Integrative Leadership and Cross-Sector Reforms: High School Career Academy Implementation

in an Urban District

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Abstract

Purpose: This study analyzed leadership structures, processes, and practices that have enabled and constrained an ambitious career and college readiness reform within an urban school district. It was designed to discern how leaders worked across cross-sector boundaries to support district-wide high school career academy implementation.

Research Methods: Case study methodology was applied to examine a long-standing cross-sector collaborative partnership that supports the district's career academy reforms. Data were collected over 15 months through interviews, observations, and document analysis. Crosby and Bryson's (2010) integrative leadership theoretical framework guided data collection and analyses.

Findings: The integrative leadership framework was suitable for understanding the boundary-spanning leadership work that was occurring, involving school leaders, civic officials, and business members in leadership roles to support academy reforms. As expected, for example, system turbulence was key to the reform's initiation, establishing legitimacy was arduous and important, and numerous facilitative structures were developed. Some nuances were also apparent. For instance, we noted the motivating power of the shared goal to enhance the relevance of student educational experiences, while business and civic leaders were particularly interested in developing student employment skills. We noted formidable political opposition and the development of a new, cross-sector power structure.

Implications for Research, Policy, and Practice: Current educational theory is inadequate to explain or inform educational leaders who increasingly are entering into cross-sector collaborations. Scholars should seek to address this issue by prioritizing this line of research. Practitioners can benefit from insights gained by applying the integrated leadership framework to cross-sector initiatives.

Keywords
career readiness, college readiness, cross-sector collaboration, educational leadership, educational reform

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In the United States, there is a strong policy drive to strengthen elementary and secondary

students' preparation for college and careers (Darling-Hammond, Wilhoit, & Pittenger, 2014).

College and career readiness (CCR) initiatives take many forms but are increasingly cross-

sectoral in nature (Henig, Riehl, Houston, Rebell, & Wolff, 2016). Partnerships involving school

districts, higher education, civic agencies, nonprofit organizations, and business sectors are

intrinsic to CCR-related policies (Malin & Hackmann, 2017a), including initiatives intended to

ease students' transitions to postsecondary or workforce settings (Malin, Bragg, & Hackmann,

2017).

Cross-sector collaboration is "the linking or sharing of information, resources, activities,

and capabilities by organizations in two or more sectors to achieve jointly an outcome that could

not be achieved by organizations in one sector separately" (Bryson, Crosby, & Stone, 2006, p.

44). Cross-sector approaches to enhance CCR make sense on a basic level. If K-12 and higher

education institutions are better aligned, combined efforts can address shared CCR interests and

outcomes (Henig et al., 2016). Likewise, local business and civic officials possess insights about

workforce trends and relevant knowledge/skills that can inform educators' programming designs,

ensuring the curriculum is relevant and that students graduate with skills needed in the local

workforce. Yet, we note little educational scholarship focused upon studying the leadership and

organizational tasks necessary to successfully pursue and implement such reforms. Public

administration scholars have studied cross-sector partnerships (Bryson, Crosby, & Stone, 2015),

including the role of leadership within such configurations (Crosby & Bryson, 2010), but there

has been little research in education, where such activities are increasingly common and their successes are predicated upon effective leadership across organizational boundaries.

Accordingly, applying Crosby and Bryson's (2010) integrative leadership framework, this case study analyzes the structures, processes, and practices that have facilitated career academy implementation within a large urban school district. Since 2007-08, the district has implemented career academies in its high schools. This study addresses the following research question: How are educational, business, and civic partners working across boundaries in leadership roles to support high school career academies?

In the literature review that follows, first we describe the policy drive to enhance students' CCR. We also describe cross-sector collaborations, stressing their leadership complexities. We then describe high school career academies; reviewing existing research, we argue that their robust operation necessitates cross-sector collaboration and unique and complex leadership distribution. We then describe the conceptual framework we employed for this study.

College and Career Readiness and Cross-Sector Collaboration: Policy and Practice

Pressures to address and enhance students' CCR in the U.S. are persistent and warranted, with high schools frequently being the primary site of reforms. For one, the value of a high school diploma, by itself, has decreased: The path from high school graduation and into employment increasingly requires postsecondary credentials (Carnevale, Cheah, & Hanson, 2015). Yet, the path to viable middle-class employment does not always require 4-year college completion but does require general and career-specific skills and dispositions necessary for employment in high-demand, high-wage sectors (Conley, 2012). Facing these realities, high school educators and policymakers must consider whether and how to adjust their programming: They could continue to sort students into college *or* career preparatory tracks, adopt an

unwavering "college for all" approach, or provide integrated college *and* career preparation.

Evidence now favors the third approach: Students benefit from high school reforms that

simultaneously prepare them "for *both* employment *and* a full range of post-secondary

educational options" (Stern, 2015, p. 4, emphasis in original). The need for high school reform is

especially acute when considering public urban education, where gaps between desired and

actual student outcomes are particularly pronounced (Milner & Lomotey, 2013). Concerning

CCR, a body of research reveals unacceptable inequities of access, college readiness, college

enrollment and completion, and career outcomes, by race, class, gender, and community context

(ACT, 2017; Bragg & Taylor, 2014; Musu-Gillet et al., 2017).

Career academies are a particularly promising high school reform fitting within this

broader policy press to improve students' CCR. Academies are the most widely researched and

implemented among reforms aimed at creating "college-and-career pathways by combining

career and technical education (CTE) and academic coursework" (Stern, 2015, p. 8) and

including genuine career preparatory opportunities. Various benefits can accrue: Students in

integrated pathways programs may graduate better prepared to access preferred employment

while their option to attend college remains open. In contrast, U.S. high schools have customarily

been organized to prepare students to pursue college *or* career—e.g., they would progress either

within a vocational or an academic track. Compelling economic and normative arguments have

been made to support integrated pathways reforms, and these claims are supported by evidence

that they can yield improved student outcomes (see Oakes & Saunders, 2008; Stern, 2015).

Although CCR reforms take many forms, they are often cross-sectoral in nature. Career

academies (Stern, Dayton, & Raby, 2010; Stern, Raby, & Dayton, 1992) and early college high

schools (see Edmunds et al., 2010), for example, rely upon robust partnerships with local

businesses and higher education institutions. State and federal policies also often require or

encourage local partnership formation (Malin et al., 2017a). The 2006 reauthorization of the Carl

D. Perkins Vocational and Technical Education Act (Perkins IV) requires states to "provide

students with strong experience in and understanding of all aspects of an industry, which may

include work-based learning" (S. 135) facilitated through education and business partnerships.

Likewise, the Every Student Succeeds Act of 2015 (ESSA) contains several provisions requiring

or encouraging cross-sector partnerships aimed to improve CCR activities (Malin et al., 2017a).

Cross-sector collaborations are increasingly prevalent, as local government agencies

partner with community entities across sectors to address complex, vexing problems (Kettl,

2015). In education, Henig et al. (2016, p. 4) observed:

> collaborative efforts increasingly seem necessary to address the complex challenges
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> facing students, schools, and communities today. For many persistent problems in
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> education and community well-being, root causes and needs are multifaceted and
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> straightforward solutions do not exist…Under these conditions, it seems unrealistic to
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> expect solutions to emerge from any single agency, organization, or social sector.

Within public management and related fields, researchers have highlighted successful cases of

cross-sector collaboration while also identifying challenges (e.g., Andrews & Entwistle, 2010;

Hodge & Greve, 2007). Noted Bryson et al. (2015, p. 648), "cross-sector collaboration is hardly

an easy answer to complex problems." Collaborations often form within "turbulent

environments" (Crosby & Bryson, 2010, p. 218), and political, economic, and social institutional

configurations may constrain efforts at collaboration. Also, some research suggests partnerships

formed between government (including school systems) and business entities are more

challenging to develop than those between government and nonprofit agencies (Salamon, 2002).

Leaders must be adept systems thinkers (Senge, Smith, Schley, & Laur, 2008), understanding that complex problems extend beyond school district boundaries and cannot be solved without boundary spanning collaboration, investments, and commitments. Those seeking to address such problems often "have no choice but to work across sector lines to develop shared understandings of the problem and commitments to shared solutions" (Bryson et al., 2015, p. 648).

Public management scholars recognize leadership as central to the success of cross-sector collaborations. Research has identified essential roles played by community partners, including as sponsors, champions, and boundary spanners (Bryson et al., 2015). Leadership also is essential through structural arrangements and processes (Bryson et al.; Morse, 2010) so shared goals can be achieved. To Morse (2010), it is precisely *leadership* that enables cross-sector collaborations to coalesce, absent hierarchical structure. Given inherent challenges, though, "the normal expectation ought to be that success will be very difficult to achieve…regardless of leadership effectiveness" (Crosby & Bryson, 2010, p. 227).

Career Academies: Description, Outcomes, Leadership Complexities

A career academy is "a type of school-within-a-school or small learning community (SLC) that provides a college-preparatory curriculum with a career-related theme" (Stern et al., 2010, p. 4). They generally share three basic features (Stern et al.):

- In small learning communities, subsets of students have some of the same teachers—from academic and career/technical disciplines—for two or more years.
- A college-preparatory curriculum is organized around a career theme (e.g., health care, public services). Academic and technical coursework and out-of-school learning opportunities are integrated so students can become prepared for various career and postsecondary options.
- Partnerships include postsecondary education and employers, who serve as guest speakers, host field trips and internships, and provide financial or other needed supports.

Career academies are aimed to increase student engagement by aligning instruction to local work contexts and viable career options (Hemelt, Lenard, & Paeplow, 2017) within students' interest areas. First implemented in Philadelphia in 1969 (Neubauer, 1986), they have since become a major reform, present in over 6,000 of the nation's high schools (Snyder & Dillow, 2012).

Research has shown academy models can positively affect some student outcomes (Stern et al., 2010). Reller (1984) found participating students to have better grades, course credit completion, and attendance than non-participants. Maxwell (2001) reported academy students were less likely to require English remediation and had higher course completion rates than comparison students. The most conclusive evidence of career academy effectiveness comes from a series of MDRC studies (Kemple, 2001; Kemple & Snipes, 2000; Kemple & Willner, 2008): Exploiting lottery-based student placements, the researchers estimated academies to have a positive, lasting influence on earnings and employment of males but not females. The academies improved student attendance and reduced dropout rates, increased high school credits earned, and increased students' participation in work-based learning, although they did not significantly affect standardized test performance (Kemple & Snipes, 2000) or graduation rates (Kemple & Willner, 2008). Based on the MDRC work, the Coalition for Evidence-Based Policy (2014) deemed the career academy approach to meet their "Congressional Top Tier" standard, meaning it produced sizable, sustained benefits to participants and to society. Kautz, Heckman, Diris, ter Weel, and Borghans (2014) concluded career academies may benefit students by improving non-cognitive skills, including workplace skills, through internships and real-world activities afforded via business and community partnerships.

Hanser and Robyn (2000) conducted comparative case study research of nine Junior Reserve Officers Training Corps (JROTC) career academies. Studying implementation to

identify strengths and generate recommendations, the researchers commented, "while many contextual variables affected implementation of the JROTC academies, …none did so strongly as the characteristics and continuity of leadership" (p. 69). Specifically, they found school leaders' programmatic commitments to be key; although principals did not need to be highly active implementers, they needed to address "the administrative and developmental details necessary to establish this complex reform" (p. 69). They also pointed to academy directors operating under principals' guidance, noting they must be "skilled educators experienced in implementing a complex reform" (p. 69). Two of Hanser and Robyn's key findings relate to leadership. First, instructional reforms were slower to develop than structural reforms: Few sites demonstrated true integration of CTE and academic content, and few evidenced ample business partner participation. The authors suggested in-service training should be provided to show teachers how to develop an integrated curriculum and schools should provide common planning time for teachers to engage in curriculum development and cross-curricular instructional design. Second, the authors reported "the lack of formal agreements between program sponsors and school districts and between the districts and the schools hindered implementation" (p. 70).

Malin and Hackmann (2017a, 2017b) studied leadership associated with career academies, applying distributed leadership theory to their case study analyses. They examined not only the role of the principal but also that of other formal and informal leaders in designing, implementing, and sustaining career academies. Reviewing the formation of academies one urban school district, Malin and Hackmann (2017a) extracted seven leadership themes:

building a shared vision, creation/employment of supportive structures and related tools
and approaches, expanding opportunities to perform leadership, emergence of leaders and

champions, cultural shifts enabling enhanced participation and organic change,

experienced benefits of change, and experienced challenges of change. (p. 10)

They identified specific leadership approaches applied by educators and their partners and

identified supportive structures and tools. Although distributed leadership theory was helpful in

describing educators' leadership activities, they found notable (and extending beyond their

frame) the "extent to which leadership was shared with community members—individuals who

are external to the school or district" (p. 20).

From this review, it is clear leadership is central to the success of career academies.

However, leadership aspects have not yet been adequately studied, particularly within the context

of cross-sector collaboration, and, thus, the empirical basis of leadership guidance is thin.

Consequently, to guide the design and analysis of the present study, we turned more broadly to

the literature on cross-sector collaboration, and particularly toward scholarship into leadership

within complex, cross-sector arrangements. Education initiatives have been understudied within

the cross-sector collaboration literature (Henig et al., 2016) and, when they are included, it has

typically been within the context of a larger discussion regarding how partnerships enhance the

provision of social services. Nevertheless, the extant literature tends to acknowledge the

centrality of leadership in cross-sector collaborations (see Bryson et al., 2015). In the present

study we draw from a theoretical framework for understanding integrative leadership across

sectors (Crosby & Bryson, 2010). Accordingly, we examine this framework's extension into an

education-centered context, enabling its testing and refinement while also providing a potentially

powerful lens through which to examine the leadership surrounding the development and

evolution of a complex, education-centered cross-sector collaboration.

Conceptual Framework: Integrative Leadership

The robust implementation of a district-wide career academy model necessitates the engagement of individuals across numerous organizations; we were interested in learning how leaders worked across organizational boundaries, as well as within the school district, to facilitate this reform. Our research was guided by a theoretical framework, set forth by Crosby and Bryson (2010), for understanding integrative leadership. Crosby and Bryson define integrative leadership as "bringing together diverse groups and organizations together in semi-permanent ways, and typically across sector boundaries, to remedy complex public problems and achieve the common good" (p. 211). Expanding upon their cross-sector collaboration framework and set of propositions initially created in 2006 (Bryson et al., 2006), Crosby and Bryson developed a revised framework incorporating findings from their review of recent literature and ongoing research. The initial framework identified five interactive elements (initial conditions, process, structure and governance, contingencies and constraints, and outcomes and accountabilities) affecting cross-sector collaboration but did not focus specifically upon leaders or upon leadership actions. The revised framework (Figure 1) emphasizes the essentiality of leaders who work across organizations to *integrate* the five elements. Crosby and Bryson asserted, "leadership work is central to the creation and maintenance of cross-sector collaborations that advance the common good" (p. 212). They developed 22 testable propositions regarding the role and nature of leadership in relation to each element, highlighting that "leaders and leadership are crucial in integrating all aspects of the framework" (p. 212).

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Insert Figure 1 about here

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A priori, this framework resonated with our working assumptions about the complexity of leading across sectors; however, the framework was not informed by research in which public school reforms figured centrally. Rather, Crosby and Bryson (2010) focused upon public administration and how multi-purpose governments and officials (e.g., city governments) created and managed their collaborations, including but not limited to public-private partnerships. While viewing the public-school sector as substantially unique, we also surmise there are common aspects of public sector and school leadership; therefore, we extend this framework to test its applicability to cross-sector collaboration involving educational reforms. Insofar as it aligns, this framework will have immediate utility for researchers, school leaders, and those with whom they collaborate. Yet, we also expect important context- and sector-specific nuances. For example, cultures, leadership arrangements, organizational structures, and institutional logics within school systems may differ from those within local governments, community agencies, businesses, and industries, which may influence the leadership strategies that are, or should be, undertaken to forge and maintain cross-sector collaborations.

For our research, we were concerned with the framework in its entirety, because Crosby and Bryson (2010) noted that leadership actions integrate all five elements. We studied a mature project: The school system and partnering entities have been collaborating for a decade. Thus, we assessed the initial conditions so we could discern environmental factors prompting the collaboration and identify key actors. We sought to determine, for example, whether our case provides evidence consistent with the proposition: "Leaders are most likely to try cross-sector collaboration if they believe that separate efforts by several sectors to address a public problem have failed and the actual failures cannot be fixed by a separate sector alone" (p. 218).

The second element relates to formal and informal processes and practices. According to Crosby and Bryson (2010, p. 219), "a process is a series of linked actions or proceedings," while a "practice incorporates process, but is also a contextually situated, socially accomplished flow of organizational action." Important integrative practices within this element include wise use of forums, the creation of "effective boundary-spanning groups, boundary experiences, and objects" (p. 219), and building trust, legitimacy, and leadership capacity. We sought to examine the authors' propositions pertaining to this element. For instance, "cross-sector collaborations are more likely to succeed if leaders make sure that trust-building activities (including nurturing cross-sector understanding) are continuous" (Crosby & Bryson, p. 223).

The third element includes structural arrangements and governance of the cross-sector collaboration, and the framework provides significant detail regarding their nature and influence. Both are theorized to be dynamic elements, influenced by context and the strategic purpose of the collaboration. An example proposition concerning governance follows: "The process leaders follow to develop collaboration structures and governance mechanisms is likely to influence the effectiveness of the structures and mechanisms" (Crosby & Bryson, 2010, p. 225).

The fourth element considers contingencies and constraints to the formation and maintenance of effective cross-sector collaborations, which tend to occur in either top-down or bottom-up fashion. Conflicts arising from power imbalances, shocks, or competing institutional logics are common, and leadership figures centrally in addressing these. Crosby and Bryson note several key functions of leaders within this element. For instance, noting competing logics can significantly undermine collective action, they propose "astute leaders will reframe disputes in ways that can appeal across sectors" (p. 226).

The framework's fifth element addresses outcomes and accountabilities. Ultimately, cross-sector partners are concerned with outcomes, with enhancing the public good and creating value. First-, second-, and third-order effects are possible. Crosby and Bryson (2010) assert these collaborations are more likely to be successful when leaders insist on robust accountability systems that can track inputs, processes, and outcomes, devote time to interpretation of and use of data, and engage in regular reassessments of their collective efforts.

Research Methods

We applied qualitative case study methodology to examine a cross-sector collaborative partnership formed to support career academies, implemented beginning in 2007 in Marshall School District[1]. Data were collected over 15 months (May 2016 – July 2017) through interviews, observations, and analysis of documents pertaining to the academy model, including those provided by the district and civic agencies, and district website reports. The focus of this study was leadership actions in support of district-wide deployment of academies, and 2 of the 12 neighborhood high schools were selected for in-depth study. Anderson High School and Brentwood High School enroll lower percentages of students of color and economically disadvantaged students than most of the district's academy schools (Table 1) and represent two of the district's three largest high schools. District leaders selected these schools because they were led by executive principals who have worked with academies for several years.

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Insert Table 1 about here

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[1] Pseudonyms are used for the district, civic organizations, businesses, schools, and interview participants. See Table 2 for pseudonyms of cross-sector representatives quoted in this article.

Fifty-three individuals were interviewed (Table 2). Twelve individual interviews were conducted of district administrators, executive principals, academy coaches, members of community civic organizations, and selected business leaders, with focus groups conducted with academy principals, academy team leaders, counselors, business partners, higher education partners, and students. Sample interview protocols for district and building leaders, and for business/community leaders, are included in the Appendix. We spent numerous days in the community, attending district-wide and cross-sector retreats and visiting the two high schools. During high school visits, we toured the schools, observed classrooms in session, observed an academy advisory board meeting, and conducted interviews.

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Interviews were audiotaped and transcribed, with transcriptions returned to participants for member checks (Glesne, 2016). During ongoing data analysis, relevant documents and processes were identified and targeted for reference during subsequent data collection. Selected participants were contacted for follow-up interviews to expand upon initial responses. We used the integrative leadership framework (Crosby & Bryson, 2010) to guide our data analysis. We independently read through transcripts and reviewed documents and observational data, with codes based upon the integrative leadership framework (Crosby & Bryson, 2010). We met repeatedly to discuss and review the data and coding until we reached consensus.

Case Description

Located in a large metropolitan area in the southern United States, Marshall School District (MSD) enrolls over 80,000 students; 70% are non-White and nearly three fourths qualify

for free or reduced-price lunches. Marshall United, a community empowerment organization, was formed in 2004 with cross-sector membership including government entities, civic organizations, business/industry, faith-based groups, and school officials. A primary purpose of Marshall United is to support MSD initiatives, and task forces were formed to address prekindergarten, elementary, middle, and high school systems. The high school work group identified numerous concerns, including a graduation rate below 60%, low student attendance, disruptive behaviors, and several low-performing high schools in danger of state takeover. School and district officials had been working on an initiative to improve the high school culture and climate but with limited success. Discovering a U.S. Department of Education smaller learning communities grant, several principals suggested the district submit a proposal. A Marshall United staff member volunteered to write the proposal and, with broad cross-sector participation, a vision, structure, and plan were formed to implement career academies in MSD high schools. The proposal was submitted and the federal grant was awarded.

Career academies initially were implemented in eight high schools in 2007-2008 and the remaining four high schools followed in 2008-09. All 12 neighborhood high schools now operate under a wall-to-wall model. Each school contains a freshman academy and 2-5 specialized college/career academies for students in grades 10-12; over 40 academies are offered across the 12 schools. Students are automatically admitted into their neighborhood high school, and they may apply to another school if their intended career field is unavailable at their zoned school. During their freshman year, students participate in career exploration activities through a seminar course; in their second semester, they select and apply for admission into a career academy. Examples of career academies include the Academy of Entertainment Management at Smith High School and the Academy of Engineering and Automotive Technology at Jones High

School. Academies are unique to each school, designed with input from the business community. Academies and related career pathways are offered and annually reviewed, based upon community labor market needs; to illustrate, Health Science pathways are offered in nine schools, with Architecture and Construction pathways only available in one school. Specialized career pathways are offered within each career academy. For example, the Digital Design and Communication academy at Johnson High School includes Audio Production, Broadcasting, and Design Communications pathways. Students complete a minimum three-course sequence within their career pathways, with many earning professional certification and/or college credit.

High schools follow a uniform structure, with an Executive Principal charged with overall oversight. Each academy is led by an Academy Principal, who is responsible for all activities occurring within this unit, including hiring, supervision, curriculum, and student discipline. Academy Team Leads work with the teachers assigned to each academy team, with a goal to provide an interdisciplinary career-focused curriculum, supported by numerous business partners. An Academy Coach functions in each school, who serves as a liaison between the school and the business community, coordinates academy advisory board meetings, monitors academic performance data, coordinates activities across teams, represents the school on district-wide committees involving the academy, and leads professional development for team teachers. A goal of the academies has been to transform teaching and learning, to include problem-based learning and instruction that is focused on students' readiness for college and careers.

Because the academy model is a community-wide initiative, its successful implementation relies on the investment and engagement of a network of leaders across community sectors. Due to their involvement since the beginning, MSD considers the following entities its founding partners: Marshall United; Marshall Civic Bureau, the community civic

organization; Schools for All Foundation, the education foundation serving the community; and Global Industries Foundation, a nationwide corporate philanthropic foundation based within the community. As will be explained later in the findings, business and civic leaders participate on a CEO Champions council, Industry Partnership Councils, and local school Academy Advisory Boards. In addition, over 350 community partners are involved within the 12 schools, providing nearly $3 million in in-kind contributions and volunteering 25,000+ hours annually.

Data indicate numerous positive features and gains. A hallmark of academy programming is the involvement of business partners, through work-based learning experiences and integration of career aspects in classrooms. Students participate in career exploration fairs as freshmen, industry field trips as sophomores, job shadowing as juniors, and internships as seniors, and many teachers complete summer externships in local businesses. Each senior completes a capstone experience involving a research paper, portfolio, and presentation. In the 10 years since implementation, the annual graduation rate has improved from 58% to 81% and the attendance rate improved by 4%. Student discipline has improved, with schools experiencing double-digit percentage declines in in-school suspensions, out-of-school suspensions, and expulsions. Student proficiency scores on state-mandated tests has increased by 14% in English I and 19% in Algebra I, and the numbers of students completing Advanced Placement (AP), International Baccalaureate (IB), and dual credit courses and earning industry certifications increased substantially. Although ACT scores have held steady, estimated additional 13,000 students have graduated since the academy model was implemented. Based upon the earnings differential between high school dropouts and graduates, district officials estimate an annual community economic impact of over $100 million.

Findings

In this section we present findings, applying the integrative leadership framework to our analysis of cross-sector leadership activities supporting the district's career academy model. While sharing findings according to the elements of the framework, we have also ordered and detailed this section with the aim of maximizing insights into when, why, and how these collaborations initiated and developed, focusing on leaders' roles and activities. Accordingly, we review initial conditions leading to academy development, structure and governance, processes and practices, contingencies and constraints, and outcomes and accountabilities.

Initial Conditions

Initial conditions involve factors that prompt the formation of cross-sector alliances, including such aspects as the *general environment* (e.g., system turbulence), *sector failure* (e.g., inability to resolve the problem by one sector alone), and *direct antecedents* (e.g., initiators, sponsors, champions; general agreement on the problem; use of existing networks) (Crosby & Bryson, 2010). These factors are addressed in this section.

The *general environment* within the MSC high schools was turbulent. Disciplinary issues, academic underperformance, and low graduation rates in several MSD high schools in 2007 meant state takeover was imminent; thus, school leaders and community partners were feeling a sense of urgency to identify needed reforms. Alice, from Marshall United, recalled: "There were schools in Marshall that I was nervous to walk into; I didn't feel safe." Sarah, a district administrator, noted community-wide consensus on the issue: "We had a 58% graduate rate at the time…it was abysmal. We were going down the tubes fast." David, in a pivotal leadership role as a Civic Bureau officer, recalled eight high school principals were experiencing tremendous pressure: "No Child Left Behind was breathing down their neck. They needed to do something different or else they were going to lose their jobs or get taken over by the state."

Concerned about *sector failure*, cross-sector partners obtained a grant from the U.S.

Congress of Mayors to engage in a 4-5 month planning process to examine the high school

issues. School leaders involved with this group agreed these problems were persistent, systemic,

and difficult to solve, and they embraced this issue as a shared, community-wide concern. Sarah

voiced administrators' frustrations:

> We would sit around the table trying to figure out basically how to fix it, what the issues were. And we started looking at the dropout data and the at-risk, really looking at the mobility issues that we were having and that we were constantly band-aiding rather than looking at it from a different perspective.

David reported overall agreement among the planning group that students were disengaged

because they did not perceive the curriculum as relevant. Some students were dropping out, and

many who did graduate did not have sufficient skills to obtain employment in the community.

As a *direct antecedent* to collaborative problem solving, the planning team "formed a

core, but then also reached out and brought in other stakeholders from the community," David

recalled. Through this process, a consensus emerged to reorganize "around a particular career

theme, or anything of interest to engage kids as to why they are in school." A district

administrator in charge of the high schools discovered the federal smaller learning community

(SLC) grant opportunity and shared it with Sarah. She recalled: "I started reading the grant and

looking up and I'm like, 'This is it!' Because they had already done the research on the dropout

data and how the [SLC] affects and gives personalization to the kids." Despite a burgeoning

coalition supporting career academies that was led by the school principals, the district's chief

academic official was opposed. Alice explained the power of the cross-sector network in

addressing this conflict:

> She really saw increasing AP as the way to transform high schools and we all know that wasn't the way to do it. And I think she didn't really understand the [SLC] model and saw it as a very…kind of vocational education. She really misunderstood it; she actually

did a lot to try to block it. And that's important because Marshall United, like I said, our mission is to support the strategic plan of the school district; we're not an advocacy organization. We don't push on the schools. In that instance that was the right thing that needed to happen. We weren't forcing it on the schools but we did help internally in an interesting way by having this external support. Now, there were enough people in the district…that believed this was right, that this one person wasn't able to kill it, which probably would not have happened had there not been this external interest.

Yet, another potential barrier arose. Once the academy approach was decided, the district's grant writer stated the grant deadline could not be met and declined to work on the proposal. Sarah explained the principals tapped into the cross-sector partnership: "We sought out the help from Marshall United and they said, 'Yeah, we can help you write it,' and they did it."

Structure and Governance

Structure and governance factors include determining cross-sector membership, reaching agreement on structural arrangements, and identifying governance mechanisms (Crosby & Bryson, 2010). As an educational reform based within the school district, primary responsibility for the academy model rests with district leaders and high school principals. School district leaders consider their *membership* to include their initial partners: Marshall United, Marshall Civic Bureau, Schools for All Foundation, and Global Industries Foundation. These members agreed on *structural arrangements* and *governance mechanisms* to support the academy model and identify needed changes, which collaborators have described as a tiered approach. The CEO Champions, consisting of leaders of major industries located in the community, monitors academy progress and ensures accountability. David described the role of this group:

> As the private sector steps up and donates…several million dollars a year, time and money, we want to make sure that school systems are honoring their commitments to have academy coach positions, or PD, or whatever it might be that the academies need. So, that's something that we do every spring, before the budget's approved by the school board, we make sure we understand as a group, the CEO Champions, what's in that budget that supports the academies and is anything missing or needed.

Industry Partnership Councils also have formed, consisting of local business/industry leaders divided into five career fields. Partnership Councils meet quarterly with school leaders to review local and regional workforce trends and to provide input when academy or career pathways modifications are considered. Initially principals made changes without gaining business input or district approval, which was found to be problematic and inequitable. Sarah noted the governance structure that is now in place:

> Now we have a program modification process built in, where if I at School A want to alter, change, delete, add, I have to go through this process and they write up, they have to include their data, they have to include what the new projections are, why this shift is necessary. It goes to the Partnership Council where they discuss it. They give their blessing or they ask questions, and then it comes back and we make a final decision at the central office whether or not they can make this change.

Brian, from Schools for All Foundation, described how the councils function:

> We look at student interest, we look at workforce trends, the projections of job growth within the next 5, 15, 20 years. Those statistics help develop the conversation so that the business partners can say, "Really, I think we actually should add another health care academy or maybe we need an HVAC pathway within this particular academy."

Within the school district, leadership functions have been restructured. Whereas previously the 12 traditional high schools operated independently, the academy approach requires the district and schools to be interdependent, thus ensuring consistently and fidelity of the model. At the district level, the director of secondary education and career-technical education director work collaboratively to guide continuous improvement of the academies. They hold regular meetings with the 12 academy coaches and Executive Principals to maintain consistency across schools, monitor progress, and discuss needed adjustments. Led by an Executive Principal, each school is subdivided into academies operating as smaller learning communities guided by Academy Principals. Adam, Executive Principal at Brentwood High School, noted this change in authority: "I don't like my Principals being called Assistant

Principals. They're called Academy Principals because they run their own schools." Academy

Coaches function in non-administrative roles, coordinating activities across academies,

facilitating partnerships, and developing dual credit/enrollment agreements with higher education

institutions; Rebecca described this role as "boots on the ground;" Team Leads serve as the

instructional leaders of each Academy Team. Each academy includes an Advisory Board,

chaired by a business partner, that includes the Academy Coach, teachers, parents, and students.

Processes and Practices

Factors involving processes and practices include the design and use of forums, arenas,

and courts; forging agreements; planning; managing conflict; building leadership; building trust;

and building legitimacy (Crosby & Bryson, 2010).

Forums, arenas, and courts are essential in "shared power situations" (Crosby & Bryson,

p. 219), to engage in decision-making processes and reach shared agreement on norms and

practices. Cross-sector leaders agree academy effectiveness hinges on community-wide

involvement, with academies aligned to workforce needs. Sarah described how cross-sector

forums helped school leaders adjust course offerings based on community input:

> What we were looking at in 2007 was where our kids would have jobs after they've
> finished high school, and some technical school or some two-year college or whatever…
> So, we took a hard look at that, and that was one of the number one things that helped us
> to inform what academies we were starting. The second thing was, we streamlined our
> Career and Technical Education and only looked at high-skill, high-wage jobs. So, we
> had tons of Family Consumer Science; we cut them all except for 2 and made teaching
> academies out of them instead of the traditional Family Consumer Science courses. We
> had 10 cosmetology tracks; we have 2. We weren't trying to dissuade people from doing
> what they were interested in but we wanted to raise the wage level of our community.

School leaders utilize forums to access the expertise and unique contributions of all

partners. Janet, a central office administrator, explained "the business partner has a louder voice

than we do here" when academy or career pathway revisions are considered. The Schools for All

Foundation facilitates business partner connections; Brian explained it is "one of the very first organizations the district reaches out to, to communicate a new need or change or a shift." Ryan, a business leader, described the business role on Advisory Boards: "We look at the type of certifications that will be helpful…We talk to the teachers, and we look at the curriculum." The Marshall Civic Bureau led the revision of state laws to modify teacher-student staffing ratios in career/technical education courses, actively lobbying state legislators to pass this legislation.

Agreements have been forged between the school district and both business and postsecondary partners. Wendy, Anderson High School Executive Principal, noted the Schools for All Foundation "vets our partners, tracks the…in-kind donations, so for every hour of partners in our school…we can measure the monetary impact of our partnerships. They develop the [memorandums of understanding] between a partner and a school." Alice explained postsecondary partnerships included "building out articulation agreements [and] increasing dual credit offerings through the academies."

Crosby and Bryson (2010) note how successful cross-sector collaborations tend to benefit from either organized or emergent *planning*, with the latter being more likely to occur when the collaboration is not mandated. Planning processes have evolved through the 10 years of cross-sector collaboration into more structured arrangements. As an example, school-level planning occurs through Academy Teams and building leadership team meetings. Jessica, a Team Lead, described how the district high schools' alternating-block schedule assists with planning: "Our master schedule is designed such that A Day is academy planning…and then B Day is department planning. So, we'll meet once a week. As a team leader, we call those meetings, we set the agenda, facilitate those meetings." She also highlighted Wednesday after-school meetings involving the building administration, counselors, and Academy Coaches, which helps maintain

constituency across the academies. Frank, an Academy Principal, described the school planning process: "In the summer, we plan out the year and we go through 'this is what we're going to do, and this is how the business partners can help us.'" At the district level, planning includes regular meetings of the schools' Academy Coaches. Community leaders and district educators jointly participate in summer retreats, to promote the continuing evolution of the academy model.

Few descriptions of leadership disagreements emerged, likely because partners are able to *manage conflict,* working through issues and have designed processes to address them. Janet described a conflict occurring several years ago:

> We had principal that wanted to stop the Hospitality [Academy], keep culinary, but put culinary in a Health Science Academy. It's sort of a weird mix, but that culinary was looking at healthiness and that sort of thing. And so, they just did it. And so that's when we had a partner at a local hotel that said, "Hey, no one talked to us."

This situation prompted the development of the previously described process, in which high school leaders must now present proposed academy changes to Partnership Councils for their input prior to seeking district review and approval.

The cross-sector reform has created avenues to *build leadership* capacity and broaden leadership distribution in the schools, through Team Lead, Academy Coach, and Academy Principal appointments. Rebecca viewed serving as Team Lead as an opportunity to gain experience and visibility, which would help in obtaining an administrative position: "Most people who volunteer to do it would use it as a stepping stone, as an opportunity to say, 'I want to be an admin; I want more of a leadership role." Executive Principal Adam agreed the Academy Principals are prepared to quickly transition into middle level or high school Executive Principal positions: "If you can run your school here that's going to give you a bedrock to actually be a principal later on because you'll know how everything works."

The importance of *building trust* was highlighted by school and community leaders. Adam explained he trusts his Academy Principals, giving them broad authority over their assigned academies. Brian described the importance of the Schools for All Foundation to develop long-lasting, trusting relationships with local businesses: "We want the relationship between the business community and the district to be forever, but we also know that we can be transient with relationships…I want to be clear that business partners are capable of moving their relationship."

Cross-sector collaborations are more likely to succeed when they can, over time, *build legitimacy* of their joint work (Crosby & Bryson, 2010). Business partners perceive students' career skills development as a legitimate aspect of academies, as Will, a business leader, noted:

> Working with [students] on those transferable work skills that no matter what you're doing, there is a transferable work skill here: problem-solving, thinking, accountability, just helping them to see those connections that the choices you're making right now do have relevance to the future…And just helping them with understanding work ethic, on-time and ready to go, consistency, and when there's issues to speak about it, not to try to cover that up.

Alice cited an ongoing need to educate community members about the academies: "People ask us that a lot of times, 'Why in the world would you take all of your schools and do wall-to-wall academies?' That really is why, if we believed it was good for some, then we should really be doing it for all." David acknowledged legitimacy is necessary throughout the community and also across the high schools:

> And our most affluent of those 12 high schools sort of pushed back on it and sort of saw it as vocational education. And, you know, all the kids were all going to Ivy League schools and they didn't need to be a part of the academies and that sort of thing. And so, our lesson there was having a communication, a marketing plan to make sure that people are informed about what they are and kind of what they're not. And so, as a result of that, after stubbing our toe publicly a bit, and us having to stand up and defend the academies in front of some of these parents and teachers, state legislators and so on, we hired an outside marketing firm to help the district do the whole academy's brand.

The marketing firm helped partners develop a consistent message for both internal and external audiences regarding the academy model and benefits for students' CCR.

Contingencies and Constraints

Contingencies and constraints include top-down or bottom up collaboration, type or level of collaboration, power imbalances and shocks, and competing institutional logics (Crosby & Bryson, 2010). Examples of *collaboration* are abundant. Grant, a business partner, described how business members' concerns are surfaced through the CEO Champions and Industry Partnership Councils: "That's where we push those things, so we have the business voice talking to Marshall public school, Civic Bureau, and Schools for All Foundation—all the community entities—and that's where we raise that voice." Difficult political decisions sometimes are implemented top-down, out of necessity; an example was the central office's decision to close cosmetology programs due to limited workforce need. David said: "That would not have happened without strong central office leadership…It would have been very difficult to do that school by school, without having someone push that through." Kathy, a high school administrator, explained bottom-up collaborative efforts depend on the fidelity with which the academy model is implemented throughout the district:

> I've seen outside of this building where the structure has caused chaos…and confusion. It depends on the strength of your team, and I think that has to do with the leader you're under and how much they hold your team accountable to communicate with each other.

There was general agreement that collaboration between educators and partners is excellent and business leaders brought both positive energy and relevance to the school learning experiences. *The types or levels of collaboration* sometimes varied. Rebecca noted Academy Coaches could find it challenging to maintain business relationships: "There is a ceiling to the number of partners that you can manage and juggle effectively, and you do have to have face-to-

face with every single one." Helping General Education teachers form connections with business

partners to bring career information into their classrooms also could be challenging, noted Janet:

> I go into advisory meetings and CTE and business partners are on one end of the table and they're just jabbering. You know they get this! I look at the other end of the table and I see the Gen Ed teachers that are not quite as engaged.

Some power imbalances and shocks were noted. An imbalance within the academy

structure was cited by counselors and students: Sometimes students are unable to be placed into

their chosen academy due to space limitations, or they cannot transfer academies if their career

interests change. Nancy, a counselor, shared: "The only frustration I have is when kids are

excited about a field and they can't get in it." Counselor Octavia identified another imbalance,

noting some perceived academies as more oriented to career training than college preparation:

> We have some kids who don't want to be a part of the academies, at least the ones we have here. They are very college-focused and their college focus may not be the academy offerings that we have. We've had several conversations with parents concerning that. They want…straight academic focus versus a focus of academics and the academies.

Another institutional shock, noted by several, involves teacher turnover. Academy Principal

Jordan explained continual turnover required regular professional development to help teachers

to commit to the academy model: "When you don't have that regular training or it's not available

to teachers, or it's optional, you don't always get the ownership or the buy-in."

Crosby and Bryson (2010) noted, sometimes leaders from different institutions "employ

different meaning systems" (p. 225) or *institutional logics* that affect their rules and

interpretations of events. Two competing institutional logics were noted: one involving educators

and the one involving business partners. A tension exists in some schools between the career and

academic foci; explained April, a Team Lead who is also a CTE teacher:

> I think your academic teachers have a completely different focus. They have the end-of-course exams and all of that stuff that they have to get through, whereas our focus is getting them through all the career expectations and the industry certifications because

that's how we're evaluated. So as long as we have teachers on two different evaluation-type systems, then you're going to have two different focuses.

Business partners sometimes experience frustrations with the district bureaucracy. Clark, a business leader, described decision making "like driving a battleship;" Sam, another business leader, said, "freeze molasses and dip it out with a spoon. That's how hard it is to get something changed." Business leader Austin explained urgency was necessary because "things change so quickly, so if you take 4-5 years to implement something, it might be outdated."

Outcomes and Accountabilities

Outcome factors include the collaboration's ability to create public value; producing positive first-, second-, and third-order effects; and resilience and reassessment. Accountability factors include systems to track inputs, processes, outputs, and outcomes; developing a results management system, and forming positive relationships with political and professional constituencies (Crosby & Bryson, 2010).

Outcomes. An essential *public value* of the cross-sector collaboration relates not only to the increased graduation rate and increases in AP, IB, and dual credit enrollments but also expanding students' employability skills, including increased numbers who attained industry certifications and participated in internships. Although data related to hiring quality has not been quantified, Brian observed,

> Anecdotally the stories that I hear from businesses are the fact that students…have a higher level of the types of soft skills that businesses are looking for, so everything from a firm handshake to being able to look somebody in the eye when they're having a conversation and introducing themselves, understanding of current industry trends, so the topic of conversation is there. Businesses also talk about they are familiar with what these students have experienced.

Wendy explained the average age of gang membership had increased from 16-17 years to 23-24 years, which she attributed to the cultural transformation within the schools brought about by

smaller learning community structures. She asserted, "Kids didn't need to belong in a gang; they could belong to something at their school."

Crosby and Bryson (2010) note how cross-sector collaborations can result in *first-* (immediate; e.g., creation of new social capital), *second-* (after collaborations are well underway; new partnerships, coalitions), and *third-order positive effects* (long-term; new institutions, new norms and social heuristics)*,* and we discerned examples of each in this study. As a result of their shared dedication to reforms, leaders work across organizations to foster a culture of interdependency toward the shared goal of improving student outcomes. David described partners' focus "on brokering very tangible connections between the academies and potential employers." Janet agreed: "engaging the business and civic community, that's our ticket, and we're blessed." Wendy noted, "the goals have largely stayed the same…around authentic partnership…around improvement attainment for kids—academic attainment, graduation rate."

Although partnerships are essential to the academy model's success, participants agreed a more important outcome is the school leaders' ongoing efforts to promote a cultural transformation and improved learning climate within the schools. Citing metrics related to graduation rates, student attendance, student discipline, and academic achievement, Alice concluded: "Culture, engagement, things like that are drastically improved." Academy Principal Larry observed a change in students' beliefs about their futures:

> Everything that the academies are bringing to the students are opening their eyes to, "Okay, I can go to college and I can do this. Or, if I'm not planning on going to college I know I have an opportunity somewhere in this field based on my experience in high school."

Students reported their school climate has improved, as Taylor observed: "You have the parents who came here when they were younger when the school was nowhere as where it's at now,

thinking it's still a bad school…When I talk about it I'm like, '[school]'s actually excelled and we have a good graduation rate and we have all these academies.'"

The continuing *resilience* of the cross-sector collaboration was highlighted, and *reassessment* also was essential. While noting successes experienced through 10 years of collaboration, participants voice a desire to be proactive, to ensure enthusiasm and levels of commitment remain high. Wendy questioned, "How do we keep it relevant and how do we not stay stagnant?...It started as a reform model. Is it relevant enough and rigorous enough that people are willing to continue to support it with their dollars and time?" Thus, it is important to assess the current state of the initiative and make any needed modifications to structures, processes, and agreements as the academies continued to evolve.

Accountabilities. Over time, participants are becoming more skilled with designing systems to track inputs, processes, outputs, and outcomes. Partners have identified what data are needed to track student performance and pathways participation and regularly analyze the data to determine strengths, weaknesses, and needed changes. Sarah described the evolution of data use:

> The data we use, that starts on Day One every year. We break it down all summer long and then we look at everything that's going on, look where our kids are performing academically. The last couple years we've had a lot better data to see where our kids are at with the different things that's going on with our CTE classes. We're able to look at dual enrollment, we're able to look at dual credit, we're able to look at all of our testing and industrial certifications and things like that. We're actually keeping numbers.

Business partner Gloria explained the role of business leaders in this process:

> It's time to take a look at what's working and what isn't and confront the brutal facts and have prevailing hope. I think that's what business partners…bring to the table. Or it's not working because the curriculum isn't there but it should be. If it's not effective, it needs to be addressed and we need to push harder.

Finally, David described how the Civic Bureau ensured academies are held accountable:

> The Partnership Councils have a dashboard of indicators that they review every quarter. They have a list of all the academies in their industry area. We make sure that we have

academy coaches or school representatives from those schools that have an academy in the area. We seat them alongside business people and they're all looking at the data about how many students are enrolled, what the ACT score is, whether there's a certification in place, what the pass rate is, how many business partners they have, how much time those business partners logged or donations. It's that peer pressure sort of transparency tool…That is all intentionally built that way to try to encourage folks to up their game and be competitive and to have a good showing.

The school district and civic partners have developed *results management systems* that address the interests of all parties. Looking to the continuing evolution of academies, cross-sector partners agree substantial progress has been made with students' career preparation through CTE coursework and with business connections but concede more work is needed with academic courses, including AP, IB, and dual credit. Janet explained:

I feel like if you look at the academies overall and you look at our journey, I think that's where we have to go next. And I think that's what will move that academic needle because, again, we're being judged on ACT scores, and while the CTE is a great supporting role in that, where it really counts is in math, English, science, and social studies because that's what's going to be tested.

David reported, although the initial focus has been on careers, leaders across sectors also need to address students' preparation for postsecondary: "We're going to drill down and find out, high school to high school, academy by academy, where those early postsecondary opportunities, including certifications, are…We're very interested in postsecondary completion, as well." Sarah agreed: "Our ACT scores have to go up. I need to have strong growth and strong achievement."

Throughout the 10 years of academy implementation, the district's focus has been to improve outcomes for all students, and data traditionally have been collected, analyzed, and reported at the aggregate level. The desirability of equitable access and participation of underrepresented students in academies is beginning to be highlighted as a concern within the district, as educators consider individual student needs. Counselor Marilyn observed, "I tend to have more girls than boys in Health Science, and I also tend to have a lot of Hispanic [students]."

Some students are aware of gender disparities; Kim, a male student in the Aviation academy reported "there's probably 15-20 girls in that whole academy, out of 600." Wendy reported gender differences are "on our radar because we have an engineering academy and it has a lot of boys, so we have classes of 27 boys and 2 girls." As the academy model evolves, it appears that academy placement and performance of student subgroups may become more of a focal point.

Relationships with political and professional constituents are seen as critical to programmatic success. Cross-sector leaders strive to ensure each high school is treated equitably, when deciding where academies are situated within neighborhoods and which business partners are assigned. Alice explained, leaders "play close attention to equity when it comes to partnerships…not only just the number but in the quality of partnerships—that they're all equally supported." David described how civic leaders created school tours to educate the community and elected leaders:

> We hosted six VIP tours one year, the other six schools the second year, and we got state legislators, metro council members, neighborhood association leaders, faith-based leaders, school board members. And that was a concerted effort to make sure our elected leadership, at least in the community, understood what the academies were and saw them first-hand.

Civic Bureau is pivotal for its political clout and connections within the community and across the state. Noting their "strong lobbying presence in the state legislature," David described how his organization worked with the district and state officials to change a state law regulating the number of students permitted in CTE classes: "we drafted a bill, got a sponsor, lobbied it, passed it, and we had to renew it every couple of years but eventually it became permanent."

Discussion

In this study, we examined how leaders have worked across organizational boundaries to support career academy implementation in an urban school district. Crosby and Bryson's (2010)

theoretical framework for understanding integrative leadership and the development and maintenance of cross-sector collaboration guided our data collection and analyses. In this section, we reflect upon key findings. We also consider the suitability of this framework, borne within the public administration literature, for understanding this education-centered reform. In so doing, we aim to stimulate further research that might extend and refine the framework relative to school district reforms. We then issue a set of recommendations.

This study does have some limitations. First, case study research findings can be limited in terms of their generalizability to other contexts (Yin, 2014). However, we agree with Punch (2005), who asserted that case studies can aid generalization by providing propositions or concepts for subsequent study. The second limitation stems from our study of a mature cross-sector collaboration. Accordingly, addressing certain components (e.g., initial drivers) required us to rely on participants to recollect events that occurred in the distant past. Finally, much of this study's research occurred in two of the 12 district's neighborhood high schools, which were selected based upon their executive principals' extensive experiences with career academies. It is possible that academy implementation and the involvement of cross-sector partners may not have been uniform across the 12 schools. Therefore, fieldwork in other schools might have elicited distinct perspectives and perceptions regarding the leadership of this reform.

Educational reforms occurring within school systems traditionally have not required school administrators to enlist the support of others outside their organization when implementing these reforms. In contrast, this ambitious, district-wide career academy reform required leaders to step up across sector boundaries. Further, a commitment to robust academy implementation impelled the burgeoning cross-sector leadership team to establish structures and processes that would enable various actors to make contributions according to their expertise. As

Crosby and Bryson (2010) observe, is it is necessary to "use of the talents of particular kinds of leaders to push the action forward" (p. 217). The reform involved restructured leadership roles both within and beyond the schools. Within the schools, for instance, new and pivotal formal (e.g., Executive Principals, Academy Principals) and informal (Academy Coaches, Academy Team Leads) leadership positions were formed. Beyond school boundaries, a complex leadership network was needed, with civic and business leaders serving as key actors, who leveraged their social and political capital to expand school-business partnerships, protect the reform against threats, and advocate for continuing reforms in support of students' CCR preparation. In addition, we found that the involvement of cross-sector leaders was essential throughout all five elements of Crosby and Bryson's framework, to ensure the continuing maintenance and refinement of the district's academy model.

Accordingly, the integrative leadership framework was well suited to study this multifaceted reform, deepening our insights into how leaders were able to create and maintain a successful cross-sector collaboration that supported implementation. Previously, we have applied distributed leadership as a lens to understand aspects of career academy reforms (Malin & Hackmann, 2017a, 2017b), and that frame was supportive but lacking in one key respect: It did not accommodate the expansion of leadership beyond school/district confines. The integrative leadership framework, in contrast, is designed to illuminate the contours of cross-sector collaborations and therefore proved to be more applicable to our research.

Given the above, and noting the increasing proliferation of cross-sector collaborations within education (Henig et al., 2016) and their intrinsic complexities (Bryson et al., 2006, 2015), we recommend that scholars, educators, and partners apply this comprehensive framework to investigate or articulate the leadership, structural, and procedural contours of comparable

reforms. "Collaboration processes are complex enough as to demand a simultaneous analysis of all its moving parts" (Berardo, Heikkila, & Gerlak, 2014, p. 701); the aim in so doing is to "understand collaborations and their moving parts well enough to actually produce good results and minimize failure" (Bryson et al., 2015, p. 657). When school leaders and their civic/business partners embark on ambitious reforms, there will always be elements of uncertainty (Fullan & Miles, 1992). Nonetheless, researchers may unlock some secrets that would otherwise be buried within the complexities, producing knowledge and conceptual tools that could improve collaborative functioning, through integrating leadership roles across sectors (Bryson et al.).

Considering the recent ESSA policy push to enhance students' CCR, a focus that particularly impels high school reforms, there is reason to believe educators' capacities to lead in an integrative fashion—involving higher education, civic, and business/industry partners—will become increasingly crucial. Embedded within most CCR policies and practices are attempts to bridge educational levels (aimed to ease high school-postsecondary transitions) and into careers and businesses (to enhance students' career preparation) (Malin et al., 2017). Meanwhile, within high schools we observe strategic but often-frustrating efforts to bridge historic academic-vocational divides, providing students with preparation for both college *and* career while preserving college as an *option* for all (Stern, 2015) rather than shunting students into rigid academic *or* vocational tracks as has previously been the case (Oakes & Saunders, 2008). We thus recommend a concerted research focus on the nature of boundary-spanning leadership that might make such momentous shifts possible.

While recognizing the utility of the integrative leadership framework, we share some nuances emerging from this case that might begin the process of outlining the operation of integrative leadership for school-centered reforms. First, we noted leaders' persistent efforts to

legitimize this reform. It is key for school- and district-based integrative leaders to consider what types of persistent problems, goals, and school-based initiatives might possess cross-sector appeal. In this case, the notion of *relevance* (e.g., the programming needed to be experienced as relevant to students' current and future lives) appealed to diverse leaders and constituents throughout the community. This focus elevated certain non-school leaders, who were positioned to describe and help develop the types of knowledge and skills students would need for career success, and to help educators stress academic concepts' real-world meanings. Career/technical educators saw their status elevate and interactions with the business sector expand as their natural focus upon career skill development became essential to the reform.

The central role of politics was also evident, as might be expected as part of a complex urban school reform. Reform sponsors and champions needed to contend with individuals who initially did not support the reform, including a high-level district leader who did not embrace this approach, parents and students who were college-focused and felt they were well served by traditional schooling, and in-district educators content to wait out what they assumed to be the reform fad *du jour*. Piled on top of these challenges were issues such as superintendent, leadership, and teacher turnover. To cope, developing a clear vision and a consistent and broadly popular message was requisite; enlisting the help of a marketing firm was strategic and effective. Also, civic leaders used their considerable agency and political will not only to promote needed policy changes but also to educate other influential community members on the merits of reform. Meanwhile, the cross-sector network that grew over time constituted a new power structure that could be mobilized to counter and respond to emergent challenges.

Intermediary organizations (e.g., nonprofits, community advocacy organizations) were extremely important within the context of this reform—the Schools for All Foundation, for

example, was repeatedly cited for its key role in facilitating business partner-school connections. Certain individuals were key connectors, demonstrating the ability to communicate clearly and successfully with public and private sector leaders and partners. This was key because different institutional logics occasionally created friction among partners. For instance, the perceived slow pace of change occurring within the district bureaucracy was troublesome for several private sector partners. In that regard, the district's investment in full-time Academy Coaches was essential to sustaining effective relationships; they were key point persons who explained district policies and procedures to impatient business partners. Ironically, we concluded the pace of change was accelerated considerably from what may have been possible without the cross-sector partnership. For instance, the extent to which the district's CTE staffing was quickly realigned to address community workforce needs was impressive.

Considering the particulars of this reform, we are impressed with its ambitiousness and its longevity. Indeed, the concept of the wall-to-wall academy configuration goes beyond the research in an important aspect: Empirical research involving career academies is specific to partial-school approaches, such as a STEM academy operating within a comprehensive high school. Meanwhile, this reform has clearly relied on cross-sector collaborations, and a typical prediction can be that such collaborations will fail (Crosby & Bryson, 2011). These facts combine to make this reform interesting of itself, and it is compelling to consider how and why this reform has been possible and has continued to flourish over 10 years. The integrative leadership framework has been strongly facilitative as we addressed these questions. Although much more could be explored within this collaborative arrangement, the broad contours have been outlined, providing an enhanced understanding of leadership within such reforms.

Going forward, we suggest future researchers should pursue similar research, perhaps instituting multiple case design to accelerate theory building and the generation of information that practitioners will find helpful, should they desire to implement similar models. Also, we suggest future research could examine the relationship between integrated leadership and important student learning and life outcomes. Researchers also could more closely investigate integrative leadership as it applies to particular formal and informal leadership positions within the school system (e.g., high school principal, academy principal, academy coach, district leaders); in this study, we looked more systemically but concede position-specific knowledge would be beneficial in disclosing essential practices within these roles. We believe we may have uncovered an important aspect within the educational leadership literature, which will need to be addressed in various ways. We are uncertain whether current theory adequately explains or informs the educational leaders who increasingly are entering into cross-sector collaborations as part of their work, perhaps particularly within this CCR reform context. Integrative leadership, borrowed from public administration, was helpful but perhaps additional field-specific theorizing is indicated.

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Figure 1

Framework for Understanding Leadership and the Creation and Maintenance of Cross-Sector Collaborations (Crosby & Bryson, 2010).
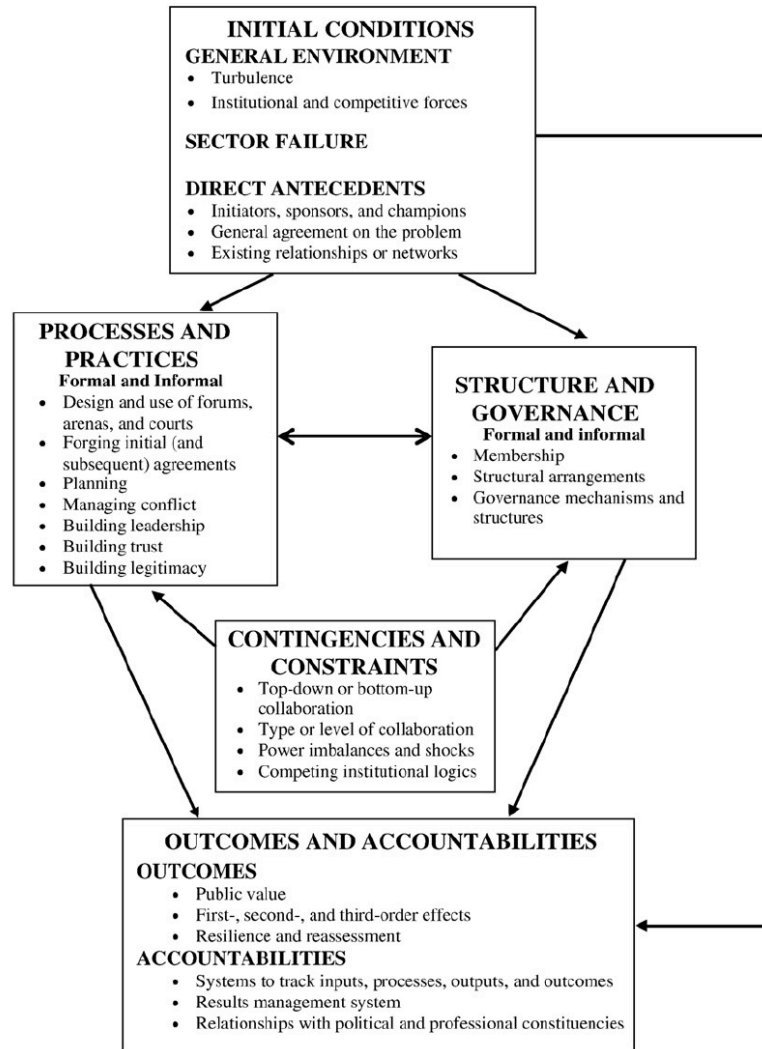
INITIAL CONDITIONS
GENERAL ENVIRONMENT
- Turbulence
- Institutional and competitive forces

SECTOR FAILURE

DIRECT ANTECEDENTS
- Initiators, sponsors, and champions
- General agreement on the problem
- Existing relationships or networks

PROCESSES AND PRACTICES
Formal and Informal
- Design and use of forums, arenas, and courts
- Forging initial (and subsequent) agreements
- Planning
- Managing conflict
- Building leadership
- Building trust
- Building legitimacy

STRUCTURE AND GOVERNANCE
Formal and informal
- Membership
- Structural arrangements
- Governance mechanisms and structures

CONTINGENCIES AND CONSTRAINTS
- Top-down or bottom-up collaboration
- Type or level of collaboration
- Power imbalances and shocks
- Competing institutional logics

OUTCOMES AND ACCOUNTABILITIES
OUTCOMES
- Public value
- First-, second-, and third-order effects
- Resilience and reassessment

ACCOUNTABILITIES
- Systems to track inputs, processes, outputs, and outcomes
- Results management system
- Relationships with political and professional constituencies

Table 1

High School Sites and Rankings Compared to 12 District Academy High Schools

School	Enrollment (rank)	Students of Color (rank)	Economically Disadvantaged Students (rank)	ACT Composite Score (rank)	Graduation Rate (rank)	Attendance Rate (rank)
Anderson	1,900 (3)	68% (8)	51% (7)	18.4 (4)	87% (3)	93% (1)
Brentwood	2,400 (1)	58% (11)	45% (10)	18.5 (3)	76% (10)	91% (7)
Academy High School Means	1,410	75%	54.8%	17.4	81%	91.5%

Table 2

Interview Participants (N = 53)

Cross-Sector Representatives	Participants Quoted (Pseudonyms)
Business/industry leaders ($n = 8$)	Austin, Clark, Gloria, Ryan, Sam, Will
Civic organization leaders ($n = 3$)	Alice, Brian, David
School district administrators ($n = 3$)	Janet, Sarah
High school executive principals ($n = 2$)	Adam, Wendy
High school academy principals ($n = 6$)	Frank, Jordan, Kathy, Larry
High school academy coaches ($n = 2$)	Rebecca
High school academy team lead teachers ($n = 9$)	April, Jessica
High school counselors ($n = 8$)	Octavia
High school students ($n = 10$)	Kim, Taylor
Higher education leaders ($n = 2$)	

Appendix

Interview Protocol – District Leaders and Building Leaders

1. Please provide us with a brief description of your role(s) with respect to the district's implementation of college and career academies?
2. What are the main reasons why your school district, community, and business leaders have implemented career academies, and continue to do so?
3. Please provide a history of the district's and community's engagement with the career academies, including who was most involved and how they began. Please describe major activities and goals.
4. What are the primary outcomes you hope to achieve through the career academies? To what extent do you feel that they have been realized to this point?
5. How have teacher leaders and cross-sector partners have been involved in leadership roles in the career academies? Please share examples noting how they have been engaged and how you have seen them develop their leadership skills.
6. Concerning the district's and cross-sector partners' roles in supporting the academies, what is the organizational/leadership design?
7. From your perspective, what are the key leadership vehicles or structures to make the academies successful? Who do you count on to make them a success?
8. What are currently the largest challenges with respect to the academies, and how does this affect your work?
9. What types of professional development have been offered that relate to the career academies?
10. Are there other individuals in the district, or within the community, who you feel it would be especially important for us to speak with, regarding the career academy model?
11. Is there any additional information you would like to share related to the district's career academy model?

Interview Protocol – Business/Community Leaders

1. What was the role of business/community leaders in the implementation of the career academy model in the district?
2. What is the current role in this cross-sector collaboration, both for yourself and for other business/community leaders? Would you share some specific examples noting how you or other business/community leaders are involved with the academies?
3. We understand business/community leaders are actively involved, through leadership roles on various committees and direct involvement in schools. Please share some examples.
4. How do business/industry/community leaders meet the district's goals in working with educators in the district (related to career academy implementation)?
5. Are there particular challenges you or your peers have faced with respect to partnering with the school/district to support career academy implementation? If so, could you describe, including successful efforts to overcome these challenges?
6. Generally, how well do you perceive the career academy model and cross-sector collaboration to be working?
7. Is there anything else you would like to share regarding the district's progress with academy implementation?