved from <http://www.leadingeffectively.com/three-ways-to-influence/>
- Clifford, M., Miller, S. B., Smith, Z., Hora, M., & DeLima, L. (2007). *K-20 partnerships: Literature review and recommendations for research*. (WCER Working Paper No. 2008-3). Madison: University of Wisconsin–Madison,

Wisconsin Center for Education Research. Retrieved from
<http://hub.mspnet.org/index.cfm/14572>

Coburn, C. (n.d.). Negotiation conflict styles. Boston: Harvard Medical School Ombuds Office. Retrieved from
<http://hms.harvard.edu/sites/default/files/assets/Sites/Ombuds/files/NegotiationConflictStyles.pdf>

Cornelissen, F., van Swet, J., Beijaard, D., & Bergen, T. (2011). Aspects of school-university research networks that play a role in developing, sharing and using knowledge based on teacher research. *Teaching and Teacher Education*, 27, 147-156.

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

Creswell, J. W. (2007). *Quality inquiry & research design: Choosing among five approaches* (2nd ed.). Thousand Oaks, CA: Sage Publications, Inc.

Cummings, T. G., & Worley, C. G. (2005). *Organization development and change* (8th ed.). Mason, OH: South-Western.

Dallmer, D. (2004). Collaborative relationships in teacher education: A personal narrative of conflicting roles. *Curriculum Inquiry*, 34(1), 29-45.

Darling-Hammond, L. (1994). Developing professional development schools: Early lessons, challenge, and promise. In L. Darling-Hammond (Ed.), *Professional*

development schools: Schools for developing a profession (pp. 1-27). New York: Teachers College Press.

Davis, M., Emery, M., & Lane, C. (1998). Serve to learn: Making connections in rural communities. In Montgomery D. (Ed.), *Coming Together: Preparing for Rural Special Education in the 21st Century* (pp. 77-83). Charleston, SC.: American Council on Rural Special Education.

Day, C. & Smethem, L., 2010. Partnerships between schools and higher education. In N. Verloop (Ed.), *International Encyclopedia of Education* (3rd ed.). Waltham, MA: Elsevier.

Dooley, K. J. (1997). A complex adaptive systems model of organization change. *Nonlinear Dynamics, Psychology, and Life Sciences*, 1(1), 69-97. Retrieved from <http://mba2007.co.uk/MBA/notes/research/cas-organisational%20change.pdf>

Dounay, J. (2008). Landmines P-16/P20 councils encounter – and how they can be addressed (or avoided altogether). Denver, CO: Education Commission of the States. Retrieved from <http://www.ecs.org/clearinghouse/78/86/7886.pdf>

Du Chatenier, E., Verstegen, J. A. A. M., Biernans, H. J. A., Mulder, M., & Omta, O. (2009). The challenges of collaborative knowledge creation in open innovation teams. *Human Resource Development Review*, 8(3), 350-381.

Edens, K., Shirley, J., & Toner, T. (2001). Sustaining a professional development school partnership: Hearing the voices, heeding the voices. *The Journal of the Association of Teacher Educators*, 23(3), 27-32.

Edmondson, J. (2012). The difference between collaboration and collective impact. [Striving for Change Web log]. Retrieved from <http://www.strivetogether.org/blog/2012/11/the-difference-between-collaboration-and-collective-impact/>

Edmondson, J. (2013). Backbone organizations or backbone function? [Striving for Change Web log]. Retrieved from <http://www.strivetogether.org/blog/2013/12/backbone-organization-or-backbone-function/>

Education Commission of the States. (n.d.). *P-16*. Denver, CO: Education Commission of the States. Retrieved from <http://www.ecs.org/html/issue.asp?issueID=76>

Education Commission of the States. (n.d.). Postsecondary institutions: Community/technical colleges. ECS Website. Denver, CO: Education Commission of the States. Retrieved from <http://www.ecs.org/html/issue.asp?issueid=250&subIssueID=241>

Education Trust. (2009). Accountability in K-12 education. Denver, CO: Education Commission of the States. Retrieved from <http://www.edtrust.org/issues/dc-0>

- Eoyang, G. H., & Berkas, T. H. (1999). Evaluating performance in a complex adaptive system (CAS). In (Eds). M. Lissack & H. Gunz, *Managing complexity in organizations; A view in many directions* (pp. 1-21). Westport, CT: Quorum Books. Retrieved from <http://www.hsdinstitute.org/learn-more/library/articles/Evaluating-Performance-in-a-CAS.pdf>
- Field, T. T., Hoffman, N., & Cohen, L. J. (1999). School/university collaborations: Letters from the front. *Teacher Development*, 3(2), 291-300. doi: 10.1080/13664539900200085
- Firestone, W. A., & Fisler, J. L. (2002). Politics, community, and leadership in a school-university partnership. *Educational Administration Quarterly*, 38(4), 449-493. doi: 10.1177/001316102237669
- Franz, N. K. (2003). Transformative learning in Extension staff partnerships: Facilitating organizational change. *Journal of Extension*, 41(2). Retrieved from <http://www.joe.org/joe/2003april/a1.php>
- Gayton, C. (1997). Getting into the education business. *Techniques: Making Education and Career Connections*, 72(5), 26-28.
- Goodlad, J. (1991). School-university partnerships. *The Education Digest*, 8(56), 58.
- Hanleybrown, F., Kania, J., & Kramer, M. (2012). Channeling change: Making collective impact work. *Stanford Social Innovation Review Web Blog*. Retrieved from

http://www.ssireview.org/blog/entry/channeling_change_making_collective_impact_work

Harwood Group & Charles Stewart Mott Foundation. (1999). Community rhythms: Five stages of community life. Bethesda, MD: The Harwood Institute. Retrieved from <http://www.theharwoodinstitute.org/wp-content/uploads/2013/10/CommunityRhythmsReport.pdf>

Harwood, J. (2014). Putting community in collective impact. *Stanford Social Innovation Review* Web Blog. Retrieved from http://www.ssireview.org/blog/entry/putting_community_in_collective_impact

Heifetz, R. A. (1998). *Leadership without easy answers*. Boston, MA: Harvard University Press.

Heifetz, R. A., Kania, J. V., & Kramer, M. R. (2004). Leading boldly: Foundations can move past traditional approaches to create social change through imaginative – and even controversial – leadership. *Stanford Social Innovation Review* Web Blog. Retrieved from http://www.ssireview.org/articles/entry/leading_boldly

Hill, P. S. (2011). Understanding global health governance as a complex adaptive system. *Global Public Health*, 6(6), 593-605. doi: 10.1080/17441691003762108

Holmqvist, M. (2003). A dynamic model of intra- and interorganizational learning. *Organizational Studies*, 24(1), 95-123.

- Honig, M. I. (2003). Building policy from practice: District central administrators' roles and capacity for implementing collaborative educational policy. *Educational Administration Quarterly*, 19(3), 292-338.
- Hord, S. (1997). Professional learning communities: Communities of continuous inquiry and improvement. Austin, TX: Southwest Education Development Lab.
Retrieved from <http://www.sedl.org/pubs/change34/plc-cha34.pdf>
- House, R. J. (1991). The distribution and exercise of power in complex organizations: A MESO theory. *Leadership Quarterly*, 2(1), 23-58.
- Hsiao, R., Tsai, D., & Lee, C. (2012). Collaborative knowing: The adaptive nature of cross-boundary spanning. *Journal of Management Studies*, 49 (3), 463-491.
doi:10.1111/j.1467-6486.2011.01024.x
- Ingram, P. & Simons, T. (2002). The transfer of experience in groups of organizations: Implications for performance and competition. *Management Science*, 48 (12), 1517-1533.
- James, C. E., & Haig-Brown, C. (2001). "Returning the dues": Community and the personal in a university-school partnership. *Urban Education*, 36(2), 226-255.
doi: 10.1177/0042085901362005
- Kania, J., & Kramer, K. (2011). Collective impact. *Stanford Social Innovation Review*, Winter Issue, 36-41. Retrieved from
http://www.ssireview.org/pdf/2011_WI_Feature_Kania.pdf

- Kania, J., & Kramer, M. (2012). Channeling change: Making collective impact work. *Stanford Social Innovation Review* Web Blog. Retrieved from http://www.ssireview.org/blog/entry/channeling_change_making_collective_impact_work
- Kania, J. & Kramer, M. (2013). Embracing emergence: How collective impact addresses complexity. *Stanford Social Innovation Review* Web Blog. Retrieved from http://www.ssireview.org/blog/entry/embracing_emergence_how_collective_impact_addresses_complexity
- Kanter, R. (1994). Collaborative advantage: The art of alliances. *Harvard Business Review*, 72(4), 96-108.
- Keast, R., Mandell, M. P., Brown, K., & Woolcock, G. (year). Network structures: Working differently and changing expectations. *Public Administration Review*, 64(3), 363-371.
- Kirschenbaum, H., & Reagan, C. (2001). University and urban school partnerships: An analysis of 57 collaborations between a university and a city school district. *Urban Education*, 36(4), 479-504. doi: 10.1177/0042085901364003
- Kirst, M. & Venezia, A. (2001). Bridging the great divide between secondary schools and postsecondary education. *Phi Delta Kappan*, 83(1), 92-97. Retrieved from <https://web.stanford.edu/group/bridgeproject/greatdivide.pdf>

- Kirwan, W. E. (2007, March/April). Higher education's "accountability" imperative: How the University System of Maryland responded. *Change Magazine*. Retrieved from <http://www.changemag.org/Archives/Back%20Issues/March-April%202007/full-accountability-imperative.html>
- Knight, L. & Pye, A. (2005). Network learning: An empirically derived model of learning by groups of organizations. *Human Relations*, 58(3), 369-392.
- Kronick, R. F., Lester, J. N., & Luter, D. G. (2014). Introduction to higher education's role in public school reform and community engagement. *Peabody Journal of Education*, 88(5), 519-524.
- Krueger, C. (2006). The progress of P-16 collaboration in the states. *ECS Policy Brief, P-16*. Denver, CO: Education Commission of the States. Retrieved from http://www.ecs.org/html/educationIssues/ECSSStateNotes_2006.asp
- Larsson, R., Bengtsson, L., Henricksson, K., & Sparks, J. (1998). The interorganizational learning dilemma: Collective knowledge development in strategic alliances. *Organization Science*, 9(3), 285-305.
- Lawson, H. A. (2013). Third-generation partnerships for P-16 pipelines and cradle-through-career education systems. *Peabody Journal of Education*, 88(5), 637-656.
- Lee, L., Horth, D. M., & Ernest, C. (2014). Boundary spanning in action: Tactics for transforming today's borders into tomorrow's frontiers. Greensboro, NC: Center

for Creative Leadership. Retrieved from

<http://www.ccl.org/leadership/pdf/research/boundarySpanningAction.pdf>

Lefever-Davis, S., Johnson, C., & Pearman, C. (2007). Two sides of a partnership:

Egalitarianism and empowerment in school-university partnerships. Nashville,

TN: Red Orbit News Website. Retrieved from

http://www.redorbit.com/news/education/891054/two_sides_of_a_partnership_e_galitarianism_and_empowerment_in_school/

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage.

Lincoln, Y.S. & Guba, E. G. (2000). Paradigmatic controversies, contradictions, and

emerging confluences. In (Eds.) N.K. Denzin & Y.S. Lincoln, *Handbook of qualitative research* (2nd ed.), (pp. 163-188). Thousand Oaks, CA: Sage.

Lowndes, V. & Skelcher, C. (1998). The dynamics of multi-organizational partnerships:

An analysis of changing modes of governance. *Public Administration*, 76(Summer), 313-333.

Mark, D. L. H. (1998). Growing our own: A three-way partnership. *Urban Education*,

32(5), 591-615. doi: 10.1177/0042085998032005004

Martin, D., Reeves, W. E., Wilson, E., O'Dell, L., & Egan, T. M. (2004). Taking on the

teacher supply and retention challenge: A performance focused model for school-university partnerships. Paper presented at the Academy of Human Resource

Development International Conference (AHRD), Austin, TX. Retrieved from <http://eric.ed.gov/?id=ED492336>

Martin, D., Egan, T. M., McWilliams, A. S., Wilson, E., Holt, M. L., & Reaves, W. E. (2008). Meeting teacher demand, increasing teacher performance: Five years of school-university partnerships. *Scholarlypartnershipsedu*, 3(2), 5-33. Retrieved from <http://opus.ipfw.edu/spe/vol3/iss2/2/>

McCray, E. D., Rosenberg, M. S., Brownell, M. T., deBettencourt, L.U., Leko, M. M., & Long, S. K. (2011). The role of leaders in forming school-university partnerships for special education teacher preparation. *Journal of Special Education*, 24(1), 47-58.

McDaniel Jr., R. R., Lanham, H. J., & Anderson, R. A. (2009). Implications of complex adaptive systems theory for the design of research on health care organizations. *Health Care Management Review*, 34(2), 191-199. Retrieved from <http://hollylanham.com/public/publications/Research%20Design.pdf>

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

Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. San Francisco: Jossey-Bass.

- Mohrman, S. A., Tenkasi, R. V., & Mohrman, A. M. Jr. (2003). The role of networks in fundamental organizational change: A grounded analysis. *Journal of Applied Behavioral Science*, 39(3), 301-323.
- Monaghan, D. B., & Attewell, P. (2014). The community college route to the bachelor's degree. *Education Evaluation and Policy Analysis*, 20(10), 1-22.
- Mucher, S. (2014, July 17). The liberal arts role in teacher education. *Inside Higher Ed*. Retrieved from <https://www.insidehighered.com/views/2014/07/17/liberal-arts-faculty-need-get-more-involved-teacher-education-essay>
- National Conference of State Legislators. (n.d.). Hot topics in higher education: Reforming remedial education. Denver, CO. Retrieved from <http://www.ncsl.org/research/education/improving-college-completion-reforming-remedial.aspx>
- Opendakker, R. (2006) Advantages and disadvantages of four interview techniques in qualitative research. *Forum: Qualitative Social Research*, 7(4). Art. 11. Retrieved from <http://nbn-resolving.de/urn:nbn:de:0114-fqs0604118>
- Patton, M. Q. (1987). *How to use qualitative methods in evaluation*. Thousand Oaks, CA: Sage.
- Patton, M. Q. (2002). *Qualitative research and evaluation methods*. (3rd ed.). Thousand Oaks, CA: Sage.

- Peel, H. A., Peel, B. B., & Baker, M. E. (2002). School-university partnerships: a viable model. *International Journal of Educational Management*, 16(7), 319-325.
- Peel, H., & Walker, B. (1995). The teacher's role in site-based management. *Kappa Delta Pi*, 32(1), 2-5.
- Plsek, P. (2001). Redesigning health care with insights from the science of complex adaptive systems. *Crossing the quality chasm: A new health system for the 21st century*. Washington, D.C.: National Academies Press. Retrieved from <http://www.nap.edu/catalog/10027.html>
- Reaves, W. E. (2009). *Delivering a high-quality teacher workforce for Texas: Reconsidering university-based teacher preparation in Texas, renewing commitments, and improving practice in the twenty-first century*. Fort Worth, TX: Sid W. Richardson Foundation Forum. Retrieved from www.sidrichardson.org/SRFEducationReport.pdf
- Regenstein, E. & Romero-Jurado, R. (2014, June 3). A framework for rethinking state education accountability and support from birth through high school. *The Ounce*. Chicago, IL: The Ounce of Prevention Fund. Retrieved from <http://www.ounceofprevention.org/national-policy/conversations/Accountability-v1-060314-short.pdf>
- Rochford, J. A., O'Neill, A., Gelb, A., & Ross, K. J. (2007). *P-16: The last education reform. Book two: Emerging local, regional and state efforts*. Canton, Ohio:

Stark Education Partnership. Retrieved from
http://www.edpartner.org/pdfs/p16_book_2_final.pdf

Rosenberg, M. S., Bronell, M., McCray, E.D., deBettencourt, L.U., Leko, M., & Long, S. (2009). Development and sustainability of school-university partnerships in special education teacher preparation: A critical review of the literature. Gainesville, FL: University of Florida National Center to Inform Policy and Practice in Special Education Professional Development. Retrieved from http://ncipp.education.ufl.edu/files_6/NCIPP_Partner_ES_010310.pdf

Ross, J. A. (1995). Professional development schools: Prospects for institutionalization. *Teaching and Teacher Education, 11*(2), 195-201. doi: 10.1016/0742-051X(95)00001-Z. Retrieved from <http://www.sciencedirect.com.lib-ezproxy.tamu.edu:2048/science/article/pii/0742051X9500001Z>

Ryan, J. (2010). Accelerating performance: Five leadership skills you and your organization can't do without. Greensboro, NC: Center for Creative Leadership. Retrieved from <http://www.ccl.org/leadership/pdf/news/AcceleratingPerformance.pdf>

Rychetnik, L., Frommer, M., Hawe, P., & Shiell, A. (2002). Criteria for evaluating evidence on public health interventions. *Journal of Epidemiology & Community Health, 56*(2), 119-127.

Schwandt, T. A. (2001). *Dictionary of qualitative inquiry* (2nd Ed.). Thousand Oaks, CA: Sage Publications.

Siegel, D. A. (2010). Why universities join cross-sector social partnerships: *Theory and evidence*. *Journal of Higher Education Outreach and Engagement*, 14(1), 33-62.

Sockett, H. (1998). Levels of partnership. *Metropolitan Universities*, 8(4), 75-82.

Retrieved from http://p9003-linkresolver.tamu.edu.lib-ezproxy.tamu.edu:2048/tamu?sid=metalib%3AL_EBSCO_ERIC&id=doi%3A&genre=&isbn=&issn=10478485&date=1998&volume=8&issue=4&spage=75&epage=82&aulast=Sockett&aufirst=%20Hugh&aunit=&title=Metropolitan%20Universities%3A%20An%20International%20Forum&atitle=Levels%20of%20Partnership.&sici=&__service_type=&pid=%3Cmetalib_doc_number%3E018694356

Stephens, D., & Boldt, G. (2004). School/university partnerships: Rhetoric, reality, and intimacy. *Phi Delta Kappan*, 85(9), 703–707.

Strauss, V. (2013, February 9). A warning college profs from a high school teacher. *The Washington Post*. Retrieved from <http://www.washingtonpost.com/blogs/answer-sheet/wp/2013/02/09/a-warning-to-college-profs-from-a-high-school-teacher/>

Swanson, R. A., & Holton, E. F. III. (2001). *Foundations of human resource development*. San Francisco: Berrett-Koehler Publishers, Inc.

- Teitel, L. (1992). The impact of professional development school partnerships on the preparation of teachers. *Teaching Education*, 4(2), 77-85. Retrieved from http://www.eric.ed.gov/ERICWebPortal/search/detailmini.jsp?_nfpb=true&_EERICExtSearch_SearchValue_0=EJ450882&ERICExtSearch_SearchType_0=no&accno=EJ450882
- Teitel, L. (1994). Can school-university partnerships lead to the simultaneous renewal of schools and teacher education? *Journal of Teacher Education*, 45(4), 245-252.
- Torraco, R. J., (2005). Human resource development transcends disciplinary boundaries. *Human Resource Development*, 4(3), 251-253.
- Van Beurden, E. K, Kia, A. M., Zask, A., Dietrich, U., & Rose, L. (2011). Making sense in a complex landscape: How the Cynefin Framework from complex adaptive systems theory can inform health promotion practice. *Health Promotions International*, 1-11. doi: 10.1093/heapro/dar089
- Vandal, B. (2009). Revving the education engine. Cincinnati, OH: KnowledgeWorks Foundation. Retrieved from <http://www.ecs.org/docs/RevvingEdEngine.pdf>
- White, C. C. (2014). An integrative review to introduce socio-networked learning: A new theoretical framework for HRD. *Human Resource Development Review*, 13(3) 276-292.

- Wilkof, M. V., Brown, D. W., & Selsky, J. W. (1995). When the stories are different: The influence of corporate culture mismatches on interorganizational relations. *Journal of Applied Behavioral Science, 31*(3) 373-388.
- Yin, R. K. (2008). The math and science partnership program evaluation: Overview of the first two years. *Peabody Journal of Education, 83*, 486-508. doi: 10.1080/01619560802414866
- Yip, J., Ernst, C., & Campbell, M. (2011). Boundary spanning leadership: Mission critical perspectives from the executive suite. Greensboro, NC: Center for Creative Leadership. Retrieved from <http://www.ccl.org/leadership/pdf/research/BoundarySpanningLeadership.pdf>
- Young, M. D., Petersen, G. J., & Short, P. M. (2002). The complexity of substantive reform: A call for interdependence among key stakeholders. *Educational Administration Quarterly, 38*(2), 137-175. doi: 10.1177/0013161X02382003
Retrieved from <http://eaq.sagepub.com.lib-ezproxy.tamu.edu:2048/content/38/2/137>
- Zetlan, A., & Harris, K. (1992). The evolution of a university/inner city school partnership. *Urban Education, 27*(1), 80-90.

APPENDIX A – TEXAS A&M INSTITUTION REVIEW BOARD APPROVAL

DIVISION OF RESEARCH
Office of Research Compliance and Biosafety



APPROVAL DATE: 04/02/2013
MEMORANDUM
TO: Jia Wang
TAMU - College Of Education - Educational Adm & Human Resource Develop
FROM: Dr. James Fluckey
Chair
Institutional Review Board
SUBJECT: Continuing Review for Human Subjects Research Approval

Protocol Number: IRB2012-0208
Title: An Exploratory Qualitative Study of University Stakeholders' Views of Their Involvement in Complex School-University Partnerships
Review Type: Expedite
Approved: 04/02/2013
Continuing Review Due: 02/28/2014
Expiration Date: 03/31/2014
Review Categories and Regulatory Determinations: Category 6: Collection of data from voice, video, digital, or image recordings made for research purposes
Category 7: Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies
Documents Reviewed and Approved: Continuing Review Application

Comments: Enrollment Closed, Follow-up only

This research project has been approved. As principal investigator, you assume the following responsibilities

1. **Continuing Review:** The protocol must be renewed by the expiration date in order to continue with the research project. A Continuing Review application along with required documents must be submitted by the continuing review deadline. Failure to do so may result in processing delays, study termination, and/or loss of funding.
2. **Completion Report:** Upon completion of the research project (including data analysis and final written papers), a Completion Report must be submitted to the IRB.
3. **Unanticipated Problems and Adverse Events:** Unanticipated problems and adverse events must be reported to the IRB immediately.
4. **Reports of Potential Non-compliance:** Potential non-compliance, including deviations from protocol and

750 Agronomy Road, Suite 2701
1186 TAMU
College Station, TX 77843-1186
Tel. 979.458.1467 Fax. 979.862.3176
<http://irb.tamu.edu>

APPENDIX B – STUDY INVITATION LETTER

March XX, 2012

Dear Dr. XXXXXXX,

Recently, I had conversations with XXXXXX about the different types of school-university partnerships, since this area has been the focus of my doctoral studies at Texas A&M University. During that conversation, XXXX mentioned your name as well as those of other higher education leaders who have experience working in educational partnerships.

Therefore, I am writing to ask if you'd be willing to participate in my doctoral research study, which will focus specifically on complex school-university partnerships. I am defining this type of partnership as a codified ongoing collaborative effort that involves at least three different organizational entities. These complex partnerships are designed to leverage resources and personnel through developing shared capacity to fulfill a specific agreed-upon educational mandate.

My interest in this area was sparked by my participation in the Texas A&M University System's Regents' Initiative for Excellence in Education from 2000-2005. This initiative, which was designed to increase the quality and quantity of teachers graduated by the system's universities over a five-year period, was a complex partnership that involved public schools and community colleges. My own experience with the A&M System and my doctoral coursework inform my belief that there is still much to be learned about this type of partnership.

My qualitative study is designed to learn from expert informants such as yourself about how this type of partnership operates. If you agree to participate in this study, I would like to set up an interview via phone or Skype this spring during a time that is most convenient for you. After I complete interviews with all study participants, I would like to schedule a second interview with you to clarify and ask follow-up questions. Your participation in this study will be anonymous and I will not identify you or your university in the research findings. You also may withdraw from this study at any time. Once the study is completed, I will be happy to share the results with you.

I appreciate your consideration of becoming a participant in this research study. If you have any questions, please feel free to contact me at dorian-martin@tamu.edu.

Sincerely,

Dorian Martin, Doctoral Candidate

Texas A&M University

APPENDIX C – INFORMED CONSENT FORM

Research Consent Form For Study on Complex School-University Partnerships

I understand that I am being asked to participate in a research study on complex school-university partnerships. This study is being conducted by Dorian Martin and will be the subject of her Ph.D. dissertation at Texas A&M University. I understand that I am one of 10 expert informants to be interviewed regarding my experience in working in a complex school-university partnership. I understand these interviews will be tape recorded and/or videotaped via Skype, transcribed verbatim, and analyzed. Since verbatim transcripts are critical to the methodology, I understand that refusal to be tape-recorded and/or videotaped will be taken as a refusal to participate in the study.

I understand the purpose of this study is to better understand complex school-university partnerships through the experiences of expert informants who have been involved in these efforts. The findings of this study will benefit the field of Human Resource Development in understanding how these partnerships operate.

I understand Dorian obtained my name through a mutual contact. I understand that the first interview will take place between August 1, 2012 and October 31, 2012 and will last approximately an hour. I understand that a follow-up interview will occur later in fall/winter 2012. I understand that interviews will be conducted at my convenience and will involve either phone conversations or Skype conversations.

I understand that I may refuse to participate in this study without any consequences. If I agree to be interviewed, I may refuse to answer any questions or discuss any particular subject that makes me feel uncomfortable. I understand, too, that if I say something in the interview that I later wish I had not said, I can have Dorian erase it. I understand that I will have the opportunity to review the transcript and can delete any information I wish to have disregarded and Dorian will omit it from any copies she has of the interview.

I understand that there are no risks involved in the study. The only inconvenience will be the time I spend on the interviews. I understand there are no personal benefits from the study.

I understand that all records and my identity will remain confidential. No one but Dorian will have access to the tape recordings and only Dorian and the four members of her Advisory Committee will have access to the transcripts made from them. My real name will not be used in Dorian's working documents, dissertation, and in any subsequent publication of the study. The names of any persons I discuss during the interview and my university's name will be changed. However, anything I say during the interviews may be reproduced word for word. I understand that confidentiality is a top priority for Dorian. I understand that Dorian will keep the tapes of my interviews indefinitely, stored securely in her home. I may, however, ask her to destroy the tapes at any time.

I understand that if I have questions about this study I may contact Dorian or the chairperson of her committee, Dr. Toby Egan, whose contact information is listed below. I also understand that this research has been reviewed and approved by the Institutional Review Board – Human Subjects in Research, Texas A&M University. For research-related problems or questions regarding subjects' rights, I can contact the Institutional Review Board through the Office of the Vice President of Research, at 979-458-4067 or irb@tamu.edu.

I have read and understand the explanation provided to me. I have had all my questions answered to my satisfaction, and I voluntarily agree to participate in the study. I have been given a copy of this consent form.

Signature of participant

Date

Signature of principal investigator

Date

Principal investigator:
Dorian Martin
1611 Austin Avenue, College Station, TX 77845
Cell: 979-██████████
dorian-martin@tamu.edu

Chairperson to Dorian's Advisory Committee:
Dr. Toby Egan
979-458-3585
egan@tamu.edu

APPENDIX D – FIRST-ROUND INTERVIEW GUIDE

Interview Questions

What is it like to participate in a complex school-university partnership?

How did the complex partnership come into being?

How was a common mission for the complex partnership determined?

How is the complex partnership structured?

How do you participate in this complex partnership?

How do you integrate professional responsibilities at the university into the complex partnership's vision for success?

How are decisions made in the complex partnership?

How does learning happen among the complex partnership's various stakeholders?

How is success defined and measured in this complex partnership?

What changes have resulted from the complex partnership?

APPENDIX E - INTERVIEWER MEMO

Research Memo for Participant # 5 ^{P-1}
- 9/19/12

- This interview was interesting because it showed the level of frustration a leader can have when working in a complex partnership. She spoke about not having a place at the table even though on the outside it seemed like her university was a full partner she had to "fight" her way in. I wonder if other partners who weren't the convening organization felt the same way or had similar experiences.
- This partnership had lots of different organizational ^{stakeholders} players in it.
- She described the convener of the partnership as a "force of nature". Interesting! This person really pushed the partnership's formation. I've seen this emerge in other interviews - well,

APPENDIX F – SAMPLE OF SECOND-ROUND INTERVIEW IN WRITING

Interview 1A – 2

need and believe that it is the right thing to do. If the university culture is not about that, then once again, I think it's more of something that happens off the side of somebody's desk; it's not a real commitment. So it's universities that see that as their mission and so they're constantly looking for what can we do to partner with our schools, what can we do help. And when they see that need, then they start figuring out how to best address that need. And that's the way [redacted] started many, many years ago with [redacted], who was very much of a visionary in recognizing the need in public schools -- particularly in our case, the rural schools -- in the need for professional development and how we might do that in a way that everyone benefits. He kind of led that whole initiative getting started, and calling people together and saying, "What can we do and how would that look?" And out of that came the [redacted]

Comment [DM4]: Do schools come to the university with their needs? If so, can you give me some examples?

7:00 Question: In these complex partnerships, how have you guys developed a common mission working with your partners?

Answer: What we have done with [redacted] is have -- I'm trying to think of what we call it -- orientation or new member orientation, I guess. We would have that at the beginning of the year and so that districts that were new, if leadership had changed at a campus -- we would have them come in. If we have new faculty on our campus, they would come in. And we would spend a morning revisiting the foundation of -- and I'm still using the [redacted] -- so we would do everything from going back to that original research on effective schools, having folks team up and divide, take a component of that research, talk about it, share it. Then we also of course described the program and how we were trying to build on that foundation of effective schools, what our history was, where we were headed and what the commitment would be from the schools. We did all that in an orientation format. So I think that was helpful in addressing that issue of turnover and trying to keep a common mission, a common vision for the organization.

Comment [DM5]: Describe the steps you used to build on the foundation of effective schools through the university's complex partnership.

Comment [DM6]: How was the common mission, vision initially developed when [redacted] came into being?

8:02 Question: How have the complex partnerships that you've been involved in been structured?

Answer: There needs to be somebody in charge, somebody who has the responsibility and yet again, the passion or the commitment to that. I just think that leadership is important and also it's saying that this partnership is important enough that we're devoting resources. And one of the most precious resources of course we have in the university -- and probably everywhere -- is time, so providing someone with release time, making it clear that it is part of their job description I think is one way that we structure that organization. In [redacted], in addition to the person who's in charge, there are others who have key identifiable roles, so I'd kind of say a next tier, like someone is the journal editor. So throughout the year, they're always connecting with the schools and listening to the presentations and thinking about soliciting the articles, thinking about what could be in that journal. Someone else is more of the -- oh, I guess you'd say social director, that keeps the activities and the team building and those kinds of things going on. So there

APPENDIX G – SAMPLE OF INDIVIDUAL CASE ANALYSIS

Sondra - Individual Case Analysis

	Direct Quotes	Researcher's Note
<p><i>Interview Question 1: So thinking about your various works with complex school-university partnerships, what was it like to participate in them?</i></p> <p>Definition</p>	<p>"So I would say that complex partnerships are different from one-on-one partnerships to begin with because it's very difficult to figure out who the key stakeholders are and how to empower them to do something because at that level, they are constrained by their boards -- the Board of Regents in the case of higher ed, the Board of Education in the case of K-12. While everybody is hoping to make progress on various agendas, progress is defined differently." (L36-40)</p> <p>"I've also been involved in complex partnerships with a large system, like a system, a school system that has [redacted], as in the case of [redacted], and multiple institutions, including the [redacted] which is in [redacted] but it prepares the largest number of teachers in the state. So when we put together that partnership, which was funded by the [redacted] grant, a multi-million dollar partnership, that's a different kind of a partnership than that state-level P-20 council. So I've been involved in both kinds of partnerships." (L42-49)</p>	

	<p>“And there’s a third kind, which I know you’re aware of, which is one university placing its student teachers in one or more schools that are... in [redacted] we’re required to prepare our teachers in professional development schools. And a professional development school is the seat or the hub of a school-university partnership at the local level.” (L50=53)</p> <p>(4:07) So basically there are these layers of partnership in the P-20 partnerships. And when I talk about P-20 or P-16 to people who don’t understand what that means, I say students can’t learn what they haven’t been taught and teachers can’t teach what they haven’t learned. (L54-56)</p>	
Potential	<p>“I would say that the benefits are potentially tremendous and the challenges are equally tremendous.” (L3-4)</p>	Just like this quote.
Benefits – Communication, Emerging Needs, Strategic Planning, Relationships	<p>“Examples of benefits of partnership: better information flow between partners, which leads to better communication, early problem identification and problem solving; ability to incorporate shared objectives into strategic planning of all partners, personal connections between staff and leaders of partner institutions, greater transparency.” (L4-7)</p>	<p>This fits into communication, rapid feedback loops and shared values and expected action (Dooley 1997), and emergent behaviors, adaptable elements and co-evolution (Plesk,2001). Hill (2011) also fits with relationships and emergent properties. Also meshes with collective impact (common agenda, continuous communication).</p> <p>These match up with Hill (2011), who commented about the non-linearity. Also can match up with Dooley (1997) who talked about cultivation of diversity and differentiation.</p>
Challenges: Differing missions and priorities, unequal sizes, governance structures	<p>“Examples of challenges: Different institutions have different missions so each partner has different priorities. Managing internal priorities that compete with partnership priorities is a challenge. Not all partners are equal in size (large school districts, and smaller universities); and not all are governed by similar governance structures—so that whereas schools can lay</p>	

	<p>down recommended procedures to principals and teachers, universities with shared governance cannot move as quickly." (L7-13)</p>	
<p>Leadership</p>	<p>"There's always a challenge when you have a complex system like this to figure out who the key stakeholders are. That's one of the first things you need to do when you're thinking about partnership work, is think about who the stakeholders (are) and how do you bring them into the tent without manipulating the agenda in a way that favors one or another of the potential partners. In a big partnership between the state public school system and the state higher education system, that's about as big as it gets, and the key stakeholders are obviously the state superintendent of schools, the chancellor of the public university system. You don't want to leave out the community colleges. You don't want to leave out the independent universities and colleges because they produce a lot of the teachers. And you don't want to leave out the higher education commission, if there is a regulatory commission." (L14-23)</p>	<p>This fits with Dooley (1997) who noted cultivation of diversity as well as Hill (2011) who mentions networks and hybrid social elements.</p>
<p>Emerging Needs, Communication</p>	<p>"And you need to figure out how to create a dialogue that involves the highest level of stakeholders like county superintendents or presidents of teachers unions or deans of education or some multi-faceted collection of individuals that need to understand they're representing their whole system. Dialogue has to be content/issue specific. So, when developing articulated programs between 2 year and 4 year schools, for example, to prepare teachers—we began the dialogue by defining common learning outcomes for programs. That way, whichever program a student</p>	<p>This fits into emergent behavior, adaptable elements, inherent order, context and embeddedness (Plesk, 2001), as well as emergent properties (Hill, 2011). It also fits with creation of a shared purpose, encouragement of inquiry, learning and divergent thinking, and creation of shared values and expected action (Dooley, 1997). This also fits into collective impact through mutually reinforcing activities and continuous communication.</p>

	<p>went through, if they finished, and completed all the outcomes, they would be likely to be successful in the next level, regardless of whether they stayed where they were or transferred. Similarly, with K-12 and higher ed, defining “college readiness” is in the purview of higher ed, but K-12 needs to understand the operational definitions (what do students need to be able to do?) so they can scaffold curriculum to achieve those defined levels of college readiness. Setting up a series of discussions around defining college readiness: English, math, social skills, maturity, teamwork, whatever...those discussions built shared assumptions and understanding. (L23-35)</p>	
<p>Scale</p>	<p>“Differences of, like I said, of stakeholders – what level you reach out to. Differences in organization – who is in charge; if you have a big grant that’s funding a particular partnership like we had with the school district, then we had a steering committee and the steering committee helped us make decisions about different strands of activity. If it’s a school district-university partnership, it’s really the teachers themselves and faculty members and the dean and the principal who meet regularly. So I think that at the levels, the more local you become, the more concrete the work becomes.” (L59-65)</p>	<p>This fits into adaptable elements, emergent behaviors and embeddedness (Plesk, 2001) and emergent properties (2011).</p>
<p>Question: So talking about the top two partnerships that you talked about – the system-wide and the other partnership that you were involved with the multiple universities and [redacted] – so how did those come into being?</p>		

<p>Follow-up Question: Well, I would guess it was awfully difficult to juggle all the competing interests between the three groups.</p>		
<p>Collaboration</p>	<p>"Yes, but sure it was obviously – the realities and practicalities of life happen. So if the State thought the teachers weren't coming in without enough reading courses or reading background, then they wanted their higher ed programs to increase the number of credits in reading, but the higher ed were constrained by a certain number of credits that students couldn't go over for their major. You know, every major's confined to 120 credits in the system by [redacted] policy. So what are you going to give up to teach? Do you want somebody to have nine reading credits? So what do you give up in their program? And so yes, there was a lot of negotiation. And then you do things like, well can you teach reading in a content course? Somebody is going to get a history major; can you include reading history and will that count as a reading course and a history course? So we did some creative curriculum development around some of the expectations. But you're right – it was complicated. And each of these things required different working groups. So how are you going to put reading into science courses or math courses? Where are we going to get that?" (L107-118)</p>	<p>This fits into adaptable elements and emergent behaviors, context and embeddedness, and co-evolution (Plesk, 2001), emergent properties (Hill, 2011), encouragement of inquiry, learning, trial and error and divergent thinking (Dooley, 1997). It also fits into mutually reinforcing activities (collective impact).</p>
<p>Question: So how did the other partnership that you were describing come into being?</p>		

<p>Funding</p>	<p>“That one (began) when the federal government announced the Teacher Quality Enhancement Program related to No Child Left Behind. They had this money out there. The U.S. Department of Education established a fund for higher education to apply for partnership grants. Because we had the state-level P-20 – or P-16 – partnership, we were able to leverage the state organization to help us get funding for a district-level partnership. The U.S. Department of Ed limited eligibility to high-need school districts so that made it easy for us because we have two high-need school districts in the state. We have [redacted] and [redacted]. So I applied for two grants. The first one I applied for was [redacted] million for [redacted] and we won that, and then we had that money for five years. And then five years later, I applied for another [redacted] million – actually it ended up being closer to [redacted] million – for [redacted]. So we had that and the money primarily comes to the university to be distributed to the partner schools and district. So I was able to...because of the preexisting state partnership, we were in a very good position to win that competitive funding.” (L120-131)</p>	<p>Funding doesn't fit into complex adaptive systems or collective impact, but it is a recurring theme in these discussions.</p>
<p>Learning Opportunities</p>	<p>“We used the funding primarily to support teacher professional development and scholarships for new teachers. So it was recruitment -- we used the money for recruitment. You can spend [redacted] million really fast if you paid for students to get master's [redacted] degrees. You can pay a two-year master's degree and pay a stipend for student teaching, and you can get a lot of students to apply for those scholarships. And similarly, we paid for teacher professional development in the summer. If you can pay teachers for two-week salary to</p>	<p>This fits into the encouragement of inquiry, learning, trial and error, and divergent thinking (Dooley, 1997) and mutually reinforcing activities (collective impact).</p>

	<p>come to the university and take courses that enhance their discipline and knowledge, that's also a very good thing. I'm oversimplifying the grants; they were very complicated. But essentially they were for recruitment of new teachers in science and math and professional development of existing teachers in science and math. And it brought higher education content faculty into work with K-12 teachers." (L132-141)</p>	
<p>Question: So the next question I've got is how did you develop a common mission for these partnerships? And I'm guessing in the first one that it was really developed in those working group conversations?</p>		
<p>Collaboration</p>	<p>"Yeah. I think basically the mission – these were problem-solving groups and we were certainly aware there were a lot of problems, a lot of issues – teacher retention issues, teacher capacity issues, university recruitment issues. So we basically started developing a mission around "What are the problems we need to solve?" And you get consensus about everybody has problems – Help us with this! Help us with this! Help us with this! And then we sort of prioritized those problems and tried to figure out how we could bring our own strengths to bear and what did we need. What did we need from the state? What did we need from external funders? What did we need from new regulations? You can address some of those issues in a lot of different ways. If one of those regulations is 100 days of student teaching -- which is one of our regulations in [redacted] – and it turns out that that</p>	<p>This meshes with collective impact (common agenda) as well as Dooley (1997) – creation of shared purpose, encouragement of inquiry, learning, trial and error, and divergent thinking, and cultivation of diversity, specialization, differentiation and integration, and creation of shared values and expected action. It also fits into emergent properties, the presence of hybrids of social and material element, and non-linearity (Hill, 2011). Plesk (2001) matches up with emergent behavior, context and embeddedness, and coevolution.</p>

	<p>changes in the way teachers are prepared, changes in the way teachers are offered professional development. I think all of those are changes are a function or are better because of the P-20 work." (L257-271)</p>	
--	--	--