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Collective Impact Strategies

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Collective Impact Strategies: Introduction to the Special Issue

Joseph A. Allen, Sheridan Trent, and Kelly A. Prange

The societal and cultural issues facing humanity are far greater than any nonprofit, for-profit, university, or government agency to address adequately alone. Whether poverty, water shortages, socio-economic inequality, natural disasters with lasting effects, or any number of other challenges facing our communities, organizations must band together to secure the impact needed to truly create change.Increasingly, communities are turning to collective impact as an approach that brings together the collective resources of multiple institutions to address a community-identified problem or need. While a somewhat new approach, there is a growing body of evidence of supporting the effectiveness of using the collective impact approach to addressing wicked problems (Bridgeland et al., 2012; Christens & Inzeo, 2015; Kania, Hanleybrown, & Splansky Juster, 2014).

As anchor institutions, Metropolitan Universities have a unique opportunity and responsibility to initiate and promote social change in a way that also advances their mission. Unlike other institutions for higher education, Metropolitan Universities are most suited for targeting social change because of the type of communities they serve and their location within large municipalities. Participating in collective impact is increasingly seen as one approach to this. This issue includes case studies and practical papers to prepare Metropolitan University administrators, faculty, and staff to initiate, facilitate, and strengthen collective impact initiatives in their communities.

What is Collective Impact?

Collective impact initiatives address a social issue by bringing together multiple stakeholders to achieve a common goal (Kania & Kramer, 2015). Traditionally, organizations targeting the same problem work independently from each other. This frequently results in competition for funding and resources, duplication of effort, and, at times, critical issues left unaddressed (Kania & Kramer, 2011). A collective impact approach seeks to align the goals, priorities, strategies and resources of the separate organizations in order to drive change simultaneously.

The characteristics of collective impact were first described by Kania and Kramer in the Stanford Social Innovation Review in 2011. Although the term collective impact is used to describe many multi-organization partnerships, the following are essential criteria to be considered a true collective impact initiative (Kania, Hanleybrown, & Splansky Juster, 2014).

- A Common Agenda among the stakeholders is critical to both addressing the larger wicked problem.
- Shared Measurement Systems enable the stakeholders to track and assess the impact of their efforts on the shared goal.
- Mutually Reinforcing Activities are efforts that interact in a meaningful way to create something greater than in the individual actions.

- Continuous Communication refers to the steady flow of information within and across partners in the initiative along pre-defined channels via preferred communication methods.
- Backbone Support Organization is the hallmark of effective collective impact initiatives. Typically, one of the organizations in the collective impact initiative, the backbone support organization often provides a facilitator, project manager, data manager, as well as provide administrative support activities for the collective, such as grant applications, marketing, meeting planning, and communications.

Articles in this Volume

The articles in this volume represent many of the thought leaders on collective impact as well as how collective impact initiatives unfold across domains, problem types, and even countries. The issue begins with an overview of collective impact and the role of urban and metropolitan universities. Smith, Pelco, and Rooke from Virginia Commonwealth University describe three paradigms of university-community partnerships (e.g., community engagement, anchor institutions, and collective impact). Using these frameworks, they describe a case study of the Bridging Richmond Partnership, highlighting the role of a university in supporting higher education in the local community by supporting local students and program promoting youth seeking education. Drawing on a series of interviews, Raderstrong and Nazaire from Living Cities outline effective strategies and processes for using data at each stage of a collective impact effort to guide and assess impact.

The next two articles highlight the role of student development in collective impact efforts. Jones, Croft, and Longacre from the University of Houston discuss the collective impact and ecosystemic approach to address student attrition at the University of Houston. Similarly, Trent, Prange, and Allen, from the Industrial/Organizational Psychology program at the University of Nebraska at Omaha, describe the efforts of a university organization to achieve collective impact in order to maximize the effectiveness of the organization's mission. Specifically, students in the Industrial/Organizational Psychology program provide free volunteer program assessments to local nonprofit organizations under the direction of faculty from the university. Ways in which the program resembles a collective impact effort, as well as the ways in which it differs, are discussed. They hope to demonstrate that even when efforts are not collective impact in their entirety, great impact can still be achieved.

Two of the articles highlight how collective impact efforts have the potential to target business and economic challenges. Szarleta, from Indiana University Northwest, discusses a collective impact initiative to utilize social entrepreneurship to address wicked problems, with a university taking the role of a backbone support organization. Lessons learned from the initiative so far are disseminated, as well as highlighting a research agenda for future collective impact efforts with universities acting as backbone support organizations. Similarly, De Chiara from the University of Naples "L'Orientale", Italy, explores collective impact as a potential solution for environmental problems that result from the competitiveness of the economy (i.e. challenges of starting and supporting local businesses). The failures of two collaborative efforts involving environmental issues in industrial districts which utilized traditional networks, including the

environmental crisis of the 'The Land of Fires,' and the tannery district of Solafra, are presented as case studies.

Finally, the issue concludes with two articles that highlight that collective impact efforts can and perhaps should be used for problems that are indeed unique to a given location and community. First, Gwynne, director of the Poche Centre for Indigenous Health, discusses the application of collective impact to the wicked problem (i.e., problems which are considered nearly impossible to address) of providing Aboriginal people in Australia with adequate healthcare. Three prominent health issues, including stroke prevention, improved access to allied health, and improved oral health care, are outlined, as well as the collective impact efforts made so far to address these problems and enable a higher level of collaboration community control. Second, Tooker, from Wagner College, documents the use of collective impact to address heroin and opiate addiction on Staten Island. Using a collective impact approach, a partnership between Wagner College and community organizations is being leveraged to reduce the instance of youth substance abuse in the surrounding area.

Conclusion

Across these articles a lessons learned emerged in terms of collective impact efforts. These include the following:

- Collective impact efforts are adaptable to many different problems;
- Collective impact efforts serve both communities and institutions of higher education;
- Collective impact is useful across cultures for targeting issues of social change and need;
- Collective impact, as a framework, is not necessarily the best way to address community problems.

We believe our readers will find the articles in this special thought-provoking and meaningful. Further, we anticipate our readers will identify other unique and thematically oriented takeaways beyond those listed here. Hopefully the information provided here will equip and spur others to enact change in their communities.

References

Bridgeland, J., et al. (2012). Roundtable on collective impact. *Stanford Social Innovation Review*, *10*(4), 25-29. Retrieved from https://ssir.org/

Christens, B. D. & Inzeo P. T. (2015). Widening the view: Situating collective impact among frameworks for community-led change. *Community Development*, *46*(4), 420-435. https://doi.org/10.1080/15575330.2015.1061680

Irby, M. & Boyle, P. (2014). Aligning collective impact initiatives. *Stanford Social Innovation Review*, *12*(4), 15-16. Retrieved from https://ssir.org/

Kania, J., Hanleybrown, F., & Splansky Juster, J. (2014). Essential mindset shifts for collective impact. *Stanford Social Innovation Review*, *12*(4), 2-5. Retrieved from https://ssir.org/

Kania, J., & Kramer, M. (2011). Collective impact. *Stanford Social Innovation Review*, *9*(1), 36-41. Retrieved from https://ssir.org/

Prange, K. A., Allen, J. A., and Reiter-Palmon, R. (2016). Collective impact versus collaboration: Sides of the same coin or different phenomenon? *Metropolitan Universities Journal*, *27*(1), 86-96.

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The Emerging Role of Universities in Collective Impact Initiatives for Community Benefit

Jason Smith, Lynn E. Pelco, and Alex Rooke

Abstract

Universities are increasing their efforts to more clearly demonstrate their social value. This article illustrates how higher education administrators can incorporate collective impact partnerships in their community benefit strategies. The article explores two of the more familiar paradigms for community benefit—community engagement and anchor institution. Collective impact principles and practices are then presented. Finally, a case study provides a tangible example of how one university's role in a collective impact initiative transitioned in response to the community. We end the article with ten takeaways and an invitation for higher education administrators to identify their own learning and action steps that can help shift focus from proving to improving their institution's value to the community.

Keywords: Community engagement; anchor institutions; partnership; collective impact

Introduction

Administrators in today's urban and metropolitan universities are feeling pressure to demonstrate tangible value to their host city and region (Starke, Shenouda, & Smith-Howell, 2017). Urban serving universities (USUs) have been a vital resource to their regions, but have not always publically demonstrated clear evidence of their regional contributions. As knowledge institutions, universities are well-equipped to study and report on their positive impact on the community. Understanding, documenting, communicating, and better leveraging internal assets is important work. However, these approaches may not fully satisfy community leaders' requests to demonstrate the value of an USU to a region. The university's neighbors may not just be asking for the university to prove, but also to improve.

Many of America's cities have experienced tremendous resurgence in recent years—renewals that metropolitan universities have helped to stimulate (Trani, 2008). These cities have reasserted themselves, in ways that may require a change in the roles that universities play in their communities and how they partner with the community (Cantor, Englot, & Higgins, 2013). This article first provides a brief overview of how universities have responded to the need to define their community benefit. The article then describes three community-university partnership paradigms: (a) the community engagement model, (b) the anchor organization model, and (c) the collective impact model. We then provide a case study that explores Virginia Commonwealth University's role in the resurgence of Richmond and the university's leadership in the community engagement and anchor organization paradigms. The case study also describes the university's pioneering work as a replication site for an emerging cradle-to-career community benefit framework. The narrative concludes with an invitation to higher education leaders to identify ways to improve their own institution's community benefit efforts based on their reflection on this article.

Historic Roles of Urban Serving Universities

Although urban serving universities are geographically situated within urban communities, for the past half century they have typically co-existed alongside these communities rather than collaborated with them (Cantor & Englot, 2014). In the early 1900s, American higher education gave priority to knowledge creation over solving social problems (Fitzgerald, Bruns, Sonka, Furco, & Swanson, 2012). Beginning in the 1940s and 1950s, higher education in the United States grew rapidly with the passage of the Servicemen's Readjustment Act of 1944 (i.e., the GI Bill). Universities struggled to keep up with growing student enrollments. They decentralized administrative and teaching tasks and hired large numbers of new faculty instructors throughout the 1950s and 1960s.

These faculty were increasingly viewed as content experts within narrow areas of specialization that had little application to social problems and were disconnected from community context and input (Fitzgerald, et al., 2012). The Cold War and the country's race to space led many faculty members into research laboratories and away from classrooms and communities. As these trends continued throughout the 1970s and 1980s, class-enrollment size increased. Funding for public universities began to decline in the recession of the 1990s, as state budgets shrank and elected officials shifted their view of higher education from a public good to an individual benefit (Hensley, Galilee-Belfer, & Lee, 2013).

By the late 1990s, university presidents, faculty members, and students began to question their university's disconnectedness from its local community (Fitzgerald et al., 2012). Relationships between urban serving universities and the communities that surrounded them were often strained, as these universities had expanded during the previous decades by buying up real estate contiguous to their campuses and displacing local, often low-income, residents (Cantor, Englot, & Higgins, 2013). Urban serving universities around the country began to reach back out to the communities that surrounded them with community engagement initiatives during the 1990s and 2000s. Because universities themselves still operated in a decentralized manner, early community engagement efforts often developed in silos, with individual academic departments and schools launching their own initiatives and programs.

Three Paradigms for University-Community Partnership

This section describes three approaches universities may employ to provide value to their host city and region, including community engagement, anchor institution, and collective impact. Each of the approaches have their own emerging body of practice and literature. One of the contributions of this article is describing the paradigm shifts in university community benefit represented by the emergence of community engagement, anchor institution, and collective impact paradigms. The authors assert that university administrators may simultaneously incorporate ideas from multiple paradigms or may narrowly align with one. Further, the authors believe that no one paradigm is more important than the others, and that the problem and desired result must inform the approach. Misalignment of the felt problem and the selected approach is likely to cause stakeholder dissatisfaction. When dissatisfaction occurs, institutions may be tempted to lurch from one paradigm to another or to tinker at the edges of their current approach.

The authors caution that these types of responses can prevent institutions from adopting a critical problem-solving perspective that enables stakeholders to leverage value from all three paradigms.

Community Engagement Paradigm

The community engagement movement emerged over the past three decades. The movement has come to include multiple activities such as service-learning, civic engagement, and community-engaged research. The founding of Campus Compact in 1985 represents a starting point for an emphasis on community engagement in higher education (Butin & Seider, 2012). By the 2010s, much had been learned about successful community-campus partnerships. Reciprocity, exchanging things or services with others for mutual benefit, became an organizing community engagement principle. Administrators began to express their interest in creating institutional-level (versus academic department-level) approaches to university-community partnerships. Universities created centralized offices of community engagement to lead, coordinate, and assess the impact of integrated, cross-disciplinary, and institutional-level efforts called for by the community.

The Carnegie Foundation for the Advancement of Teaching institutionalized the concept of community engagement by including it in their higher education classification cycle. Carnegie defines *community engagement* as "the collaboration between institutions of higher education and their larger communities (local, regional/state, national, global) for the mutually beneficial exchange of knowledge and resources in a context of partnership and reciprocity" (https://compact.org/initiatives/carnegie-community-engagement-classification/). The term *community engagement*, even if used consistently across units within an institution, can be applied to a wide range of activities that may not meet the technical definition (Starke, Shenouda & Smith-Howell, 2017). This ambiguity makes a challenge for mapping, measuring, prioritizing results, and assessing value.

Community engagement offices focused their early assessment efforts on documenting the impact of community partnerships on outcomes traditionally valued by universities, such as the number and quality of scholarly products produced, as well as student learning outcomes. First generation community engagement research results suggested that some approaches were having a positive impact on important student outcomes, such as retention and degree completion (Lockeman & Pelco, 2013). Only in very recent years have universities begun to think critically about how best to insure that university-community collaborations benefit community as well as university stakeholders.

Signs of internal malaise were beginning to be seen within the movement by the 2010s (Butin & Seider, 2012). The lack of conceptual focus, limited rigorous research, and uncertain community impact all contributed to current challenges within the movement. The higher education community responded in a few ways, by: (a) continuing to position community engagement as a broad umbrella; (b) attempting to re-ignite the movement with clearer conceptual clarity and goals; (c) institutionalizing community engagement in certificates, minors, and degrees; and (d) shifting investment to other community benefit paradigms.

Anchor Institution Paradigm

The anchor institution paradigm of university-community partnerships, like the community engagement paradigm, developed during the early decades of the 21st century. Urban-serving universities are described as anchor organizations because they are deeply rooted in their community. In 2002, in a CEOs for Cities report, Michael Porter used the label "anchor institutions" as part of a call to action. College and university leaders needed to develop strategic plans to catalyze economic development in their surrounding communities (CEOs for Cities with Living Cities, 2010). According to the Democracy Collaborative, "Anchor institutions are place-based entities, such as universities and hospitals that are tied to their surroundings by mission, invested capital, or relationships to customers, employees, and vendors" (Dubb, McKinley, & Howard, 2013, p. 2). Early university anchor institution efforts placed a heavy emphasis on real estate development and the development of retail and public spaces where they intersected with the neighboring community (CEOs for Cities with Living Cities, 2010).

The anchor institution movement often defines itself in contrast to the community engagement movement rather than as a complement to it. In their paper titled, *The Anchor Dashboard*: *Aligning Institutional Practice to Meet Low-Income Community Needs*, Dubb, McKinley and Howard (2013) called for the creation of a new anchor mission community of practice. The authors state that, "an anchor strategy is more than the sum of individual community engagement programs; it is a mission developed to address tenacious community challenges, and implemented to permeate an institution's culture and change the way it does business" (Dubb, McKinley & Howard, 2013, p. 1). Over time, universities began to hire and purchase locally, to explore commercialization of their research, and to engage with the broader community's economic development plans (CEOs for Cities with Living Cities, 2010).

The anchor institution paradigm developed as a critique of the lack of institutional-level goals and indicators of community impact in the community engagement paradigm. Business transactions were quantifiable, targets could be set, and social value was easier to communicate to local business leaders and elected officials. Anchor institution initiatives appeared to move beyond the measurement of isolated programs and research projects to providing a framework for aligning institutional assets. Anchor institution paradigm advocates believed their paradigm fundamentally questioned the substantial investment some institutions had made in "dollars and personnel toward discrete community programs" and stated that their paradigm was qualitatively different (Dubb, McKinley, & Howard, 2013, p. 1). Central to the anchor institution movement is the focus on the use of two forms of metrics: (a) indicators of community well-being to focus institutional investments; and (b) measures that assess the institution's effort to improve the indicators. Advocates of the anchor institution paradigm acknowledge that an anchor institution is not the only factor contributing to changes in community indicators. Yet, a key focus of the paradigm is to help internal decision makers align individual institutional efforts, so that these efforts might better provide and demonstrate value to the community.

Collective Impact Paradigm

Beginning in 2011, Kania and Kramer introduced the concept of *collective impact* and defined it as "the commitment of a group of important actors from different sectors to a common agenda for solving a specific social problem". The collective impact movement in begins with the

premise that the efforts of individual organizations and isolated programs are insufficient to address complex social problems. A focus on implementing isolated programs can obscure the need to fundamentally change the system, address policy, or improve practice. Because the collective impact paradigm is less well known, we define and describe it below detail.

Both the higher education and nonprofit sectors frequently operate using an *isolated impact* approach (Kania & Kramer, 2011). Individual organizations or research teams seek to demonstrate value by developing solutions for complex social problems that can then be scaled by expanding research-informed programs and interventions. National emphasis on randomized controlled trials (RCT) as the gold standard for research also contributed to a higher education culture that seeks solutions that work in a closely controlled environment, but not necessarily in the complex community settings. According to Kania and Kramer (2013), "the greatest obstacle to success is that practitioners embark on the collective impact process expecting the wrong type of solutions" (p. 2).

The success of collective impact initiatives depends on the existence of five conditions: (a) a common agenda; (b) shared measurement; (c) mutually reinforcing activities; (d) continuous communications; and (e) backbone support (Hanleybrown, Kania, & Kramer, 2012). A common agenda begins with a shared understanding of the problem and a common way of solving it, which is developed through agreed-upon action from all participants (Kania & Kramer, 2013). Power dynamics associated with resources, privileged forms of knowledge, credentials, and influence can create conditions within which anchor organizations may believe there is a common agenda when community partners do not share the vision. Shared measurement includes agreed upon indicators and targets, as well as ways to measure efforts to ensure mutual accountability (Hanleybrown, Kania, & Kramer, 2012).

A focus on business measures and traditional forms of research might drive initiatives towards solutions that do not take into account the system in which the solution will be implemented or the practical measurement strategies that will be used to gauge improvement. This disconnect can block the development of mutually reinforcing activities. Continuous communication strategies that are accessible to all partners build trust, insure a common purpose, align motivations, and create accountability for action commitments. The language and communication styles used in higher education, the business sector, social sector, and in local communities vary greatly, requiring ongoing translation of information to connect it to meaning frameworks for all partners.

Backbone supports, the fifth condition, refer to facilitation, data systems and analysis, communication support, highly structured problem solving methods, and the administrative functions that are needed to effectively coordinate the participation of multiple organizations. Turner, Merchant, Kania and Martin (2012) described six critically important functions that backbone supports facilitate: (a) guiding vision and strategy; (b) supporting aligned activity; (c) establishing shared measurement practices; (d) building public will; (e) advancing policy; and (f) mobilizing funding. By necessity or by design, backbone supports can be addressed through either a centralized (i.e., located in a single organization) or decentralized (i.e., located in multiple organizations) model.

Surman (2006, 2008), urged collaborative partnerships "NOT to legally incorporate in any way. This...undermines the power dynamic of the group and creates an entity that will innately want to build itself to compete with its own members" (p. 10). Rather than arguing for a single backbone organization, Surman emphasized the importance of several organizing principles: (a) action teams or constellations are formed to address a problem and are creatively destroyed when the work is accomplished; (b) leadership is shifted between partners on a project-by-project basis; (c) a stewardship group is created that engages representatives of the partner organizations and provides vision as well as strategic direction; (d) partnership agreements are created to articulate the roles and responsibilities of different players; and (e) a secretariat function is provided by a third party organization or individual. Surman equated this secretariat function to the role of an executive director for the partnership and indicated that when the secretariat or executive director came from within one of the partners, the individual would need to attempt to detach themselves from their own organization and take on a third-party, servant leadership role.

Putting the Pieces Together

The three university-community partnership paradigms described above require different administrative structures, employ different strategies and processes, and often focus on impacting different community or university outcomes. As universities and their respective regional communities sought to collaborate during the first two decades of the 21st century, their efforts were often bogged down by the lack of an explicit shared understanding of the partnership paradigm or paradigms being employed. Consequently, university and community leaders must understand the aims, benefits, and differences of each paradigm and discuss with each other the paradigm(s) being used.

USU's and their communities have often collaborated to reform education with the aim of positively impacting regional communities. However, the national landscape has shifted in the area of education reform, further impeding the success of university-community partnerships to impact community educational outcomes, because collaborating organizations often operated from different education reform perspectives.

Following the section below on education reform movements, we provide a case study that illuminates the path taken during the past ten years by one USU and its regional partners to address regional education reform. The case study focuses on the evolution of several different university-community partnership paradigms, including a collective impact paradigm, to improve educational outcomes across a metropolitan region.

Education Reform Movements in the United States

Institutions of higher education have long been involved with education reform. Education reforms are intended to change policies, processes, and practices to improve education outcomes and to address the needs of society, including workforce preparation.

Patterson (2011) describes three major waves of education reform in the United States beginning in the 20th century: the progressive education reform, equity-focused reform, and excellence reform waves. Progressive education reforms began in the 1950s with the expansion of college access resulting from the GI Bill and the nation's focus on math and science achievement over Cold War concerns. The Civil Rights movement of the 1960s marked a shift in focus to more equitable education access and the reduction of disparities in educational outcomes across citizen groups. This equity-focused education reform movement included programs, such as the federal government's TRIO grants program (to increase access to higher education for economically disadvantaged students), and the Higher Education Act of 1965 (HEA) (Pub.L. 89-329). In the 1980s, education reform focus shifted to excellence and accountability. The 1983 report, *A Nation at Risk*, raised fears across the country that the United States had lost its global competitive edge (Patterson, 2011).

Education pipeline can be considered a fourth reform movement. Pipeline reform emerged in the 1990s in response to a fragmented education system in the United States. Early childhood, K-12, and higher education have historically been treated as three separate systems in the United States, creating isolation and misalignment that negatively impacts students. The *All One System* report by Harold Hodgkinson (1985) provided language to a new P-20 reform movement that would seek to smooth student transitions from preschool (P) to graduate school (20). The pipeline reform movement also represented a shift from a programmatic reform model to a systemic change model (Edmondson & Zimpher, 2014). By 2006, 46 states had articulated P-20 agendas or formed P-20 councils (Lawson, 2010). These advisory bodies focused on aligning expectations for readiness, access, attainment, data integration, and funding. At a state level, the movement led to the creation of longitudinal data systems, completion programs and partnerships, and curriculum alignment initiatives. State P-20 councils were often advisory, initiated by an elected official, and lacked the supportive infrastructure. These conditions led to significant mission-related, political, legal, constituent, bureaucratic, and resource barriers for the councils (Rippner, 2014). Cross-sector councils that included partners from outside education also formed within communities and regions, and these cross-sector councils experienced many of the same barriers. The P-20 pipeline movement also sought to improve cross-sector coordination by creating what has sometimes been referred to as *wraparound services* (Kania & Kramer, 2011). Unfortunately, the broader P-20 pipeline movement lacked unifying goals and often did not identify measurable results. It wasn't long before the P-20 pipeline movement began to lose momentum.

A fifth educational reform movement, called the relevance movement, emerged in the 2000s with a national focus on college and career readiness. Societal concerns about higher education relevance and costs, and the rise of mid-skill jobs as the nation emerged from the 2008 Great Recession led to a renewed emphasis on the roles of community colleges, apprenticeships, and other industry-recognized credentials. P-16 or P-20 labels were problematic because they

reflected a bias towards four-year institutions as the ultimate educational path. In response, some reform groups began to call for *cradle-to-career* partnerships. However, the perceptions and focus of community leaders, who had been engaged with the P-20 reform movement for more than a decade, were more difficult to change than the movement's name.

The cradle-to-career partnership in Cincinnati (Strive Partnership) received national attention following the publication of Kania and Kramer's (2011) article on collective impact. In 2006, Nancy Zimpher, then president of the University of Cincinnati, convened a cross-sector group of partners to discuss a new college readiness program. By the end of the meeting, the community leaders were in agreement that more programs were not the answer—the system had to change. What set this cradle-to-career pipeline group apart from many of the previous P-20 councils was that it established specific measurable outcomes that it wanted to improve, created shared and individual accountability to achieving those outcomes, and tapped a readiness from leaders to use their authority to accelerate change (Edmondson & Zimpher, 2014). Strive Partnership also funded a dedicated staff to coordinate those collective actions. Jeff Edmondson was hired as the executive director for the local partnership, and the partners began to discover what functions were needed to support this type of collective impact work, including data and communication management.

Cincinnati began to see early improvement in the educational outcomes of its students, and Zimpher began talking around the country about what conditions were needed to enable a cradle-to-career partnership to succeed. With only one emerging case study, replication was needed to build a robust framework. In 2009, three other communities were identified to test the cradle-to-career pipeline approach to system reform with funding though Living Cities and from Urban Serving Universities (USU). Richmond, Virginia was selected as one of those three pioneer communities. Four pillars shaped this early work: (a) shared community vision; (b) evidence-based decision making; (c) collaborative action; and (c) investment and sustainability.

The pioneer sites began to identify elements of civic infrastructure that were needed for the initiative to develop, and for their partnerships to emerge and mature. Learning from success and failure was captured in a developmental framework that became known as the Theory of Action. StriveTogether (https://www.strivetogether.org/), the emerging network of cities seeking to replicate the Cincinnati framework for building cradle-to-career civic infrastructure, grew quickly. After several years of testing the Theory of Action, the StriveTogether network implemented quality-assurance measures. Communities that wanted to join the network were required to demonstrate that they had moved beyond an exploring phase of development. Today there are over seventy partnerships, most of them anchored somewhere other than at a higher education institution.

Putting the Pieces Together

Significant evolution within the U.S. education reform movement has occurred during the last half-century. The most recent national education reform movement addresses societal concerns over college and career readiness and has been labeled the cradle-to-career pipeline movement. Cradle-to-career partnerships have drawn national attention, because of the early improvements

to regional educational outcomes being realized in Cincinnati, Ohio, where a collective impact paradigm is being used to realize cradle-to-career education reform goals.

The case study below describes the pioneering work of Virginia Commonwealth University (VCU) in the Richmond, Virginia using a cradle-to-career framework. The case study describes changes that occurred over a ten-year period in the university's role as founder and university-community partnership collaborator, and documents a shift in understanding and approach to partnership that exemplifies the collective impact paradigm.

Case Study: Richmond, Virginia and Virginia Commonwealth University

Virginia Commonwealth University (VCU) was an early participant in the community engagement movement, formally creating the Division of Community Engagement (DCE) in 2006. Over the next 10 years, student service hours in the community increased from 346,526 to 1,462,854, with a 162% increase in service-learning class sections. Across that decade, the DCE supported faculty members in developing service-learning courses and community-based research projects. In 2012, it launched ASPiRE, VCU's first living-learning residential hall with a focus on community service. The Division delivers community outreach programs through the Mary and Frances Youth Center, including a regional youth program quality initiative, and direct youth programs. The DCE also created and still leads the university's Council for Community Engagement, which seeks to create a culture of community engagement across the university. VCU is recognized as a community-engaged institution by the Carnegie Foundation, and it is one of only 54 universities to be designated as "Community Engaged" with "Very High Research Activity".

VCU also became an early participant in the anchor institution movement. The university has played an active role in identifying and refining national and Richmond-specific indicators that can be used to align the university's assets to contribute to measurable regional outcomes. VCU has long been recognized as an anchor in Richmond, Virginia. It has even been recognized in 2002 by CEOs for Cities and the Initiative for a Competitive Inner City for using its presence in Richmond to encourage urban revitalization. In 2006, VCU was ranked eighth in the top 25 "Best Neighbors" in the New England Board of Education report, Saviors of Our Cities.

Today, VCU distinguishes itself as a "…premier urban, public research university…" with a mission to "…advance knowledge and student success…" through several commitments including "sustainable, university-community partnerships that enhance the educational, economic, and cultural vitality of the communities VCU serves…" (VCU Strategic Plan, 2011). For well over 100 years, the university has been deeply engaged with the community to address complex social problems. Like in most institutions of higher education, these activities developed primarily through individual academic departments. The following figure provides a visual representation of some of transitions in the role of VCU in their community benefit efforts.

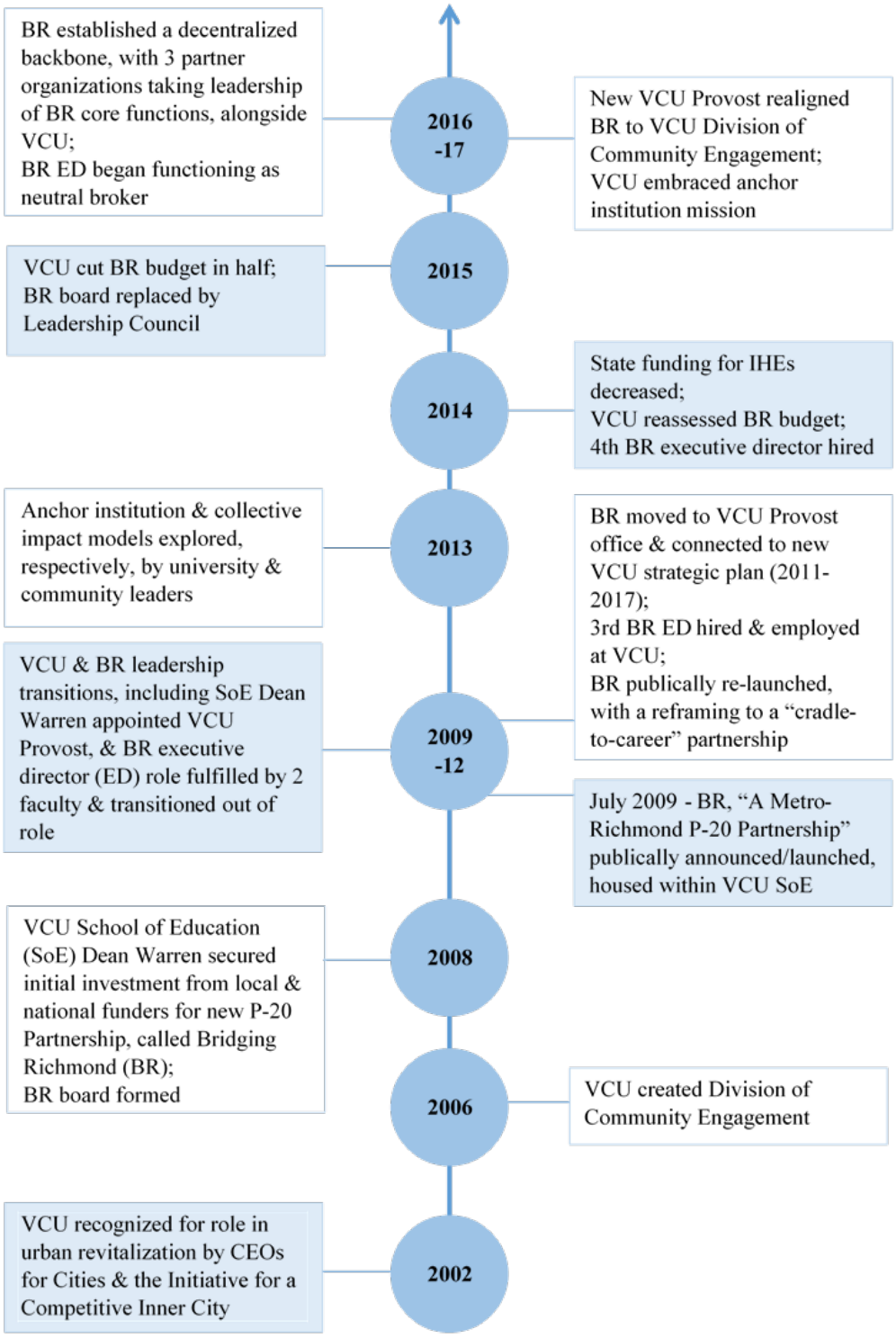

Figure. Timeline in University Roles

VCU: Evolving to include a Collective Impact Paradigm

Already one of the city's largest employers, VCU greatly expanded its physical footprint, degree programs, and student enrollment during Eugene P. Trani's two decades as president (1990-2009). President Trani was determined to show how a university could collaborate, particularly to catalyze economic development. From 1997-1998 he chaired the Greater Richmond Chamber of Commerce, and from 2001-2004 he chaired Richmond Renaissance, which focused on downtown revitalization (now Venture Richmond, http://www.venturerichmond.com/). Trani (2008) urged public and private higher institutions to see higher education connections to communities as "essential to our core functions and are increasingly vital to our continued success as well as the long-term prosperity of the nation's cities, regions, and states".

President Trani, a founding member of the Coalition of Urban Serving Universities (USU), was aware of a Living Cities (https://www.livingcities.org/) grant opportunity. In 2009, VCU School of Education Dean Bev Warren submitted a proposal and Richmond was chosen as an inaugural member of the Education Partnership Implementation Network. This network was based on the early success of the Strive P-20 partnership, referenced earlier in this article, in Cincinnati, Ohio. The other three sites in the network were California State University, East Bay; Indiana University-Perdue; and University of Houston. This VCU presidential initiative, championed by Dean Warren, would require buy-in beyond the university.

After securing the initial investment from USU and Living Cities, Warren sought additional investment from the community. Altria, the holding company for Phillip Morris with headquarters in Richmond, had recently made significant investments in another national program to improve educational outcomes, entitled Readyby21 (http://www.readyby21.org/). Almost simultaneously, Richmond became a project site for both fledgling models. Resolute, Warren secured initial investment from Strive, Readyby21, Altria, The Community Foundation, and the Jessie Ball DuPont Foundation, for the P-20 partnership that would be called Bridging Richmond.

Warren began meeting with community leaders to introduce the concept and to invite them to join an executive council, a CEO-level board that would inform how to move Bridging Richmond forward. Founding members included the superintendent of the Richmond City Public Schools and presidents of the Chamber of Commerce, Community Foundation, community colleges, private colleges, and executives from large corporations. The executive council participated in presentations on the USU model as well as by CEOs for Cities, which was launching the Talent Dividend project to increase college attainment in the top 51 metro areas. From the beginning, the group was focused on improving economic competitiveness by working back from the business sector to workforce preparation.

Bridging Richmond: 2009-2012

Bridging Richmond, "A Metro-Richmond P-20 Partnership", was announced in July 2009 in a high-profile, public event. At the time, Virginia Commonwealth University and the broader higher education community were still primarily operating from the community engagement paradigm. A few states and regional leaders were beginning to consider the implications of the P-

20 reform movement, while others were focused on the accountability excellence movement. Consequently, the earliest expression of Bridging Richmond reflected this cross-section of stakeholder perspectives and paradigms.

Virginia Commonwealth University established the Division of Community Engagement in 2006 with a vision of becoming a national model for community engagement and regional impact. In 2009, the university was making strides towards integration of community engagement through teaching, research and outreach programs. When the university was accepted as an Education Partnership Implementation Network, university leaders created the P-20 partnership within the context of this community engagement paradigm. Bridging Richmond was initially housed within the Center for School Improvement, effectively creating a community engagement hub within the VCU School of Education. Being situated in a School of Education center influenced the types of problems and solutions that arose. Dean Warren made the case for the new partnership in the Spring/Summer 2009 edition of *The Bridge*, the magazine of the School of Education. The letter from the dean that opened the magazine emphasized the "outstanding work of the School of Education community" through new programs and leadership roles that foster strong partnerships". As it stood in 2009, Bridging Richmond reflected a P-20 reform initiative that operated primarily through a community engagement paradigm.

Universities have historically played a key societal role in generating and sharing knowledge about best practices. These traditions led to VCU's Bridging Richmond role as founder and early carrier of the P-20 reform vision. A shared vision or shared agenda had to be created. Some of the community leaders who became involved with the Bridging Richmond initiative would later express the opinion that convening the initiative at a public launch under the bright media spotlight inhibited their ability to ask questions and fully understand the purpose, goals, and roles of Bridging Richmond executive council membership. VCU and the other inaugural members of the Education Partnership Implementation Network were simultaneously co-creating the partnership vision nationally while simultaneously trying to communicate that vision to local leaders from multiple sectors.

Establishing a centralized backbone model within the university was pragmatic because the university was the primary holder of the vision, and the 'university as driver' approach was consistent with the community engagement paradigm. This primary role of the university in the early days of Bridging Richmond impacted the role of the partnership's first director. Bridging Richmond's first director was the executive director of the VCU School of Education's Center for School Improvement. She was also the primary investigator for a $5.2 million federal grant to recruit, prepare, and retain school leaders in hard-to-staff schools. This first Bridging Richmond director retired after one year of fulfilling these multiple roles, and a second Bridging Richmond director was hired who also had considerable experience in the K-12 and higher education sectors. The role and skill sets of these first two Bridging Richmond directors aligned with traditional research faculty roles within the academy.

Systems within and beyond the university had considerable impact on Bridging Richmond's early activity and challenges. The national convergence of the community engagement paradigm and P-20 reform movement has already been noted. Regional leaders within the Richmond community were being asked to apply two national collaboration models simultaneously (Strive

and ReadyBy21). The implementation of these two national collaboration models could be considered complementary. However, the politics and jargon associated with each of them made it challenging for community leaders to articulate a common agenda and vision locally across the two models. Within VCU, President Trani retired weeks after the public launch of the Bridging Richmond partnership, and President Rao became the chair of the fledgling initiative. Dean Warren was named the interim provost in April of 2010 and became provost in April 2011. An interim dean for the School of Education was appointed from April 2010-June 2012. Bridging Richmond quickly became thought of as the initiative of a former president during a time of significant university-wide and School of Education specific leadership change.

The second Bridging Richmond director resigned by the end of 2011. Community leaders were impatient with what was perceived as getting caught up in process with no results. Some sectors within the community continued to relate to the accountability and excellence reform movement. Bridging Richmond, a P-20 reform movement project, continued to be perceived as a VCU-driven program with a bias towards bachelor's degrees. The relevance reform movement was building, and additional emphasis nationally and regionally was being placed on the role of community colleges and post-secondary learning leading to associate degrees, apprenticeships, and other industry-recognized credentials. Leadership churn and an emerging, rather than a clear and well-established, project vision meant Bridging Richmond lacked the energy and influence to change regional and university dynamics that were at the time being driven by individual interests, action, and recognition. It was time to reassess the vision and viability of the P-20 reform movement in Richmond.

Bridging Richmond: 2012-2014

Virginia Commonwealth University hired a consultant and a transition team was formed to determine how and if Bridging Richmond should move forward. The university also completed its strategic plan: *Quest for Distinction: Discover, Impact, Success*. The new plan articulated university-community partnerships as critical and targeted K-12 education, health access, and economic development as key partnership focus areas. Provost Warren was able to connect the Bridging Richmond partnership to this new VCU strategic agenda, moved Bridging Richmond to the Office of the Provost, and launched a national search for a new executive director. In August 2012, Bridging Richmond was re-launched in another large public event. The *P-20* reform language was intentionally dropped, and a new *cradle-to-career reform* language was emphasized.

From 2012-2014, the nation and region lost momentum for the community engagement paradigm. Businesses, hospitals, and higher education began to reinterpret the social contract in response to post-recession fiscal austerity. The university, and some community leaders, started to learn about the anchor institution paradigm. The community outside the university became interested in collective impact models and quickly launched several local collective impact initiatives. The accountability and excellence education reform movement remained a dominant frame, and leaders also began to incorporate relevance reform movement values. As part of a federal Promise Neighborhood grant application, community leaders had been learning about Results Accountability, as described in Mark Friedman's (2005) *Trying Hard Is Not Good Enough.* The community focused on technical solutions, by purchasing licenses for population

indicator dashboards, as well as case management software for linking performance measures. The community had not invested equally in building trust and shared measurement for the shared data systems, and Bridging Richmond was able to fill that void.

Bridging Richmond convened a Regional Data Advisory Committee with people from business, philanthropy, K-12, and higher education to select core, lagging education indicators for the partnership. Bridging Richmond partnership staff members developed impact frameworks for two of the new intermediaries that: (a) clarified the desired result and indicators; and (b) identified shared measures that could be used by multiple partners to align practices for shared action. The Bridging Richmond partnership also commissioned an economic study to identify areas of high occupational demand for the region through 2030. The partnership set a regional degree and credential goal based on the projected demand, and Bridging Richmond convened 31 partners to co-develop a Department of Labor (DOL) grant proposal that focused on high school reform to address high demand for information technology and computer science occupations. Job analysis and curriculum alignment across K-12, apprenticeship, and two- and four-year colleges continued even though the grant proposal was not funded.

Virginia Commonwealth University, through the Office of the Provost, continued to serve as a centralized backbone for the partnership. During the period, the partnership staff grew to include an executive director, manager of evidence based decision making, and communications coordinator with funding for these positions coming almost exclusively from the university. The role of the university as anchor and primary investor allowed the Bridging Richmond to keep its doors open through multiple internal transitions and periods of limited local financial investment. VCU and community leaders began to explore the possibility of forming a separate 501(c)3, developed bylaws, and renamed its executive council a “board of directors” in order to shift the perception of Bridging Richmond in the community from ‘university program’ to ‘partnership’ and to improve financial sustainability.

The executive director for Bridging Richmond now had one foot in and one foot out of the university. The executive director was responsible to a board of directors and executive council that had no fiduciary responsibility, and directly reported to the founder of the work within an institution providing fiscal agency, primary investment, and founding vision. During this period, the executive director’s role was to help the community develop a common agenda through shared measurement, demonstrate the relevance of the work by bringing multiple partners together to take shared action, and fund development. Examples of this emphasis included co-chairing a regional workforce preparation group for another emerging regional collaborative to propose a shared agenda for education and career readiness, and writing a successful Lumina Foundation Community Partnership for Attainment grant.

Two significant systems dynamics were at play during this period. First, the system in Richmond was designed to promote individual transactions and a competitive agenda that drove a direct service delivery expectation. Shared accountability to results through aligned contributions from the partners was not the solution that community leaders were expecting. Partners sought program proposals that might benefit their own individual organizations so that each could decide whether or not to participate and/or fund the initiative. Otherwise, they preferred to work

on their own organizational improvement internally, without peer accountability through a partnership, or incursion from what was still perceived by many as a university program.

Significant system dynamics also existed within Virginia Commonwealth University. Virginia's funding for higher education fell by over 20% from 2007 to 2013, making it one of the lowest per FTE student in the nation. The university had been rapidly expanding before and during this period. Through the *Quest for Distinction*, the university had focused on improving educational quality, embracing diversity, developing the research program with substantial increases to external funding, pre-eminent academic programs, and growing the alumni base and engagement of the community.

In July 2014, Provost Warren was appointed as president of Kent State University. An interim provost was named, and one of his first charges was to identify ways the University could respond to significant state funding cuts. Bridging Richmond, an initiative started by a former president and provost, was one place where university cost savings could occur without impacting internal operations. Presentations were made to the Bridging Richmond board of directors, calling on the community to demonstrate an increased investment or the university would reduce its financial investment by half. VCU appointed Bridging Richmond's manager of evidence-based decision-making as the partnership's fourth executive director after the third executive director left VCU to accept a position with the Carnegie Foundation. With prior experience in nonprofit administration, community health, and the faith community in Richmond, the new Bridging Richmond director brought skills and relationships from sectors beyond higher education. In its first 4 years, the fledgling Bridging Richmond partnership had employed four executive directors.

Bridging Richmond: 2015-2017

Virginia Commonwealth University's interim provost charged the Bridging Richmond executive director with accelerating the partnership toward shared action and revising the partnership's accountability structure to reflect VCU as the anchor and primary investor. In response, the executive director put forward three proposals to the interim provost and executive committee: (a) wind the partnership down over three months; (b) finish its largest grant and wind down over 14 months; and (c) identify a primary customer and champion for the next year to provide focus and value. Regional K-12 school superintendents came forward to express interest in being a primary customer and Bridging Richmond champion for the next year, as they prepared for a regional equity summit intended to lead to shared action. VCU's financial contribution to the partnership budget was cut in half, the Bridging Richmond's board was dissolved, and all community leaders were considered for the positions on the partnership's leadership council. Consideration was based on their organization's aligned actions or the funding their organization contributed towards shared action. VCU administrative leaders determined that Bridging Richmond was unique and valuable in its role as a neutral broker of community collaboration. The university provided a one-time cash payment to give the partnership time to implement its proposals.

VCU hired a new provost in March 2015. The VCU Office of Planning and Decision Support and the Division of Community Engagement developed a pilot anchor framework for

understanding the impact of the university in 2015. An anchor dashboard task force was formed and co-chaired by these same two offices. VCU celebrated the Division of Community Engagement's 10th anniversary in 2016. The Division of Community Engagement also developed a partnership mapping program to better understand the landscape of university activity in the community and to better identify opportunities for matching community and university partners. After considering various administrative home options for Bridging Richmond within the university, the new provost selected the Division of Community Engagement. VCU was simultaneously investing in the community engagement paradigm, anchor institution, and collective impact paradigms while seeking to clarify connections and roles between the potentially complementary approaches.

Bridging Richmond continued to build on the momentum in the community for collective impact and results accountability. The partnership also obtained, for the first time, regional kindergarten readiness data for its early childhood coalition at the school-level, disaggregated by race, ethnicity, socioeconomic status, and sub-scores. These data allowed the early childhood coalition to target preschool quality interventions, based in a way that had never been possible with only district-wide scores. Partnership staff developed shared data system prototypes for collective impact initiatives to coordinate middle school out-of-school time and college and career centers in the city schools. Bridging Richmond provided operational support for data use in one of the partnership's coordinating organizations, and oversaw transition of the data to a third party vendor. The system used the shared measurements that came from the facilitation of the impact framework and allowed for connecting school and multiple nonprofit data.

Because of these accomplishments, the Richmond City Public School district invited Bridging Richmond to embed a staff member within the district to provide data support. Federal financial aid information (FAFSA) was made available in week-over-week and year-over-year dashboards at the high school level for the first time in the state. Improvement teams were formed and provided with continuous improvement coaching to use the data, as well as policy advocacy to get Virginia to receive the data at a student level. Following up on the unsuccessful Department of Labor (DOL) proposal, the partnership also continued to convene groups of employers to do job analysis on some of the high-demand technology careers, and it convened K-12 and higher education partners to work on curriculum alignment. The governor announced a high school redesign grant, and the superintendents built on the Department of Labor grant proposal. They folded the job analysis and curriculum alignment work into the committees that were formed when the grant was awarded. Collaborative Action Networks were also formed to address chronic absence and elementary literacy. The partnership had moved to shared action and demonstrated the value of backbone functions.

At the beginning of this period, VCU continued to serve as the anchor and centralized backbone for the partnership. As VCU also embraced an anchor institution mission, it became important to clarify the difference between the two roles. An anchor within collective impact is an organization that provides fiscal agency and other core functions for the partnership. The role of the university as the sole anchor for Bridging Richmond began to shift in 2016. There were new executives at The Community Foundation, Robins Foundation, and United Way of Greater Richmond and Petersburg, and they saw the value of the backbone functions. The Bridging Richmond executive director began meeting with each of these new executives to introduce the

decentralized backbone model and to identify what functions of the partnership each executive might be interested in leading. A nine-month facilitated group conversation followed that resulted in each institution/organization identifying aspects of the partnership they would anchor, and as importantly, what functions they would bless the others to lead.

This process of transitioning to a collective impact paradigm was accelerated when Bridging Richmond's senior data analyst was hired by a local community organization that had been receiving data support through the partnership. Instead of assuming that a new senior data analyst should be hired at VCU, the four organizations were asked where (i.e., within which organization(s)) they wanted to build data capacity for the partnership. The partners decided that United Way would become the primary fiscal agent, host the data infrastructure, and staff some of the partnership's collaborative action networks. VCU would continue to host the executive director, be the secondary fiscal agent, and leverage the Division of Community Engagement to align other university contributions as a partner. The Community Foundation took on leadership of capability building for the convening, facilitation, and leadership skills needed for collective impact. The Robins Foundation, a private family foundation, was well-positioned and interested in forming a policy action team. The partnership executive director role had fully transitioned into a secretariat or servant leadership role for the community leaders, and there was a core group of partners that no longer saw the partnership as a university program.

The system dynamics during 2015-2017 exemplify the emergent, evolutionary nature of collective impact work. Collective impact work cannot depend on a single visionary leader, organization, or single sector. In 2015, the Bridging Richmond partnership could have begun to wind down, returned to being a program within a university center, or been championed by any sector or group of community leaders. In 2015, five of the twelve leadership council members were superintendents, and they served as a magnet for the other members. During the period, all but one of those superintendents transitioned within or outside regional school districts. The new philanthropic leaders, who had become engaged because of the superintendents, began to become customers and champions of the work as school district leadership changes occurred.

Leadership transitions at VCU, and ambiguity about how the partnership would connect to other university priorities, provided a great deal of autonomy and urgency for the executive director to deepen the engagement of community partners. Responding to multiple emerging collaborative initiatives that were priorities for community leaders provided Bridging Richmond with sustainable funding during the transition and proof of concept for the value of the backbone functions. If Bridging Richmond had treated the community as static, and failed to respond to any of these environmental conditions, the partnership would have likely become extinct.

Instead, multiple partners began to own the work and change a small part of the system in Richmond. United Way of Greater Richmond and Petersburg redesigned their communications, community indicator project, and activities to better align to the cradle-to-career reform continuum. The Robins Foundation updated their strategic plan to incorporate partnership indicators and made changes to funding priorities. The Smart Beginnings early childhood coalition re-aligned with the Bridging Richmond partnership and began incorporating practices supported by the backbone organizations.

Instead of a staff of one to three people at VCU, the Bridging Richmond partnership "staff" quickly expanded to include nine leaders from seven partner organizations, who began meeting monthly to align the work of their organizations and the functions of the partnership they led. Alongside a more stable community leadership for the partnership, the current executive director has been in role for three years and worked for the partnership a total of four and a half years, whereas the average tenure for each of the previous three executive directors was 16 months. Developing relationships, trust, awareness of multiple motivations, leadership without formal authority, and ability to navigate the politics of a regional system requires time and development of a unique skillset. While attribution of changes in lagging education and workforce indicators is not possible yet, there is considerable evidence that systems are changing in a way that could contribute to those desired results.

Ten Takeaways

Based on our experiences at an urban serving university that has recently evolved a collective impact partnership paradigm, while continuing to use both the community engagement and anchor institution partnership paradigms, we offer the following ten takeaway observations. These observations are designed to help university leaders successfully engage with university-community partnerships, particularly collective impact partnerships that realize beneficial outcomes for universities, as well as for the regional communities within which they operate.

1. Urban serving universities have shifted from co-existing alongside their communities towards reciprocity, an exchange for mutual benefit.
2. While important, these transactions must be complemented with system transformations within the higher education context and in the broader community, if we are to realize improved social outcomes.
3. Community engagement, anchor institution, and collective impact are three paradigms for university-community benefit that can be complementary if coordinated and applied to appropriate community and university problems.
4. The first major obstacle to a successful collective impact process are that partners expect the wrong type of solutions.
5. The second is that universities, as knowledge organizations, may overlook how their own research and community engagement norms impact the types of solutions they value and bring to the community.
6. The problem, desired result, and the current capability of partners to share leadership must inform the boundaries of roles and tasks for the university partner.
7. Collective impact partnerships require strong backbone support functions that can be either centralized in one organization or decentralized across multiple partners.
8. Historical and contemporary university-community power dynamics make it difficult for higher education institutions to serve as a neutral broker for collective impact.
9. If the university must host the executive director for a collective impact partnership, the institution needs to ensure that this leader is able to detach themselves from the university and take on a third-party, servant leadership role.
10. The executive director role in collective impact partnership requires sophisticated leadership skills to facilitate a shared vision, cultivate trust and peer accountability, navigate community politics, communicate across multiple sectors and leadership levels, understand the

motivations of and value to partners, build a cross-functional team, and use informal authority to mobilize partners for shared action.

Conclusion

University leaders, particularly in times of fiscal uncertainty, may be tempted to "reduce investment in activities that are sometimes considered tangential to our core missions of teaching, research, and service" (Trani, 2008, p. 1). Particularly for urban and metropolitan universities, the mission of community benefit is not a luxury or a tangential activity, it is core to the identity of the institutions, valuable to the other core mission elements, and essential to the vitality of the surrounding communities. Neither the communities nor the universities are static, but are always evolving individually and in relationship with each other. University and community leaders must embrace the paradox that Kania and Kramer describe as "combining *intentionality* (that comes with the development of a common agenda) and *emergence* (that unfolds through collective seeing, learning, and doing)" (2013, p. 8).

Universities are collaborating with community partners to increase their intentionality through anchor dashboards and community engagement efforts that identify clear results with measurable targets. Understanding the current landscape of university-community partnerships is important work, as are efforts to more intentionally align existing and new university activity towards clear aims. At the same time, leaders must be vigilant to insure that predetermined solutions do not crowd out new ways of collaborating to address complex and adaptive problems. Improving systems so that they move beyond incremental change to transform communities requires leaders who are comfortable with continually unfolding opportunities, strategies, and relationships, and who have the endurance to persevere through the inevitable periods of failing forward. Without the founding vision and persistent investment of Virginia Commonwealth University, it is likely that Bridging Richmond would never have been created or survived the many university and community transitions that occurred.

In this article we suggest that universities must embrace emergence and be as intentional about clarifying their role as they are in developing a common agenda. A key takeaway from this article is that higher education "need not always be involved in, much less at the forefront of, community engagement work" (Whitney, Harrison, Clayton, Muse, & Edwards, 2016, p. 88). It is also important that university leaders be consciously aware that the current system is aligned to deliver the current results. Intentional and thoughtful force must be applied to keep the system from recreating itself by shifting from isolated programs to isolated collective impact initiatives. We invite you to reread and reflect on the ten takeaways preceding the conclusion section, to add your own learning, and to identify specific actions that your institution can take to improve its community benefit in the next month, three months, and year.

References

Bridging Richmond: A metro-Richmond p-20 partnership. (2009, Spring/Summer). Bridge: The Magazine of the VCU School of Education, 14-17.

Butin, D. W., & Seider, S. (Eds.). (2012). *The engaged campus: Majors, minors, and certificates as the new community engagement*. New York, NY: Palgrave Macmillan. https://doi.org/10.1057/9781137113283

Cantor, N., Englot, P., & Higgins, M. (2013). Making the work of anchor institutions stick: Building coalitions and collective expertise. *Journal of Higher Education Outreach and Engagement, 17*(3), 17-46. Retrieved from http://openjournals.libs.uga.edu/index.php/jheoe/article/view/1036

Cantor, N. & Englot, P. (2014). Civic renewal of higher education through renewed commitment to the public good. In J.N. Reich (Ed.), *Civic Engagement, Civil Development, and Higher Education.* Retrieved from http://archive.aacu.org/bringing_theory/documents/4civicseries_cecd_final_r.pdf

CEOs for Cities with Living Cities. (2010). *How to behave like an anchor institution.* Retrieved from https://ceosforcities.org/how-to-behave-like-an-anchor-institution/

Dr. Eugene P. Trani biography. (2016). Retrieved from http://eugenetrani.vcu.edu/bio.html

Dubb, S., McKinley, S., & Howard, T. (2013). The anchor dashboard: Aligning institutional practice to meet low-income community needs. Retrieved from https://democracycollaborative.org/content/anchor-dashboard-aligning-institutional-practice-meet-low-income-community-needs-0

Edmondson, J., & Zimpher, N. L. (2014). *Striving together.* Albany: SUNY Press.

Fitzgerald, H. E., Bruns, K., Sonka, S., Furco, A., & Swanson, L. (2012). The centrality of engagement in higher education. *Journal of Higher Education Outreach and Engagement, 16*(3), 7-28. Retrieved from http://openjournals.libs.uga.edu/index.php/jheoe/article/view/861

Friedman, M (2005). *Trying hard is not good enough.* Santa Fe: FPSI Publishing.

Futrell, M. H. (2010). Transforming teacher education to reform America's P-20 education system. *Journal of Teacher Education, 61*(5), 432-440. https://doi.org/10.1177/0022487110375803

Hanleybrown, F., Kania, J., & Kramer, M. (2012 January 26). Channeling change: Making collective impact work. *Stanford Social Innovation Review, 20*, 1-8. Retrieved from https://ssir.org/articles/entry/channeling_change_making_collective_impact_work

Hensley, B., Galilee-Belfer, M, & Lee, J. (2013). What is the greater good? The discourse on public and private roles of higher education in the new economy. *Journal of Higher Education Policy and Management, 35*(5), 553-567. https://doi.org/10.1080/1360080X.2013.825416

Hodgkinson, H. L. (1985). *All one system: Demographics of education, kindergarten through graduate school.* Washington, D.C.: Institute for Educational Leadership. Retrieved from http://files.eric.ed.gov/fulltext/ED261101.pdf

Kania, J., & Kramer, M. (2011). Collective impact. *Stanford Social Innovation Review, 9*(1), 36-41. Retrieved from https://ssir.org/articles/entry/collective_impact

Kania, J., & Kramer, M. (2013 January 21). Embracing emergence: How collective impact addresses complexity. *Stanford Social Innovation Review*. Retrieved from https://ssir.org/articles/entry/embracing_emergence_how_collective_impact_addresses_complexity

Lawson, H. A. (2010). Needs and opportunities for social work leadership in emergent P-16 initiatives. *Children & Schools, 32*(1), 51-60. https://doi.org/10.1093/cs/32.1.51

Lockeman, K. & Pelco, L. E. (2013). The relationship between service-learning and degree completion. *Michigan Journal of Community Service-Learning, 20*(1), 18-30. Retrieved from http://files.eric.ed.gov/fulltext/EJ1047041.pdf

Patterson, R. R. (2011). *The development of a P-20 educational campus: A case study on innovation* (Doctoral dissertation). University of Denver, Denver, CO. Retrieved from http://digitalcommons.du.edu/etd/499/

Rippner, J. A. (2014). State P-20 councils and collaboration between K-12 and higher education. *Educational Policy, 31*(1), 3-38. https://doi.org/10.1177/0895904814558008

Senechal, J., & Stringer, J. (2014). *Middle level learning: Compendium of research and best practice*. Richmond: Metropolitan Educational Research Consortium. Retrieved from http://scholarscompass.vcu.edu/merc_pubs/6/

Starke, A., Shenouda, K., Smith-Howell,D. (2017). Conceptualizing community engagement: Starting a campus-wide dialogue. *Metropolitan Universities, 28*(2), 72-89. https://doi.org/10.18060/21515

Surman, M., & Surman, T. (2008). Listening to the stars: The constellation model of collaborative social change. *Social Space, (Annual),* 24-29. Retrieved from https://socialspacemag.org/wp-content/uploads/2016/12/SocialSpace-2008.pdf

Trani, E. (2008). Even in hard times, colleges should help their communities. *Chronicle of Higher Education*, 54(36), A36. Retrieved from http://www.chronicle.com/article/Even-in-Hard-Times-Colleges/23564

VCU strategic plan: Quest for distinction (2011). Retrieved from https://quest.vcu.edu/

Whitney, B., Harrison, B., Clayton, P. H., Muse, S., & Edwards, K. E. (2016). Learning from and with community organizations to navigate the tensions of democratic engagement. *Michigan Journal of Community Service Learning*, *23*(1), 85-91. https://doi.org/10.3998/mjcsloa.3239521.0023.108

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What Does it Take for Practitioners to Use Data to Change Behavior in Collective Impact?

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Abstract

The use of data to track and manage progress is critical to a collective impact initiative achieving results or understanding impact. Yet, little research has been done to determine how collective impact practitioners can effectively use data. This article—including a literature review, semi-structured interviews with experts on performance management and collective impact, as well as Living Cities' experience with over 70 collective impact initiatives—outlines five steps for practitioners to grow their initiative's capacity to use data: Agree on the Data; Find the Data; Present the Data; Discuss and Learn from the Data; Change Behavior and Share Responsibility.

Keywords: Community change; continuous improvement; cross-sector partnerships; database management

Introduction

Collective impact initiatives need to use data to inform decisions, drive direction and manage progress (Kania & Kramer, 2011). The continuous use of data grounds the collective impact work and illuminates for partners when and how they should change their behavior to achieve results. The use of data for collective impact can be thought of as a continuous "feedback loop" to support behavior change and influences systemic change in communities to create large-scale social change (Boyea-Robinson, 2016). Living Cities' experience with over 70 collective impact initiatives has shown that embedding a data-driven feedback loop can be challenging. There are many challenges associated with using data to change behavior, but they all fundamentally come down to questions of the capacities, skills, and discipline required to manage a data-driven process.

To better understand what it takes to use data for collective impact, we interviewed 17 experts and practitioners on performance management for collective impact.

Background

Living Cities, a collaborative of 18 of the world's largest foundations and financial institutions, approaches all of its field-level research based on the needs of grantee partners in 105 cities and metropolitan areas across the US. These efforts focus on a variety of content areas, from education and economic development to workforce development and health. A majority of time is spent with grantee partners identifying areas of needed support to achieve large-scale community change. Occasionally, there are similarities across geographies and content focus, since challenges are similar for the different collective impact initiatives. Therefore, Living Cities invests resources in identifying solutions to those challenges.

Living Cities was one of the first organizations to encourage the use of a collective impact framework through its funding initiatives (Kania, Hanleybrown, & Splansky Juster, 2014). Within our support of collective impact initiatives, we have explicitly focused on investing and supporting the use of data to achieve large-scale community change (Living Cities, 2016). Among other approaches, Living Cities has used the Results Based Accountability (RBA) framework, to help collective impact practitioners think through their outcomes and necessary data to track progress of performance over time (Friedman, 2015). RBA helps collective impact initiatives develop a framework for measuring, tracking, and managing performance against large-scale results. While the RBA framework and associated tools were helpful to collective impact leaders, it became clear there was a need for greater understanding of how to invest in the capacity of collective impact initiatives to effectively collect, use and manage data throughout the lifecycle of the initiative.

Methodology

Exploring what capacities are required to use data for collective impact occurred in four different stages. The initial stage consisted of an online literature review, which used keyword searches of data and performance management for collective impact, which all were written after the original *Collective Impact* article was released in 2011. The review found 19 articles and online resources, and we identified themes across these articles. Several focused on performance management within the context of the social sector (Park, Hironaka, Carver, & Nordstrum 2013; Zhang & Winkler, 2015; Gillespie, 2014; Walker & Moore, 2011), as well as several examples of performance management case studies within the context of collective impact (Edmondson, 2014; Perkins, 2014; StriveTogether, Undated; Kuhlmann, 2016). However, there were few examples of research that explicitly focused on exploring what collective impact practitioners need to invest in to effectively use and manage data within the context of collective impact.

With this baseline understanding from the literature, the research expanded to a second phase, comprised of interviews with practitioners located in geographies around the country, as well as intermediary organizations that support collective impact initiatives, such as funders or research organizations. This group had representatives in positions ranging from research assistants to executive directors of programs or organizations. Less than a quarter of the interviewees were receiving direct funding from Living Cities at the time.

Living Cities conducted semi-structured interviews with 17 different individuals with experience on using data to achieve social outcomes and/or experience leading and/or supporting collective impact initiatives (Figure 1). Some of these interviewees had experience with tracking and using data to achieve social outcomes, but not necessarily through collective impact, and some of these interviewees had experience with collective impact but not necessarily tracking and managing data. Some had experience with both (i.e., for a full list of first and second round interviewees, visit: https://www.livingcities.org/work/data-collective-impact/about). Several follow-up interviews or email exchanges were conducted with these interviewees to obtain further feedback on the research presented in this article as it was developed.

1. What capacities do you think are needed to use data in collective impact?
2. In particular, what capacities do you think are needed to use data for continuous improvement in collective impact?
3. What challenges have you seen for using data in collective impact?
4. What are some potential solutions to solving these challenges?
5. What are good examples of CI initiatives using data well?
6. Other resources?

Figure 1. Initial interview questions.

After completing the literature review and gathering data from the first set of interviews, we synthesized major themes and drafted a first iteration of the actions needed to use data while undertaking a collective impact initiative. The third phase of research consisted of additional semi-structured interviews with practitioners of collective impact to better understand how the elements apply to the exercise of collective impact in communities. Five semi-structured interviews were conducted with seven practitioners to obtain their feedback on the elements, as well as to capture stories from their work, to better understand the application of each part of the elements (Figure 2). These practitioners were all either currently or formerly involved in a Living Cities-supported collective impact initiative, and they also worked with or for a backbone organization in some capacity. These practitioners had indicated an interest in learning more about using data for collective impact, and had experience doing so. We framed the elements as "steps" in that interview protocol to help practitioners conceptualize how the elements would be applied to their day-to-day work.

1. We've identified 5 basic steps for how to use data in collective impact to achieve a shared result:
    a. **Agree on Data**: Agree with partners on population metrics that track to a shared result, as well as program-specific metrics to understand how programs are contributing to changes.
    b. **Find the Data:** If the data exist, figure out how to access them. If they don't, figure out how to develop them.
    c. **Present the Data:** Take the data and make them digestible, understandable and actionable.
    d. **Discuss the Data:** The data will tell a story—determine what's behind that story and, more importantly, what to do about it.
    e. **Change Behavior and Share Responsibility:** Make sure everyone in the collective impact initiative is actually changing behavior based on the data.
2. Do these steps resonate with your work? Is there something missing?
3. What are the roles and responsibilities you've seen required to complete some of all of these steps?
4. What are the main successes and challenges you've seen?
5. What are other challenges and opportunities you see for using data in collective impact?
6. What resources or tools have been most helpful for you to encourage your partners to share and/or use data?

Figure 2. Subsequent practitioner interview protocol.

The fourth and final phase of this research was to translate the research findings into an online blog series on LivingCities.org to further validate the elements with a larger body of collective impact practitioners. The blog series ran over the course of four months and was marketed towards collective impact practitioners around the country. Digital metrics from the blog series show that the elements presented generally resonates with the experience of collective impact practitioners. Almost 600 people have subscribed to the blog series through an e-newsletter service, and the blog posts over-performed other blogs on LivingCities.org, with one blog being the most read on the website during the series time period, and three blogs being in the top ten most read blogs.

Results

From the research, we found five different elements necessary for effectively using data for collective impact: Agree on the Data; Find the Data; Present the Data; Discuss and Learn from the Data; Change Behavior and Share Responsibility. Within each of these elements, the research also identified many different "capacities" that collective impact initiatives need to invest in to use data effectively. Because interviews focused mostly on performance management and measurement techniques, use of quantitative data dominated the discussions. However, the use of qualitative and "lived experience" data is critical to collective impact (Raderstrong and Boyea-Robinson, 2016). Any absence of findings on qualitative data in the discussion below is only because the best use of qualitative data for collective impact is outside the scope of this research.

The remainder of this paper will explore the five elements and each subsequent capacity required to strengthen a collective impact initiative based on what it takes to implement those elements. These elements were presented as linear "steps" in the blog series, but should be viewed as dynamic actions that can occur throughout the lifecycle of an initiative. Investment in an element can be seen as independent from the others, but there are intersections in each element that requires consideration of the others. Focus on one area may also surface issues in another, requiring collective impact leaders to shift resources to invest in new or different capacities.

Discussion: Five Elements for Effectively Using Data for Collective Impact

Agree on the Data

Agreement on what data is needed is a foundational element to using data for collective impact. This first requires establishing a "shared result," (a term often used in Living Cities programmatic support) or "common agenda" (Kania & Kramer, 2011). This shared result is the "north star" of an initiative and should be ambitious but attainable, such as reducing unemployment by 10% in 10 years (Raderstrong & Perkins, 2015).

With this shared result in place, a collective impact initiative can then build out a "data-driven feedback loop" to track progress towards achieving a shared result (Figure 3). The feedback loop consists of five components: key drivers; 3-6 and 6-10 year outcomes; a shared result; and strategies. Key drivers are metrics that collective impact initiatives use to measure the impact of strategies, programs, activities, and systems. Outcomes are measures that illustrate changes in the

population. The outcomes are divided up in to 3-6 year outcomes and 6-10 year outcomes to allow the collective impact initiative to think of its work in phases. Some progress can be seen early through changes in data, and some progress can only be seen after several years. Strategies are a coherent collection of activities, ideas and programs that drive changes towards a shared result.

Figure 3. Data-Driven Feedback Loop.

Collective accordance of the metrics for a collective impact initiative's data-driven feedback loop requires an intensive focus. To secure this agreement on what data to track, a collective impact initiative should invest in three different capacity areas: Facilitation skills; research and analysis skills; and a framework for continuous improvement.

Facilitation Skills. A strong facilitator is required to get all partners to agree on the initiative's shared result, and the best measures to track that shared result. Often collective impact initiatives will use an outside individual or contractor to facilitate an initial meeting or set of meetings to come to agreement on which metrics will make up their data-driven feedback loop. But maintaining this agreement on measures requires on-going relationship management as the collective impact work evolves, so if collective impact initiatives rely on an outside facilitator, they should supplement that individual with their own capacity to manage on-going relationships.

Research and Analysis Skills. To get agreement on data, collective impact initiatives need to start with an initial list of measures that have been tested and verified in specific focus areas, such as obesity rates or high school graduation. Using these initial measures as a starting point can help the facilitation of agreement discussed above. Many initiative partners already have a sense of what measures make sense, but some basic research skills are needed to find and analyze a reasonable list of initial measures.

The identification of appropriate measures should arise through the collective knowledge of the partners. Depending on the agreement of the members, the initial identification of measures may occur through the efforts of the backbone organization, a data committee, or from a discussion of all the partners. For instance, the Seattle/King County member of The Integration Initiative, Communities of Opportunity, has created a data committee made up of staff from partner organizations that have research and data analysis experience. This committee was pulled together after the initiative agreed on an initial framework for their data-driven feedback loop, but the members have been able to go deeper in this framework to revise the measures as needed.

An Approach to Continuous Improvement. The science of continuous improvement is another fundamental part of using data in collective impact (Park, Hironaka, Carver, & Nordstrum 2013). There are many different tools and approaches to continuous improvement and collective impact initiatives need to pick the "right" approach for them based on local context.

Living Cities uses several different approaches to continuous improvement. It uses Results Based Accountability (RBA) with our Integration Initiative sites as a way to set up the data-driven feedback loop, explained above. RBA in particular helps collective impact initiatives connect the longer-term outcomes to the programmatic metrics or key drivers.

Living Cities' Prepare Learning Circle sites have used the A3 tool for their continuous improvement processes, which incorporates another continuous improvement method called "Plan, Do, Study, Act." The A3 tool is designed to produce data to be fed into a data-driven feedback loop, so collective impact initiatives relying only on the A3 tool can miss the bigger picture of their work. Some other initiatives have used Six Sigma, such as the Strive Partnership. This approach has been popular in large corporations, particularly those focused on manufacturing and industry, but can require a lot of quantitative capacity to implement successfully.

Find the Data

Finding needed data was one of the most common challenges cited in interviews. All interviewees touched on this challenge in some way or the other. Not surprisingly, this challenge is well documented in the literature (StriveTogether & Data Quality Campaign, 2015; NNIP, 2014; Gillespie, 2014; Parkhurst & Preskill, 2014). There are seven different elements a collective impact initiative can invest in to strengthen their capacity to find necessary data:

1. Leadership buy-in and support;
2. A data inventory;
3. Data sharing agreements;
4. A dedicated staff;
5. Surveys;
6. A data partner; and
7. A software platform.

Leadership Buy-In and Support. The Strong Healthy Communities Initiative in Newark, NJ has navigated a data-driven culture shift. They are accessing and sharing data with partners, but are struggling to get data they can use for forward-looking, strategic decision-making. Much of the data they have access to, particularly from public sector partners, is compliance focused. For example, they know how many students are chronically absent from school, but not the reasons why they are absent. The lack of these strategic data has become a big barrier to achieving their collective impact goals.

Getting the "right data" to achieve goals requires commitment from leaders of your collective impact initiative to share data from their work with the other partners. Oftentimes a commitment to using data for improvement requires fundamental shifts in the culture of an organization (Gillespie, 2104), at staff levels from programmatic up to executive leadership.

A Data Inventory. An unfortunate reality is that even with agreement on what data is needed, it is likely that data will not exist. For example, the Network for Economic Opportunity, a member of The Integration Initiative, decided they wanted to track the number of working-aged African American men earning family sustaining wages. As they began to look into collecting data, they realized they couldn't really track this metric, and instead chose multiple proxy measures , including non-employment rates, labor force participation rate, and average wage.

One way to solve this is to create a data inventory, a list of all the data needed, and how to potentially get it (Queen, 2016). Lack of data shouldn't slow down an initiative's use of data, but instead inform where an initiative should invest resources in finding and/or creating data.

Data Sharing Agreements. Formalizing data sharing relationships can set specific expectations for partners and help ensure a collective impact initiative gets the data it needs. For example, The Integration Initiative member from Detroit shared data across several different partners, but often would get data in the form of PDFs, and not the more usable Excel spreadsheet files. Developing what's called "data sharing agreements" can help set expectations—like when to share data and in what format—early on in the life of your collective impact initiative.

The National Neighborhood Indicators Partnership (NNIP) outlines four elements of successful formalized data sharing agreements: (a) general introduction; (b) data transmission and content; (c) handling and release of data and analysis; and (d) procedural/contractual issues (NNIP, 2014).

Partners need to be held accountable to the data sharing agreements they sign. The Strong Healthy Communities Initiative example outlined earlier shows how even with data sharing relationships set, partners may not provide necessary data nor exercise the discipline necessary to use it. Maintaining this type of accountability requires dedicated staff to manage data-centric relationships.

Dedicated Staff. Because the continuous collection of data requires significant staff capacity, creating staff positions to manage data collection and analysis can help manage data more effectively. However, this can be challenging since data capacity is often under resourced for level of expertise needed. Dedicated staff for collective impact are usually housed within a

centralized backbone organization, but do not have to be. The Neighborhood Developers (TND), the managing partner of Chelsea Thrives in Massachusetts, was able to work within funding constraints to meet data needs by engaging an existing TND staff member on the creation of data dashboard and monitoring tools. That individual has since moved on, and the position is in the process of being filled. Melissa Walsh, Director of Chelsea Thrives, one interviewee for this paper, said her experience building out their staffing for data management "highlights the importance of strong data systems and the need to train additional program staff on those systems. Effective systems building, documentation and sharing of knowledge are crucial for transitions and ultimately for sustainability."

Collective impact initiatives often employ a Data Manager or two who are devoted to the process of using data and continuous improvement. These positions are often the first hire after the initiative director (Collective Impact Forum, 2013; StriveTogether & Data Quality Campaign, 2015). Because collective impact initiatives are often underfunded (StriveTogether, 2013), this dedicated staff capacity is usually held by the initiative director for interim periods.

Yet responsibility for use of data should not fall solely on the dedicated data staff of an initiative or the backbone organization. A central function of the collective impact approach is for individual partners to take responsibility for changing their own behavior (Edmondson, 2015). While dedicated staff can help facilitate this behavior change, ultimately partners need to hold themselves accountable to the use of data as well. More on this will be discussed in the "Change Behavior and Share Responsibility" section.

Surveys. When the Network for Economic Opportunity realized that the data they needed—more information on the needs of the city's large numbers of unemployed African American men—didn't already exist, they decided to create a survey to generate that data. The survey not only created a new data-base of information not previously available to New Orleans or their partners, it revealed some unexpected results that helped inform their overall planning (Landrieu, 2014). The NEO team illustrated that primary data collection is an option for practitioners.

Surveys can help collective impact initiatives access both qualitative and quantitative data that provide greater context. Communities of Opportunity in Seattle/King County has used the White Center Community Development Association's Community Survey as a data source to provide qualitative context to their work reducing health disparities in suburban areas. Results from this survey, and other community data efforts, successfully helped make the case in the state legislature for why an under-resourced neighborhood should be absorbed into the city of Seattle.

One tool to support data collection is the Spark Policy Institute's "Right Now" Survey. Communities of Opportunity used this tool to surface emerging opportunities, concerns and partner needs, particularly for those not comfortable sharing at in-person meetings. As members got to know and trust each other, the initiative began using the survey as a way to organize observations during meetings. The initiative staff used the data from the survey to take advantage of timely opportunities and inform decisions that addressed concerns of partners.

A Data Partner. Some collective impact initiatives have found it helpful to work with an external data partner—such as a university—to support their data collection or development. Almost all

collective impact initiatives have a partner with some additional research or data capacity at least nominally involved (Parkhurst & Preskill, 2014).

But Monique Baptiste-Good, the Executive Director of the Strong Healthy Communities Initiative, said in an interview that, in her experience, relying on a third party data partner is most useful when an initiative has a large amount of data to analyze. The data partner can interpret what the data are "saying." If the data partner is instead developing or creating most of the data to the initiative, rather than gathering it from other sources, that partner could have too much control over what data is used in the data-driven feedback loop and what isn't. Like with any partner, a data partner should have a specific purpose for being engaged in the collective impact initiative and should be included in planning conversations early on (Raderstrong & Gold, 2015).

A Software Platform. Focusing on creating a software solution first can cause more trouble than it's worth. Efforts often stall when people spend too much time looking for software, and not enough time trying to use data to improve their activities. Many collective impact initiatives equate the use of data with the need for some kind of software infrastructure, but this oftentimes is "work avoidance" (Heifetz & Laurie, 2007) to push off making decisions around what data needs to be tracked and how to track it. Chelsea Thrives is working with approximately 25 partners to track and share data for the Chelsea Hub Model, an innovative community mobilization model, which is a specific strategy within Chelsea Thrives. To do this, they use something that comes standard on most personal computers: Microsoft Excel.

Based on interviews and Living Cities' experience, most collective impact initiatives rely on Excel or other basic software tools. If a collective impact initiative is considering using a more complicated software option, it should weigh the pros and cons of the tool very carefully before making the decision to invest in it to increase their initiative's capacity (Zhang & Winkler, 2015).

Present the Data

Most people cannot consume raw data, nor do they have the time or capacity to do so. To effectively use data, collective impact initiatives must make them more digestible. There are three areas that collective impact initiatives can invest in to increase presentation capacity: (a) analytical skills, (b) artistic skills, and (c) framing

Analytical skills. The Network for Economic Opportunity, our New Orleans partner in the Integration Initiative, is managing several projects with the goal of increasing employment rates of African-American men. They're accessing and using data for each project, and some projects have more accessible data than others. Instead of providing raw spreadsheets of data to their partners, the Network spends time analyzing and consolidating these data into more easily digestible graphs and charts (Figure 4).

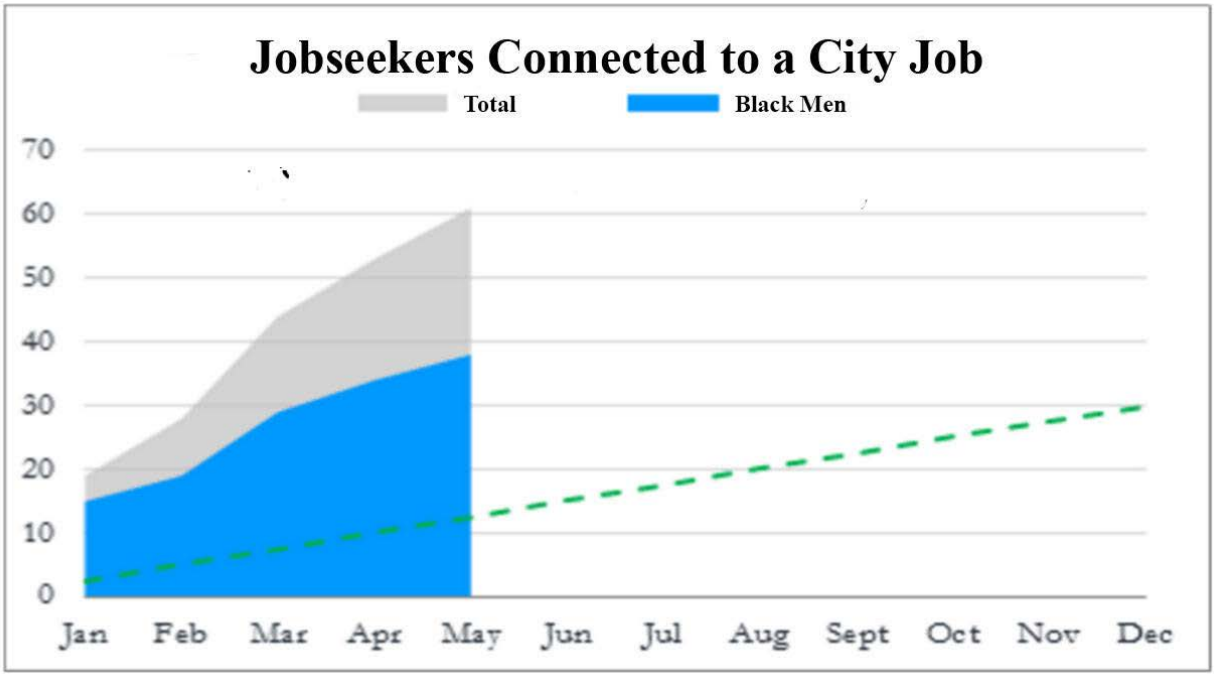

Figure 4: Example of a Graph from the Network of Economic Opportunity.

Making data presentable in this way usually requires some moderate level of analysis. A base understanding of statistical processes can help synthesize data into a more presentable form. Usually the Data Manager, discussed above, fulfills these analytical functions. The Network for Economic Opportunity has several individuals across City Hall fulfilling data management responsibilities in various ways. Some spend time securing data from partners, and some spend time "massaging" data to make it more presentable.

Data should be used to encourage partners to make changes to their work to achieve better outcomes. The process of statistical analysis with the process of assigning meaning to the data should not be conflated. These are two discrete steps, and the latter is crucial to do in collaboration with partners.

Artistic skills. Presenting data is much more of an art than a science. Communities of Opportunity, the Seattle/King County member of the Integration Initiative has a lot of data on its work to reduce health disparities. They have found that presenting data in ways that connect two or more abstract concepts together can take partners past observing data to action. For example, maps are visually compelling way to connect inequities with people and places. Individuals quickly relate to the data when they see how their neighborhoods rank on several indicators (Benjamin, 2007).

Turning numbers and raw data into a visualization can help partners connect the dots in compelling, actionable ways (Pettiross, 2015). Nadine Chan, the Assistant Chief for Assessment, Policy Development, and Evaluation in Seattle and King County, worked with data related to employment using excel charts and graphs to quantify disparities. However, when she later converted the data into a simple infographic using the free resource Piktochart (Figure 5),

partners spent more time looking at it and asked more questions about the data, showing that they connected with the data in new ways. There was a renewed urgency around working on strategies to increase employment rates to improve poverty in their community. This shows not only the need for creative presentation, but also the value in presenting data repeatedly in different ways to get the information to stick with people.

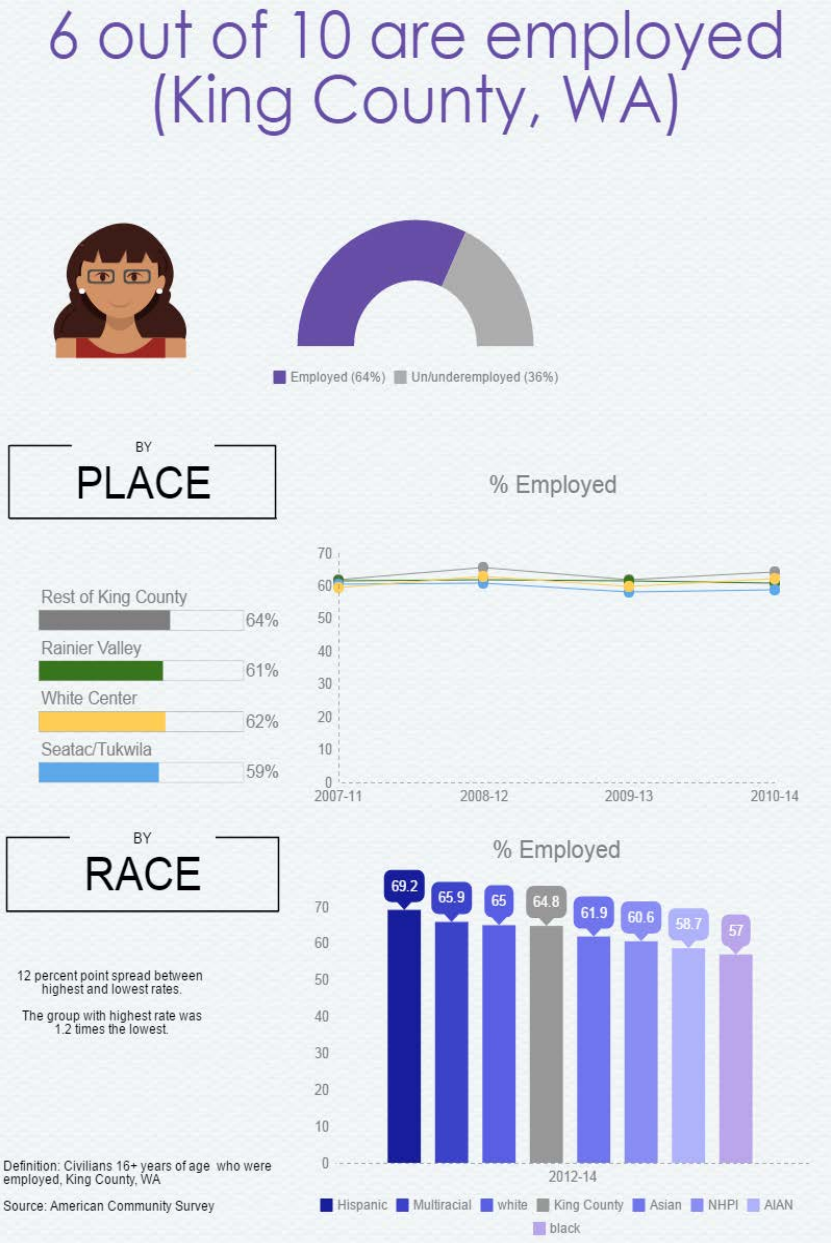

Figure 5: Sample of an Infographic from Communities of Opportunity.

The infographic was created by Nadine Chan of King County to present her data in a visually compelling way.

Framing. The examples of visually appealing data show how powerful data can be when presented in a way that "tells a story." In particular, disaggregating data through a variety of factors can help tell different stories. For example, Figure 5 has employment rates broken up by region, but also by race. Disaggregating by race in addition to place gives the data a different meaning that if it was only disaggregated by one factor—it shows that in King County, employment does not vary much by region, but it does by race. If partners were to look at the "place" data alone, they may not think there would be much of a problem with employment disparities in their region. But the "race" data clearly shows that black residents clearly are not able to access employment opportunities at the same rates of other citizens.

A combination of visual presentation and creative formatting can drastically shift a conversation around data. Organizing "Data Walks," where graphs and charts are placed on walls, have been shown to encourage discussion and help people absorb data in new ways. The Urban Institute has done extensive research on the usefulness of Data Walks to facilitate community-based changes (Murray, Falkenburger & Saxena, 2015).

Discuss and Learn from the Data

The fourth element in our initial framework was "Discuss the Data" to highlight the need for collective meaning-making by the collective impact partners (Gold, 2013). However, in our discussions about the initial framework and subsequent blog posts, it became clear that learning from the data was just as important as the act of discussion. To increase an initiative's capacity to discuss data, we found investment was needed in two areas:

- Facilitation skills, and
- An understanding of assumptions about the problem being solved.

Facilitation skills. A strong facilitator can help partnerships come to an agreement about what the meaning behind data in the same way facilitation is required to secure agreement on what data to use. A facilitator should understand how to shape a conversation about data so that other members of the collective impact initiative understand what they are looking at and why that matters, as well as feel empowered to make their own conclusions.

Mark Friedman, who pioneered the Results Based Accountability framework discussed earlier, has developed seven different questions to ensure performance accountability that can help collective impact initiatives guide their discussions around data (Friedman, 2015):

1. Who are our customers, clients, people we serve? (e.g children in a child care program).
2. How can we measure if our customers/clients are better off? (performance measures about client results – e.g. percent of children with good literacy skills).
3. How can we measure if we are delivering service well? (e.g. client staff ratio, unit cost, turnover rate etc.).
4. How are we doing on the most important of these measures? Where have we been; where are we headed? (baselines and the story behind the baselines).
5. Who are the partners who have a potential role to play in doing better?

6. What works, what could work to do better than baseline? (best practices, best hunches, including partners' contributions).
7. What do we propose to do? (multi-year action plan and budget, including no-cost and low-cost items).

Our partners at the Network for Economic Opportunity in New Orleans have monthly discussions about data and progress to inform on-going work. Due to data accessibility challenges, they haven't been able to bring a lot of quantitative data to these meetings. Instead, they rely on qualitative updates from partners to move their work forward while simultaneously working on accessing data. They can move their continuous improvement process forward by using anecdotal evidence and "lived experience" while they resolve some of their data accessibility challenges (Klaus, 2014; Mack, 2014).

An Understanding of Assumptions. Each partner in a discussion about collective impact will have his or her own assumptions about the work. Partners may hold assumptions (correct or not) about any number of things– from the cause of problems to how to solve those problems. Any conversation about data should involve a conversation about root causes of problems. If there isn't an understanding of why certain problems exist, it's unlikely that an initiative can determine effective strategies for solving those problems. Our Prepare Learning Circle sites have gone through a factor analysis process to determine root causes that influence their ultimate shared result, which helped them better understand why and how strategies may fit in to their data-driven feedback loop.

In discussing assumptions, practitioners often find that equity, particularly racial equity, surfaces. Many of the root causes of problems, are, at their core, issues of systematic and institutional racism. The entire field of collective impact is recognizing that racial equity needs to be a fundamental component of the process of applying collective impact principles (Schmitz, 2014). An equity lens should be applied to all the elements to using data for collective impact (Williams & Marxer, 2014), but it's often in this element where equity conversations are most important.

Change Behavior and Share Responsibility

Changing behavior and sharing responsibility is the most critical element to actually achieving the central goal of collective impact: creating systems level changes in communities (Kania & Kramer, 2011). If an initiative invests in capacity in all of these different elements but cannot hold partners accountable to changing their behavior (Edmondson, 2015), then it is unlikely the initiative will achieve their shared result. Ultimately, partners should own their own data and hold themselves accountable to changes (Hanleybrown, Kania, & Kramer, 2012).
To help partners reach that place of shared accountability, collective impact initiatives should invest in the capacity of four areas:

- Dedicated staff,
- An action plan,
- Programmatic staff buy-in and support, and
- Evaluation capacity.

Dedicated Staff. The process of holding partners accountable requires continuous follow-up and relationship management. Directors of collective impact initiatives, as well as data managers, often take on the responsibility of following up with partners to ensure they execute on their action commitments.

The Collective Impact Forum has created a set of resources to outline common responsibilities for dedicated staff of collective impact initiatives. The three roles it outlines are "Executive Director," "Project Coordinator" and "Data Consultant." Of the three, all have responsibilities that require holding partners accountable to various aspects of collective impact. Most of the responsibility falls on the Executive Director, which has responsibilities such as "providing regular reports on progress against goals and indicators" to the steering committee and "cultivating excellent working relationships...in a way that can inspire collective action without formal authority" (Collective Impact Forum, 2013).

An Action Plan. Collective impact initiatives often fall prey to one of the most frustrating parts of working in teams: people don't do what they say they will do (Bain Pillsbury, Undated). An easy way to hold partners accountable to their action commitments is through the use of an "action plan." There are many ways to create an action plan—Gantt charts are a popular resource—and the process for creating a plan is similar whether it is done for a project specific to an organization or one that needs coordination with partners.

The essential components of an action plan should be:

- The task,
- Who is responsible for the task, and
- A timeline for completing a task.

Figure 6 provides an example of an action plan from All Hands Raised in Portland, OR.

ACTION STEPS	Deliverable	Person(s) or Group(s) Responsible	Implementation Timeline		Date Completed	Resources Needed
			Start	Stop		
A) Compiling / Creating Useful Tools for Educators						
Complete sector reports re: (1) types of careers in construction & manufacturing, with wages, and (2) industry needs / labor market projections	2 final sector reports	WSI		2/29	[WSI]	
Complete career pathway guides (1 for construction, 1 for manufacturing)	2 final career guides	WSI		2/29	[WSI]	
Develop 2-page career pathway visuals/infographic (1 for construction, 1 for manufacturing) – planning committee review mid-March – *PULL FROM EXISTING WEBSITES*	Info-graphic	AHR		4/1	4/20	
Finalize a proposed set of content for use at event (infographics, websites, videos, student stories) – planning committee review mid-March		WSI		2/29	4/22	
Finalize the packet/toolkit for all attendees: Externship overview (Jesse); Action Plan template (Nate); Administrator infographic (Jesse); Takeaway card and contact list (Nate); Pathways graphics (Nate); Posters (Reese); playing cards (Jesse); PDU certificates (Jesse)		AHR/WSI		4/8	4/22	
Test messages and tools for clarity, relevance and cultural appropriateness		Planning committee		4/15	N/A	
Revise, finalize and print tools	Final printed tools	AHR / WSI		4/21	4/25	
Distribute awareness tools broadly through networks of superintendents and others – targeting middle & high school administrators & school board members		AHR / WSI		4/26	5/6	

Figure 6. Sample Action Plan from All Hands Raised.

Programmatic Staff Buy-In and Support

Without getting everyone on board, the use of data can't be integrated at all levels of a collective impact initiative (Gillespie, 2104). There will always be one "problem" group or one organization that doesn't pull its own in terms of follow through in changing behavior.

Our partners at Chelsea Thrives have seen how shared ownership and use of data can have real impact on the lives of the people they serve to reduce poverty and improve mobility. A team of their service providers meets monthly to assess risk factors of different families. Much of their work previously felt like "triaging," according to Chelsea Thrives Executive Director Melissa Walsh. But once they were able to come together as a group with shared data on clients, they were able to effectively prioritize which clients should receive which services. If the partners agree, based on two to eight factors, that a family has a high level of need, they will coordinate amongst themselves to deliver those services.

Evaluation Capacity. Evaluation is distinct from performance management. Evaluation is the process in which an organization assesses its programs effect on a target population, whereas performance management is focused on the improvement of programmatic or organizational processes (Walker & Moore, 2011) and impact on customers (Friedman, 2015). Although this article has focused primarily on the elements to implement performance management in collective impact, evaluation of the effects of collective impact is an essential part of understanding what large-scale changes are happening in a community as a result of collective impact efforts. Several entire articles have been written on evaluating collective impact to guide practitioners in understanding what impact their efforts are making on their communities, and why (Preskill, Parkhurst, & Splansky Juster, Undated).

Collective impact initiatives should invest in both formal and informal evaluation methods (Preskill, Parkhurst, & Splansky Juster, Undated). If an initiative doesn't know if it is actually changing the lives of the people, it could do more harm than good. At Living Cities, we build in time and capacity to evaluate all of our programs, especially the collective impact initiatives we support. With our Integration Initiative, we conducted an extensive evaluation that highlighted a number of recommendations to improve the program (Living Cities, 2014). One of the major ones was to create a planning year to help set the stage for collective impact, something the Working Cities Challenge adopted as well.

Conclusions

Achieving large-scale change through collective impact requires the use of data to understand progress and measure impact. Yet management of data can be one of the most challenging aspects of collective impact, or any community change initiative. For practitioners to effectively use data for performance management, they must invest in the capacity of their initiative across five different elements: Agree on the Data; Find the Data; Present the Data; Discuss and Learn from the Data; Change Behavior and Share Responsibility.

This article presented lessons learned and examples that speak to each of these five elements. Yet many questions remain regarding how to best equip collective impact practitioners to build

capacity across these five elements. To achieve the true promise of collective impact (that is, large-scale community change), funders and intermediaries like Living Cities can and should explore more deeply what it takes to use data to change behavior in collective impact. Further refinement on the research presented here, particularly focusing on the use of qualitative data for collective impact, will only strengthen the collective impact model as it evolves and is applied in more and more communities in the US and around the world.

References

Boyea-Robinson, T. (2016). Data-driven feedback loop examples. Living Cities. Retrieved from https://www.livingcities.org/resources/314-data-driven-feedback-loop-examples

Bain Pillsbury, J. (Undated). Theory of aligned contributions. Sherbrooke Consulting, Inc. Retrieved from http://nvecac.com/wp-content/uploads/2016/05/TOAC.pdf

Benjamin, D. (2007). Doing social math: Case study in framing food and fitness. *FrameWorks E-Zine*. No. 40. Retrieved from http://www.frameworksinstitute.org/ezine40.html

Collective Impact Forum. (2013). *Job descriptions of backbone roles*. Retrieved from https://collectiveimpactforum.org/resources/job-descriptions-backbone-roles

Edmondson, J. (Dec 3, 2014). *Children will show us the way…On how to use data in education?!?* Retrieved from http://www.strivetogether.org/blog/2014/12/children-will-show-us-the-wayon-how-to-use-data-in-education/

Edmondson, J. (2015). *Collective impact irony*. Retrieved from http://www.strivetogether.org/blog/2015/03/collective-impact-irony/

Friedman, M. (2015). *Trying hard is not good enough*. PARSE Publishing.

Gillespie, S. (2014). *Starting small and thinking long-term*. Retrieved from http://www.urban.org/research/publication/starting-small-and-thinking-long-term-qa-performance-measurement-and-evaluation-professionals

Gold, A. (2013). *What barriers? Insights from solving problems through cross-sector partnerships*. Retrieved from https://www.livingcities.org/resources/231-what-barriers-insights-from-solving-problems-through-cross-sector-partnerships

Hanleybrown, F., Kania, J. & Kramer, M. (2012). Channeling change: Making collective impact work. *Stanford Social Innovation Review* blog. Retrieved from https://ssir.org/articles/entry/channeling_change_making_collective_impact_work

Heifetz, R. & Laurie, D. L. (2001). The work of leadership. *Harvard Business Review*, *79*(11), 131-141. Retrieved from

Kania, J., Hanleybrown, F. & Juster, J.S. (2014). Essential mindset shifts for collective impact. *Stanford Social Innovation Review, 12*(4), 2-5. Retrieved from https://ssir.org/articles/entry/essential_mindset_shifts_for_collective_impact

Kania, J. & Kramer, M. (2011). Collective impact. *Stanford Social Innovation Review*, *9*(1), 36-41. Retrieved from https://ssir.org/articles/entry/collective_impact

Kuhlmann, J. (2016). *Data dashboard keeps users, student outcomes at the center of the conversation*. Retrieved from http://www.strivetogether.org/blog/2016/03/data-dashboard-keeps-users-student-outcomes-at-the-center-of-the-conversation/

Klaus, T. (2014 October 27). *Collective impact 3.0: Big ideas from CI summit in Toronto*. Retrieved from http://tamarackcci.ca/blogs/nonprofit-doc/collective-impact-30-big-ideas-ci-summit-toronto

Landrieu, M. (2014). *African-American male unemployment report*. Retrieved from http://www.nolaforlife.org/images/economic-opportunity/bmu-report_final_pages2/

Living Cities. (2014). *The integration initiative three year evaluation report*. Retrieved from https://www.livingcities.org/resources/282-the-integration-initiative-three-year-evaluation-report

Living Cities. (2016). *Data and collective impact*. Retrieved from https://www.livingcities.org/work/data-collective-impact/about

Mack, K. (2014, October 15). *Rethink who you call an expert*. Retrieved from http://www.fsg.org/blog/rethink-who-you-call-expert

Murray, B., Falkenburger, E. & Saxena, P. (2015). *Data walks: An innovative way to share data with communities*. Retrieved from http://www.urban.org/research/publication/data-walks-innovative-way-share-data-communities

NNIP. (2014). Key Elements of Data Sharing Agreements. Retrieved from http://www.neighborhoodindicators.org/library/guides/key-elements-data-sharing-agreements

Park, S., Hironaka, S., Carver, P., & Nordstrum, L. (2013). *Continuous improvement in education*. Stanford, CA: Carnegie Foundation for Advancement of Teaching.

Parkhurst, M. & Preskill, H. (2014). Learning in action: Evaluating collective impact. *Stanford Social Innovation Review*, Fall. Retrieved from https://ssir.org/articles/entry/learning_in_action_evaluating_collective_impact

Pettiross, J. (2015). Why the time-tested science of data visualization is so powerful [Blog post].. Retrieved from https://www.tableau.com/about/blog/2015/11/why-time-tested-science-data-visualization-so-powerful-45705

Perkins, J. (2014). Improving outcomes for opportunity youth. StriveTogether. Retrieved from http://www.strivetogether.org/sites/default/files/images/improving-outcomes-opportunity-youth-data-driven-approach.pdf

Preskill, H., Parkhurst, M., Splansky Juster, J. (Undated). *Guide to Evaluating Collective Impact*. FSG. Retrieved from http://www.fsg.org/publications/guide-evaluating-collective-impact

Queen, J. (2016). *Data inventory*. Retrieved from https://www.livingcities.org/resources/313-data-inventory

Raderstrong, J. & Boyea-Robinson, T. (2016). The why and how of working with communities through collective impact. *Community Development, 47*(2), 180-193. https://doi.org/10.1080/15575330.2015.1130072

Raderstrong, J. & Gold, A. (2015). *Four questions to consider when building a cross-sector partnership's structure*. Retrieved from https://www.livingcities.org/blog/980-four-questions-to-consider-when-building-a-cross-sector-partnership-s-structure

Raderstrong, J. & Perkins, J. (2015). *Four components of a shared result that creates enduring change*. Retrieved from https://www.livingcities.org/resources/301-four-components-of-a-shared-result-that-creates-enduring-change

Schmitz, P. (, 2014 December 22). The culture of collective impact. *Huffington Post.* Retrieved from http://www.huffingtonpost.com/paul-schmitz/the-culture-of-collective_b_6025536.html

StriveTogether. (2013). *Funding for the backbone organization in collective impact efforts*. Retrieved from http://www.strivetogether.org/sites/default/files/images/Funding_To_Support_The_Backbone_Final_updated.pdf

StriveTogether & Data Quality Campaign. (2015). *Data drives school community collaboration*. Retrieved from http://www.strivetogether.org/sites/default/files/ST-DQC-Data-Drives-School-Community-Collaboration_web.pdf

Walker, K. & Moore, K. A. (2011). *Performance management and evaluation: What's the difference? Child Trends*. Retrieved from http://www.childtrends.org/wp-content/uploads/2013/06/2011-02PerformMgmt.pdf

Williams, J. & Marxer, S. (2014). *Bringing an equity lens to collective impact*. Retrieved from https://collectiveimpactforum.org/sites/default/files/EquityandCollectiveImpact_UrbanStrategiesCouncil.pdf

Zhang, S. & Winkler, M. (2015). *Navigating performance management software options*. Retrieved from http://www.urban.org/research/publication/navigating-performance-management-software-options

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We're All in This Together: How one University Drew on Collective Impact Principles to Advance Student Success in Higher Education

Bruce Jones, Maureen Croft and Teri Longacre

Abstract

Student attrition rates in higher education are an ongoing concern in the U.S, and are costly to students themselves, colleges and universities, and the economy in terms of dollars and human potential. Thus, the need to identify solutions to student attrition is pressing for both students who are enrolled in institutions of higher education today, and for multiple generations of students yet to enroll. This article discusses collective impact as a model of intervention at an urban university and the quest to promote institutional efficacy around student retention and graduation strategies in partnership with internal (on-campus) and external (off-campus) constituents.

Key Words: Student attrition; student retention; student graduation; low socioeconomic status; Pell Grant eligible

Interdependency of the Ecosystem

"We're all in this together", Senator Bill Nelson (FL) affirmed as he soared into outer space at an estimated 18,000 miles per hour. In 1986, the U.S. Senator had the privilege to serve as a member of the astronaut crew on board the Challenger Space Shuttle. As he peered out the window of the space shuttle on its rapid ascent, his home state of Florida quickly faded into a view of the United States. Seconds later, the United States faded into a view of the planet. In his online bio, he writes "from that perspective, you can see how we're all in this together . . . if we could just remember that, we'd sure get a lot more done" (Nelson, 2016).

An ecosystem, such as planet earth, is about interdependence. Bronfenbrenner (1986), who is a pioneer in perspectives on ecosystemic approaches to understanding the dynamic between people and institutions, and Hightower-Weaver (2008), who subscribe to ecosystemic approaches to public policy making, discuss the value in recognition that components of an ecosystem are interdependent. A fully viable ecosystem is one whereby all parts of said system are in a harmonious state of success. In contrast, when one part of an ecosystem suffers, the entire system is adversely affected in some way. In this respect, think of the 1986 Ukrainian, Chernobyl nuclear plant disaster. Evidence of the disaster showed up in parts of Europe as the earth's winds carried the deadly nuclear cloud across the earth's atmosphere. Suddenly, what was initially characterized as a U.S.S.R. problem became problematic for European population centers. Consistent with the notion of the ecosystem, we know that human neglect and indifference in one part of the world can impact the livelihoods of individuals and communities thousands of miles away in other parts of the world. Because of this, many of the issues that we face require collective solutions, which require multiple constituencies to be involved in the development and implementation of solutions.

Education, as an *educational ecosystem*, is no exception to this rule (Goodlad, 1984). The levels of efficacy of our educational systems impact the United States and the world. For example, in many of the nations' urban centers, our public schools are often metaphorically, and in practice referred to, as warehouses, armed camps, preparatory places for prison, or dropout factories (Castagno & Brayboy, 2008; Garcia, Jensen & Scribner, 2009; McKinsey & Company, 2009; Ream & Rumberger, 2008; Schott Foundation, 2008). In American higher education, student attrition rates are a major concern as students drop out at unacceptable rates. Such departures are costly to the students themselves, the colleges and universities, and the U.S. economy (Carnevale, Smith & Strohl, 2010; Dodge, Mitchell & Mensch, 2009). Furthermore, this exacerbates the shortage of skilled workers:

> The Georgetown University Center on Education and the Workforce shows that by 2018, we will need 22 million new college degrees but will fall short of that number by at least 3 million postsecondary degrees, Associate's or better. In addition, we will need at least 4.7 million new workers with postsecondary certificates. At a time when every job is precious, this shortfall will mean lost economic opportunity for millions of American workers (Carnevale, Smith & Strohl, 2010, p. 3).

The failure to ensure that our education system succeeds results in tremendous social, economic and moral cost to our political economy (Arum & LaFree, 2008; Coontz, 1992). The consequences of this failure manifest through the enormous loss of human potential. The children and students that we fail may have been the very children and students who could have made a life-altering discovery. These children and students could have been the next generation of university academics, scholars, key community leaders, and Nobel Prize recipients. Furthermore, our lack of institutional efficacy in the education of economically poor children and students comes at tremendous cost to society's level of mental and physical safety in the form of crime, prison construction, gated communities, unemployment, welfare and unabated poverty generation after generation (Arum & LaFree, 2008). Obtaining a college education is a vehicle to upward mobility (Baum, Ma & Payea, 2013; Gupton & Miksch, 2016). College-educated adults are more likely to be in a position to pass income and wealth (i.e., home ownership, investments, savings, or property) to a new generation of descendants. In this respect, our need to engage in collective problem-solving is not just about children and students who are with us today. This is also about the multiple generations of children yet to be born and students yet to enroll in our colleges and universities.

Lastly, we face a moral dilemma in the eyes of the world. It is difficult to face the world as a model of democratic ideals when housed in a political economy that is incapable of collective problem solving around the plight of children and adults who are in a perpetual cycle of intergenerational poverty. With specific regard to colleges and universities, what will be the role of university research, teaching and service as a means to address issues faced by low-income students and our communities? How will research, teaching and service interface and work effectively with institutions on and off-campus to ensure the success of all students, particularly low-income students? Lastly, what practical and conceptual guides will drive the work of comprehensive efforts to reduce attrition and increase retention and graduation rates of students

on campus? These are key questions for the University of Houston, which is cited as the second most student diverse campus in the United States (US News and World Report, 2017).

State and Local Context

In response to facing low student progression to postsecondary education and disparities in degree attainment across demographic groups (National Center for Higher Education Management Systems, 2012), the state of Texas developed a higher education strategic plan aimed at increasing student success consistent with workforce needs and the goals of global competitiveness and economic prosperity for Texas (Texas Higher Education Coordinating Board, 2015). The strategic plan is ambitious in its goal: to increase certificate or degree attainment by citizens of Texas, and to generate marketable skills among postsecondary education college and university enrollees. In order to accomplish this, the strategic plan recognizes that success is contingent on the combined expertise and resources of a diverse set of stakeholders working collaboratively to achieve increased levels of student success.

As the fourth largest city in the U.S. and one of the most ethnically diverse, Houston plays a key role in this endeavor. The total population for the Houston metro area grew 26 percent from 2000-2010 with the African American population increasing by 26 percent and the total Hispanic population rising by 55 percent during the same time period. Additionally, 10 percent of the Houston population is college-age (18-24), with projections that by 2020, Hispanics will grow by 42.6 percent, and African-Americans will grow by 12.7 percent in this age group. It is critical that Houston's diverse and growing student population be prepared to succeed in today's global, high-tech, knowledge-based economy, which increasingly requires postsecondary education to ensure needed knowledge and skills (Carnevale, Smith & Strohl, 2010). In Harris County, Texas, however, only 27.6 percent of the population 25 and older holds at least a college degree. Furthermore, Houston ranks 34th among the 50 largest metropolitan areas in the U.S. for the percentage of the population aged 25 and older holding a college degree. There are also differences in attainment across groups with college degrees held by 66 percent of Asian immigrants, 39 percent of US-born Anglos, 20 percent of US-born Blacks, 17 percent of US-born Hispanics, and 8 percent of Hispanic immigrants (Kinder Institute, 2012).

Texas and Poverty as a Factor

In Texas an estimated 24.8 percent of all children live in poverty. This exceeds the national poverty rate, which stood at approximately 15 percent (Kinder Institute, 2012). In this regard, a large and growing number of postsecondary students face the challenges created by limited resources. Approximately one in three American undergraduates receive a Pell grant, and as a result, are considered a low-income (Chaplor, Cooper, Johnstone & Karandieff, 2015). These demographic trends pose challenges to the economic growth of our state and region. However, rising postsecondary participation in Houston along with growing enrollment at Houston area community colleges and universities present a tremendous opportunity to significantly increase degree attainment through collaborative strategic efforts. This opportunity is enhanced by a longstanding tradition of the University of Houston of focusing on working-class citizens and a tradition of enrolling and serving low-income students. As it stands, forty-three percent of the undergraduate students attending the University receive Pell Grant assistance.

Student Success at the Heart of University Mission and Goals

The University of Houston was founded in 1927 and today serves over 40,000 students with an estimated 300 undergraduate and graduate programs. The mission of the University of Houston is as follows: "to offer nationally competitive and internationally recognized opportunities for learning, discovery and engagement to a diverse population of students in a real-world setting" (University of Houston, 2017). The University Mission Statement recognizes three shared values. First, the University will meet the challenges of educating a dynamic mix of non-traditional and traditional students. Second, the University will promote excellence within the context of basic and applied research and scholarship. Finally, the University will identify and respond to the economic, social and cultural changes affecting the quality of life in the city of Houston, the state of Texas and in the world through its education, research and service.

At the University of Houston, and elsewhere in other institutions of higher education, student success is at the heart of its mission and goals. Students who face additional challenges that interfere with the ability to progress towards degree attainment need additional support and clear pathways for graduation. The identification and removal of institutional barriers and the provision of extra support are difficult challenges for institutions of higher education to overcome.

Collective Impact: Using Ecosystemic Approaches to Solving Intractable Higher Education Challenges

As indicated earlier, an ecosystem is, in part, about the relationships between individuals and institutions in a given community or social system and the interdependent nature of these relationships (Weaver-Hightower, 2008). In many ways we can examine the efficacy of an ecosystem through our understanding of these relationships, with respect to how individuals and institutions work to bring shared goals to fruition. The ecosystemic approach to problem solving, from a conceptual standpoint, allows us to understand the need to approach issues that concern student retention and graduation from a broad university and community-wide standpoint. Such a conceptual approach allows us (i.e., university professors, administrators, and staff, student representatives, key community constituents, community college, philanthropic and business sector representatives) to better understand the benefits of our interdependence, thus moving toward a more collective quest to become highly efficacious in the academic advancement of our students. This is particularly important given the resource shortages that we face coupled with the benefits of the intellectual capital that can arise from collaborative approaches to problem solving in the area of students and college completion.

It is one thing to believe in something and another matter to actually engage in action toward what one believes. In this respect, the ecosystemic approach serves as the conceptual-base for our work at the University of Houston while the basic tenets that are associated with collective impact serve as the practical-base for our work. These basic tenets provide the tools, guidelines and necessary steps for ensuring that we engage in the action that is necessary to actually promote, develop and implement a coordinated and shared community-wide responsibility for ensuring the success of our students. Figure 1 (below) illustrates the relationship between the conceptual underpinning, *educational ecosystem*, and the practical guide, *collective impact* (Kania & Kramer, 2012), of our work.

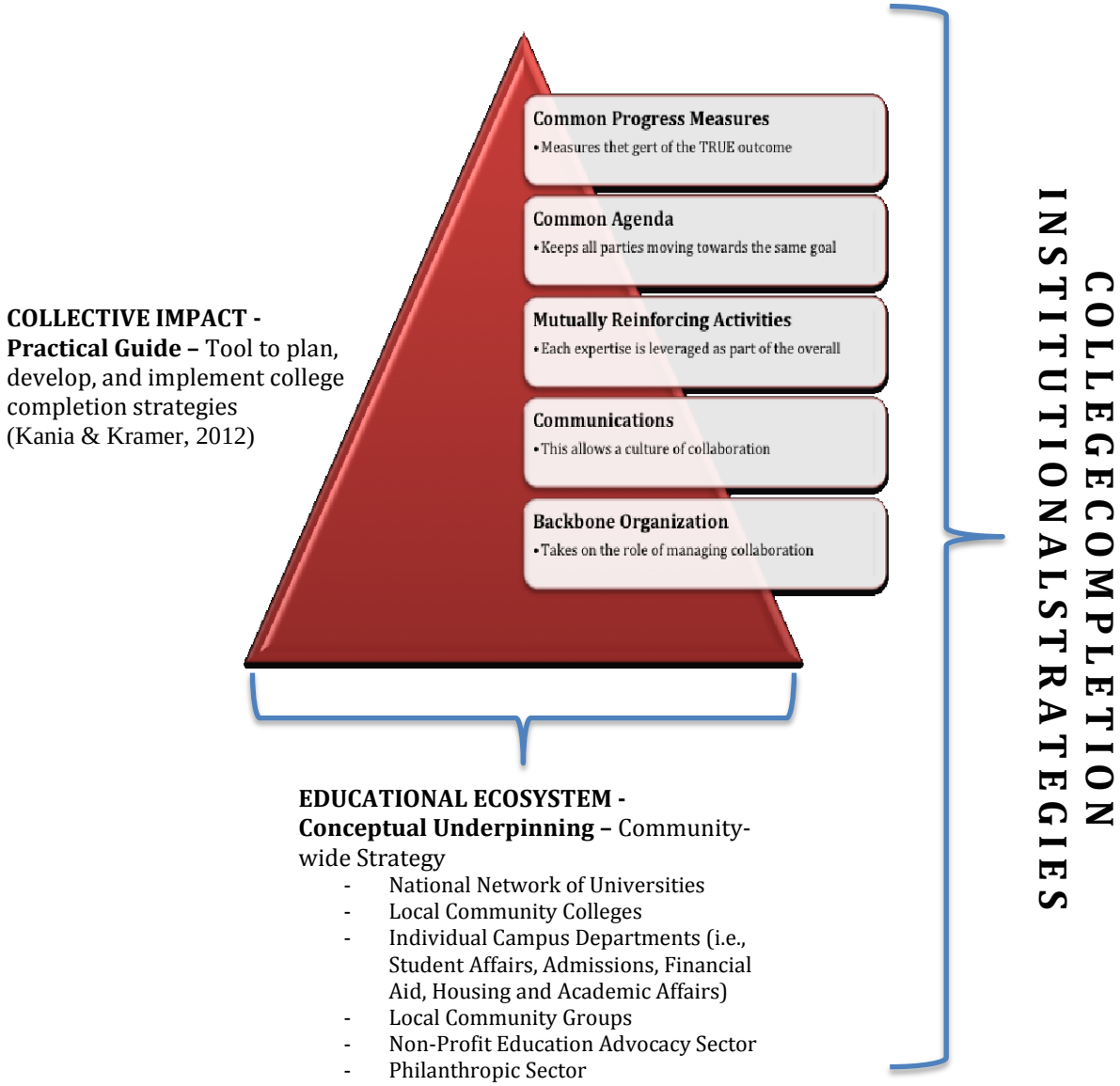

Figure 1. Collective Impact as a Means to Promote High Efficacy in Community-wide College Completion Efforts for Students

Building a Tool Box of Interventions that Changes Higher Education Through the Use of Collective Impact

The University of Houston shares the recognition put forth in the Texas Strategic Plan that statewide challenges require internal and external collaboration with the end goal of solving problems through incubation of ideas and the identification of scalable efficiencies (Texas Higher Education Coordinating Board, 2015). As such, the University has actively sought out collaborative initiatives aimed at improving not only the educational outcomes of our students but also of all low-income students impacted by our collective efforts with institutions invested in ensuring better postsecondary outcomes for low-income students. The University of Houston

strives to bring multiple on-campus departments and off-campus agencies and institutions together to address issues that focus on low-income student retention, persistence and graduation. In this endeavor, we are guided by the recognition that we are an educational ecosystem—we are interdependent and must act accordingly, if we are to maximize our effectiveness on addressing these issues. From a conceptual and practical standpoint, the notion of *collective impact* begins with the recognition that no one individual and no one institution can address the multi-faceted issues that we face. In a climate of unstable resources and failure to make appreciable movement in closing attainment gaps among students, the University understands that collective efforts to advance cross-sector institutional efficacy, and the shared knowledge and efficiencies associated with collective problem-solving endeavors, are likely the only way to make appreciable social progress and to ensure the success of low-income students.

Collective Impact in Action in Higher Education

Beyond Financial Aid

Beyond Financial Aid is a national initiative that focuses on increasing the efficacy of institutions of higher education in the quest to retain and graduate low-income students. The initiative has been launched at a select number of universities with the principle support from the Lumina Foundation. Through this effort, a University-wide committee is working to identify barriers to achievement and possible areas for additional student support for low-income students. And, as a beta-test institution, UH is working to help the Lumina Foundation evaluate and refine the Beyond Financial Aid assessment tool.

OASIS

The Education Trust is a national, non-profit advocacy organization that promotes high academic achievement for all students, especially low-income and underrepresented minority students. Their initiative, Optimizing Academic Success and Institutional Strategy (OASIS), aims to create a network between eleven regional, comprehensive institutions that serve large populations of underrepresented minorities. The network aims to expand on the use of evidence-based practices at their campuses and to share their data and insights with each other in order to narrow the college completion gap between white and underrepresented minority students. Senior university leaders collaborate to analyze data and frequently communicate with each other in effort to develop best practices in student success. UH is an enthusiastic OASIS institutional partner.

Completion Grant Project

The Association of Public and Land-grant Universities (APLU) and the Coalition of Urban Serving Universities (USU) recently awarded the University of Houston $50,000 to launch a pilot program to prevent low-income college students nearing graduation from dropping out. The University of Houston was one of nine institutions to receive a grant. The grants are for two years and are funded by Great Lakes Higher Education Guaranty Corporation and Lumina Foundation. Funds from the programs are used to strengthen the infrastructures in place to identify students close to graduation, who are at risk of dropping out due to inability to pay, and matching them with endowment funds in the form of Completion Grants. The grants are part of a

broader success initiative known as Collaborating for Change, which matches institutions with peer mentors for assistance, professional development, and form learning communities to work through challenges, opportunities, and other unexpected developments. With guidance from APLU, USU, and peer mentors, institutions that received funding work toward the common goal of promoting timely completion through financial support. Collaboration and regular communication with mentors and other institutions has led to efficiencies in the grant award process at UH which are intended to increase the number of grants awarded to students. Common progress measures across institutions are being utilized to assess the extent to which completion grants prevent drop-out and facilitate completion among recipients.

Houston Guided Pathways to Success (GPS)

Comparatively low levels of degree completion and differences across demographic groups threaten the economic growth of the Houston region. However, rising post-secondary participation along with growing enrollment at Houston area community colleges and universities provide a tremendous opportunity to significantly increase degree attainment through collaborative strategic efforts. To facilitate such collaboration, the University of Houston is leading Houston GPS, which is a consortium of institutions, including other University of Houston System campuses (UH-Downtown and UH-Clear Lake) and the four major community college systems (Houston Community College System, Lone Star College System, San Jacinto College District, and Wharton County Junior College). Houston GPS aims to develop a plan to accelerate college completion in the greater Houston area. Collectively, these institutions serve over 200,000 students and are a reflection of the diverse city and region that they serve. Through Houston GPS, consortium institutions are implementing an integrated system of cohesive, interdependent strategies that include: (a) default pathways; (b) academic maps focused on 15 hours per semester; (c) meta-majors; (d) proactive advising; (e)workforce connections; (f)block scheduling; (g) co-requisite remediation; and (h) aligned mathematics. Collectively, these strategies intend to increase and accelerate student completion and smooth two-year to four-year college transfer, while improving educational quality for Houston area students. Collaboration across Houston GPS institutions and with national experts has resulted in strong commitment to a common completion agenda and progress measures.

Applying the Model

Individually and collectively, these programs exemplify the components (Kania & Kramer, 2012) of collective impact outlined in Figure 1. In terms of a *Common Agenda*, improving college completion is an issue of national, state, and local concern and lies at the heart of each initiative. Low completion rates and the presence of attainment gaps are commonly understood problems, addressed collaboratively by removing barriers to success faced by students. Barrier identification is a focus of the Beyond Financial Aid initiative while other programs focus on overcoming specific completion challenges. For example, the Completion Grant Project focuses on providing funds for students with financial need to complete their degree within an academic year while Houston Guided Pathways to Success provides students with streamlined pathways to reduce excess credits, decrease time to degree, and increase completion.

These initiatives involve a number of collaborators including multiple institutions of higher education, national experts, and philanthropic organizations, all working toward a completion agenda. In doing so, collaborators in each initiative have agreed upon *Common Progress Measures* designed to assess the impact of strategies implemented. For example, Houston GPS institutions have set five-year targets for the following common set of outcomes to track the impact of Guided Pathways to Success strategies: (a) FTIC graduation rates; (b) transfer graduation rates; (c) time to degree; (d) credits to degree; (e) FTIC 1-year retention; (f) transfer 1-year persistence, (f) credit hour accumulation, and (g) completion of math and English gateway courses. Agreed upon progress measures for initiatives are reported at regular intervals supporting a culture of accountability.

Also facilitating accountability are *Mutually Reinforcing Activities* built into the structure of each initiative. Clear plans of action, which include specific roles and responsibilities that align with the common agenda, guide program activities. For example, Houston Guided Pathways to Success involves the development of comprehensive institutional implementation plans, with identified units and positions responsible for carrying out each component within a specified timeframe. Similarly, the Completion Grant Project involves specific roles for institutional constituents associated with identifying potential applicants, assessing eligibility criteria, and matching applicants with grant funds. In addition, mentors involved in this initiative play a key role in guiding the implementation of completion grant programs across institutions participating in the grant program.

Mentoring roles such as this also support the *Communication* component of collective impact, needed to ensure consistent and effective efforts toward the common agenda. Monthly mentoring calls occur as part of the Completion Grant Project. Regular communications, including phone calls, site visits, and conferences, take place with the OASIS and Houston GPS initiatives. Collaboration that occurs as a result of such routine communications has led to a number of insights that support and enhance the implementation of strategies to overcome completion barriers. As one example, working with content experts throughout the Houston GPS planning process has facilitated the implementation of proactive advising practices, and assisted with the transition from developmental courses to co-requisite remediation.

Collectively, a number of organizations provided critical human, fiscal, material and knowledge (technical expertise) resource support to help ensure success in attaining programmatic goals. For example, the Education Trust provided a strategic vision for the OASIS initiative, established a management and coordination team, facilitated communication with and between participating institutions, and created a process for institutional assessment and data collection. The Lumina Foundation provided critical financial support and technical assistance. The Association of Public and Land-grant Universities, the Coalition of Urban Serving Universities, and Complete College America have played key roles in establishing effective organizational structures for our initiatives.

Conclusion

As the University of Houston and other institutions of higher education continue on their path to address student attrition while increasing student retention and graduation rates, there is the

promotion of a mindset that recognizes that we are all in this together: we are an ecosystem that consists of a set of people, communities and institutions that are interdependent. Collective impact as a practical guide and the ecology metaphor, as a conceptual underpinning, are serving as a road map for the democratic selection of programmatic tools and the development and implementation of said tools that will help us to bring about a healthy and productive educative system. This is the kind of system that will help to ensure that our educative institutions are coordinated, united, and successful in the critical goal to promote the success of all students—particularly low-income students in the quest toward college completion.

References

Arum, R., & LaFree, G. (2008, October). Educational attainment, teacher-student ratios, and the risk of adult incarceration among U.S. birth cohorts since 1910. *Sociology of Education*, *81*, 397-421. https://doi.org/10.1177/003804070808100404

Baum, S., Ma, J., & Payea, K. (2013). *Education Pays 2013: The Benefits of Higher Education for Individuals and Society*. College Board: New York. Retrieved from https://trends.collegeboard.org/sites/default/files/education-pays-2013-full-report.pdf

Brofenbrenner, U. (1986). Ecology of the family as context for human development: Research perspectives. *Developmental Psychology*, *22*(6), 723-742. https://doi.org/10.1037/0012-1649.22.6.723

Carnevale, A.P., Smith, N., & Strohl, J. (2010). *Help wanted: Projections of jobs and education requirements through 2018*. Center on Education and the Workforce. Georgetown University. Retrieved from https://eric.ed.gov/?id=ED524310

Castagno, A.E., & Brayboy, B.M.J. (2008). Culturally responsive schooling for indigenous youth: A review of the literature. *Review of Educational Research, 78*(4), 941-993. https://doi.org/10.3102/0034654308323036

Chaplot, P., Cooper, D., Johnstone, R., & Karandieff, K. (2015). Beyond financial aid: How colleges can strengthen the financial stability of low-income students and improve student outcomes. Indianapolis: Lumina Foundation. Retrieved from https://www.luminafoundation.org/files/publications/BFA/Beyond.Financial.Aid.pdf

Coontz, S. (1992). *The way we never were: American families and the nostalgia trap*. Basic Books.

Dodge, T.M., Mitchell, M.F., & Mensch, J.M. (2009). Student retention in athletic training education programs. *Journal of Athletic Training*, *44*(2), 197-207. https://doi.org/10.4085/1062-6050-44.2.197

Garcia, E., Jensen, B., & Scribner, K. (2009). The demographic imperative. *Educational Leadership*, *66*(7), 8-13. Retrieved from http://www.ascd.org/ASCD/pdf/journals/ed_lead/el200904_garcia.pdf

Gupton, J.T., & Miksch, K. (2016). A theory of equity: A social and legal analysis of college access for low-income students. In P.A. Pasque, N. Ortega, J.C. Burkhardt, & M.P. Ting (Eds.), *Transforming understandings of diversity in higher education* (pp. 44-53). Stylus Publishing: Sterling, Virginia.

Goodlad, J. (1984). *A place called school*. McGraw-Hill Co.

Kania, J., & Kramer, M. (2012). Channeling change: Making collective impact work. Stanford Social Innovation Review, Retrieved from: https://ssir.org/articles/entry/channeling_change _making_collective _impact_work

Kinder Institute. (2012). *The 2012 Houston education survey: Public perceptions in a critical time*. Rice University. Retrieved from https://kinder.rice.edu/uploadedFiles/Kinder_Institute_for_Urban_Research/SHEA/SHEA%20Education%20Report.pdf

McKinsey & Company. (2009). *The economic impact of the achievement gap in America's schools*. Washington, D.C.: McKinsey & Company. Retrieved from http://mckinseyonsociety.com/the-economic-impact-of-the-achievement-gap-in-americas-schools/

National Center for Higher Education Management Systems. (2012). *A new measure of educational success in Texas: Tracking the success of 8th graders into and through college*. Houston Endowment. Retrieved from http://www.txblc.org/wp-content/uploads/2012/10/a_new_measure_of_educational_success_in_texas.pdf

Nelson, B. (2016). Biography. Retrieved from https://www.billnelson.senate.gov/about-bill

Ream, R.K., & Rumberger, R.W. (2008). Student engagement, peer social capital, and school dropout among Mexican American and Non-Latino White students. *Sociology of Education, 81*(2), 109-139. https://doi.org/10.1177/003804070808100201

Schott Foundation. (2008). *Given half a chance: The Schott Foundation 50 state report on public education and Black males*. Cambridge, MA. Retrieved from http://schottfoundation.org/report/given-half-chance-schott-50-state-report-public-education-and-black-males

Texas Higher Education Coordinating Board. (2015). *60X30 TX: Texas Higher Education Strategic Plan, 2015-2030*. Texas Higher Education Coordinating Board. Retrieved from http://www.thecb.state.tx.us/reports/PDF/9306.PDF?CFID=68698548&CFTOKEN=40613338

University of Houston Mission Statement. (2017). Retrieved from: http://www.uh.edu/about/mission/

US News & World Report. (2017). Campus Ethnic Diversity. Retrieved from: https://www.usnews.com/best-colleges/rankings/national-universities/campus-ethnic-diversity

Weaver-Hightower, M.B. (2008). An ecology metaphor for educational policy analysis: A call to complexity. *Educational Researcher, 37*(3), 153-167. https://doi.org/10.3102/0013189X08318050

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Moving Toward a Collective Impact Effort: The Volunteer Program Assessment

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Abstract

Volunteers are essential to the operation of many nonprofits, but some experience challenges in retaining their volunteer workforce. The Volunteer Program Assessment (VPA) seeks to address this issue by helping organizations to identify strengths, growth areas, and recommendations for improving volunteer experiences. To maximize the effectiveness of VPA's mission, the organization is moving toward a collective impact (CI) approach. Although not developed as a CI effort, the program currently exemplifies many of its characteristics, which have been instrumental in expanding reach to more organizations. We examine VPA's alignment with collective impact and outline how VPA will continue to improve efforts.

Keywords: Volunteerism; university programs; evaluation; industrial-organizational psychology

Introduction

When utilized strategically, volunteers provide a critical support to organizations, such as assisting with fundraising efforts, collection and distribution of donated goods, youth mentoring, coaching, tutoring, administrative tasks, and general labor. According to the Corporation for National and Community Service (2016), volunteers contributed 7.9 billion hours of service and saved $184 billion for nonprofits in the United States in 2015. Volunteers are almost twice as likely to donate financially to their organizations as non-volunteers (Corporation for National and Community Service, 2016).

Given the positive impact of volunteers on organizations, it is critical for programs to retain them. Unfortunately, many nonprofit organizations experience significant challenges in managing their volunteers effectively, with approximately one-third of volunteers discontinuing service in the first year (Davis, Hall, & Meyer, 2003), representing a loss of $38 billion dollars in labor (Eisner, Grimm Jr., Maynard, & Washburn, 2009). Thus, the declining rates of volunteerism across the United States are a growing problem for the organizations that depend on volunteer efforts for sustainability. In examining why volunteers leave, several explanations have been put forth by researchers. A study conducted in 2003 by the Corporation for National and Community Service found a number of factors implicated in the discontinuation of volunteer service, most notably centered on a lack of adoption of effective volunteer management practices. For example, the only management practice widely adopted by volunteer organizations was that of providing regular supervision and communication with volunteers, with 67% of organizations indicating that they performed this activity to a large degree. However, practices such as offering training to volunteers, having written policies and job descriptions for volunteer involvement, and conducting recognition activities for volunteers were adopted much less frequently, indicating that the adoption of practices to help effectively run volunteer programs are limited and still represent a significant problem for many organizations.

In 2016, the President of the Society for Industrial-Organizational Psychology (SIOP), Steve Kozlowski, charged industrial-organizational (I-O) psychologists to use their skills to advance efforts supporting advocacy and community impact. The SIOP contains academics and practitioners with expertise in organizational development, human resources management, evaluation, and others that are relevant to the nonprofit management and development. One such initiative, the Volunteer Program Assessment (VPA), was highlighted as an example of how I-O psychologists can have a substantial impact in their communities. Established in 2009, the VPA is a collaboration between six universities across the United States with the common mission of improving nonprofit organizational effectiveness: (1) the University of Nebraska at Omaha, (2) the University of North Carolina at Charlotte, (3) the University of South Florida, (4) George Mason University, (5) the University of Northern Illinois, and (6) Illinois State University. With the support of their respective Universities, each VPA chapter has grown and developed individually.

However, the overarching structure of VPA, along with its shared goals and mission, is capable of supporting a collective impact approach. Many collective impact articles have highlighted the importance of developing collective impact efforts from the beginning of a project. However, we demonstrate that with a certain level of growth and collaboration, some organizations may develop into collective impact initiatives by necessity. By moving toward a collective impact approach, VPA has been able to serve more than 300 nonprofit organizations and made great strides in improving organizational capacity and volunteer satisfaction and retention.

This paper describes how VPA, grounded within each chapter's respective university system, has utilized the collective impact model to serve a greater number of clientele, serve clientele more effectively, and have a broader impact. In this article, we will depict the ongoing evolution of VPA from independent chapters to a unified set of organizations with aligned goals. We will briefly review the key tenets of collective impact, explain why a collective impact approach is valuable in this case, and discuss the steps VPA has taken in recent years to move toward a collective impact effort.

What is the VPA?

Efforts to help build the capacity of volunteer programs are not new; there are multiple organizations that either distribute resources for volunteers, or help to build their capacity in other ways. One example of such an organization is Points of Light, a national group who assists nonprofits in a multitude of ways. These include connecting those interested in service with volunteer opportunities, highlighting tools organizations can use for recruitment, background checking, and training, and helping companies to launch volunteer programs for employees (Points of Light: What We Do for Nonprofits, n.d.). Another organization providing similar services is the Nonprofit Association of the Midlands, which distributes information to members about educational opportunities for program managers, provide managers with toolkits to address a variety of issues, and help to connect nonprofit leaders with others in the community (Nonprofit Association of the Midlands, n.d.). In contrast to these approaches, VPA chapters are not independent organizations, but rather groups connected to their respective universities, which function as anchor institutions, providing spatial immobility, corporate status, scale, and a

common mission of social justice, democracy, and equity (Fulbright-Anderson, Auspos & Anderson, 2001).

History of VPA

VPA was founded by Dr. Steven Rogelberg, Dr. Joseph Allen, and Dr. Daniel Bonilla, after their results of a study of animal welfare volunteers revealed a critically unmet need for assessment resources in the volunteer sector. Continued and more recent investigations into the state of volunteering in the United States paints a similar picture, with the rate of volunteering decreasing each year (Bureau of Labor Statistics, 2016). With the goal of addressing this problem, by providing program coordinators with feedback and key insights from the perspective of their volunteers, the VPA was launched in 2009 at the University of North Carolina Charlotte. The program continues to operate to this day, and has expanded to five other chapters across the United States.

In 2013, Dr. Joseph Allen brought the VPA to the University of Nebraska at Omaha. Shortly after VPA began operating at UNO, the organization applied for, and received, space in UNO's newly-built Weitz Community Engagement Center, a 70,000 square foot facility in the middle of UNO's campus. The Center houses over thirty university and community organizations and provides nonprofit organizations with space to fulfill their missions and foster collaborations. With the new space, VPA-UNO utilized its new resources by training more students in consulting practices, and has grown its client base by 300% in three years.

What is VPA?

VPA is a capacity-building and philanthropic organization dedicated to helping nonprofit agencies, consisting of industrial-organizational psychology faculty and graduate students, as well as undergraduate students from multiple majors in a single University. The VPA serves nonprofits by assessing the experiences of their volunteers to improve volunteer satisfaction, performance, and retention. Using the results of the assessment, student analysts develop comprehensive diagnostic reports, prepare interpretations of these reports, and meet with leaders from client organizations to provide consultations and guidance for improving volunteers' experiences. If these services were provided at market value, organizations might pay approximately $10,000 for the survey alone, excluding interpretation and consultation; however, VPA provides these services completely free-of-charge as a community service.

In return, the VPA provides its students with the opportunity to gain skills and knowledge through experiential learning. The VPA gives both undergraduate and graduate students the opportunity to experience co-curricular service throughout their college career by applying the skills they learn in their classes to help volunteer managers. Students have direct contact with volunteer program managers in their community and across the country, and they apply inter-disciplinary knowledge from psychology, organizational development, business management, communications, technology, and nonprofit management. The VPA follows tenets of experiential learning and quality education practices such as: (a) reciprocity, in which both the receiver of the service and the giver of the service learn from the exchange; (b) reflection on their learning; and (c) giving students autonomy and voice in their learning (Billings, 2006;

Scales, Roehlkipartain, Neal, Kielsmeier, & Benson, 2006). Students can utilize their current skills when working with clients and integrate new, practical knowledge about the nonprofit industry into their current understanding of their role within the community. Because students give their time to each client for free, they also feel satisfied that they give valuable data and consulting services to volunteer programs that otherwise could not afford to buy those services. As previously stated, the program's reciprocal nature ensures that all parties benefit from the exchange of resources.

Table 1. *Kania & Kramer's Characteristics of Successful Collective Impact Initiatives*

Common Agenda	All participants have a shared vision for change including a common understanding of the problem and a joint approach to solving it through agreed upon actions.
Shared Measurement Systems	Collecting data and measuring results consistently across all participants ensures efforts remain aligned and participants hold each other accountable.
Mutually Reinforcing Activities	Participant activities must be differentiated while still being coordinated through a mutually reinforcing plan of action.
Continuous Communication	Consistent and open communication is needed across the many players to build trust, assure mutual objectives, and create common motivation.
Backbone Support Organizations	Creating and managing collective impact requires a separate organization with staff and a specific set of skills to serve as the backbone for the entire initiative and coordinate participating organizations and agencies.
Adapted from Kania & Kramer, 2013	

Other VPA chapters have also developed in response to ongoing interest and demand in the program. In addition to VPA-UNO, VPA began working with partners at George Mason University, Illinois State University, the University of South Florida, and Northern Illinois University over the past few years (Olien et al., 2014). Development of a VPA chapter requires only interest from a university faculty member, and completion of a training process, which is provided by the founding VPA chapter in Charlotte. In addition to training, the Charlotte chapter also helps new chapters in setting up the VPA assessment, provides all necessary process documents for conducting the assessment, collects and manages data from all VPA chapters, and aids in the procurement of client organizations. There are currently six VPA groups operating across the United States, serving more client organizations each year. As VPA groups have expanded, keeping up with client demand as well as working out the most effective practices for maintaining the program has involved a considerable amount of collaboration between chapters. In addition to cross-chapter collaboration, VPA groups are increasingly finding ways to work more collaboratively with client organizations to best meet their needs. This necessary upsurge in collaboration has led to increasing discussion as to whether VPA groups would function more effectively by utilizing a collective impact approach, as well as whether VPA groups are in fact already utilizing a collective impact approach.

Collective Impact

In the seminal article, Kania and Kramer (2011) describe collective impact as an emerging strategy to help address complex social issues more effectively. The benefit of a collective impact approach lies in that it reduces the amount of overlap between organizations attempting to address the same goal, and also allows for the sharing of information between different 'actors' to target an issue on different levels. Their seminal article provided a definition of collective impact that included five key characteristics necessary for a successful outcome: (a) a common agenda; (b) shared measurement systems; (c) mutually reinforcing activities; (d) continuous communication; and (e) backbone support organizations. Each characteristic allows actors from different sectors to work together to solve a specific social problem (see Table 1 for definitions). An update by Kania, Hanleybrown, and Splansky Juster (2014) also described three important mindset shifts necessary for successful implementation of collective impact. These include getting the correct people involved to help a specific problem, having collaborators change the way they work with each other, and understanding that social issues relentlessly change and solutions must adapt to changes.

Although the term 'collective impact' is increasing in popularity, many agree that true collective impact initiatives which meet all five criteria are rare (Kania & Kramer, 2011), and that the term is sometimes applied to initiatives which do not fully meet the criteria (Prange, Allen, & Reiter-Palmon, 2016). Reasons for the incorrect labeling may have to do with a lack of full understanding as to what is needed to carry out a collective impact effort, or a general lack of clarity as to the five tenets outlined by Kania and Kramer (2011).

A precondition noted by some researchers is that many successful collective impact initiatives are designed and planned specifically to constitute a collective impact approach, with a heavy focus on assessment (Parkhurst & Preskill, 2014; Prange, Allen, & Reiter-Palmon, 2016). One important question, which has not yet been explored in case studies, is whether it is possible for an organization to move from a collaborative initiative to a collective impact initiative in order to have a broader impact, and what such a shift might look like. Another question not yet answered is whether it is possible for a collaborative effort to shift organically into a collective impact effort over time. Flood et al. (2015) noted in a recent case study that although key stakeholders did not intentionally seek out collective impact as a model for an initiative to address health issues in a neighborhood in San Francisco, the approach was later noted by many to align closely with collective impact. Furthermore, some researchers have noted that collective impact may simply be another form of inter-organizational collaboration (Prange, Allen, & Reiter-Palmon).

Why Collective Impact?

Multiple researchers have expounded the benefits of a collective impact approach. By taking a collective impact approach, social change agents/organizations can tackle a particular issue together rather than separately. By aligning their goals, methods, and evaluation in solving a social issue, multiple actors can be more effective in facilitating change than if they were each trying to solve issues without continuous collaboration. Collective impact initiatives such as Strive, Shape up Somerville, Mars, and the Elizabeth R. Project, were cited as very successful examples, by Kania and Kramer (2011) in their seminal article on collective impact. Flood et al.,

(2015), researching the efforts in the health services sector, found collective impact to be extremely useful in attempting to address poor health and nutrition in a San Francisco neighborhood.

Although researchers in general have articulated the benefit of collective impact through experience and theory, Kania and Kramer (2011) suggested that collective impact is likely most useful when addressing problems that are more adaptive. That is, collective impact can be most successful in generating solutions for social issues that are complex, in which the solution is not well-known or cannot be easily implemented. Volunteer program effectiveness is one issue sufficiently complex to warrant individuals from different agencies working together. There are a few reasons for this. First, there is no 'one size fits all' solution to address program challenges. Although volunteer programs have one thing in common (i.e., volunteers), they differ drastically in terms: (a) size, ranging from as few as five volunteers to thousands of volunteers; (b) staff, with some programs being entirely volunteer-operated and some having a large, dedicated paid staff; (c) type of service, with some volunteers performing administrative work, some volunteers engaged in fundraising efforts, some volunteers doing direct service, and some volunteers whose experiences include all of these types of service and more; (d) funding, as some programs are well-funded and some extremely limited,;(e) volunteer demographics, with some organizations comprised mostly of elderly volunteers, some mostly of college students, and some with more diverse volunteer populations; (f) volunteer manager capability, with some volunteer coordinators whose entire job is to ensure the volunteer program is running efficiently, and others who may only dedicate a small percentage of their time toward managing the volunteer program; and (g) board coordination, with some programs being accountable and having the support of a board, and others that do not.

These, which are in no way an exhaustive list, render it extremely difficult to simply put out 'solutions' and recommend that all programs implement them regardless of their individual characteristics or ability to do so. Additionally, it is impossible to take considerations like this into account without working closely with managers and paid staff at volunteer organizations to develop useful recommendations tailored to their program. This point has become increasingly salient for VPA chapters as the organization has evolved. Collaborating with other chapters in finding ways to better serve client organizations has also been necessary, in order to tackle ongoing organizational challenges such as dealing with rapid program growth, modifying training procedures as necessary in response to student analyst feedback, and implementing new procedures piloted at different chapters to better address client needs. Problems faced by one chapter are typically experienced at other chapters as well, so such an approach saves time and resources that can be better spent toward serving client organizations, which is crucially important for VPA chapters who typically have lengthy waitlists. Thus, it is not so much a choice to begin relying on cross-sector coordination, which begins to resemble collective impact, to operate efficiently as it is necessary for program survival.

Moving Towards Collective Impact

The six chapters of VPA are a collective of organizations trying to simultaneously improve volunteer program effectiveness across the United States. Though the initial founding members did not envision VPA as a collective impact operation, continued functioning of the organization, as well as the need to serve client organizations as effectively as possible, have necessitated that the organization develop into a collective impact effort. To highlight the similarities and differences between VPA and more traditional collective impact initiatives, the various tenets of collective impact as well as how VPA aligns with those characteristics are discussed below.

A Common Agenda

The importance of a common agenda has been highlighted as critical by those utilizing collective impact (Flood et al., 2015; Hanleybrown, Kania, & Kramer, 2012). Researchers studying collective impact to date have described achieving a common agenda as a potentially challenging but necessary activity involving the agreement of all stakeholders, which can include dozens or more organizations working in tandem (Kania & Kramer, 2011). Volunteer Program Assessment groups share the same common agenda of improving volunteer program effectiveness. Although there are differences by chapter with regard to the type of volunteer research conducted, what organizations each chapter reach out to, and occasionally the development of unique processes to address specific programmatic challenges, the core agenda remains the same and in alignment with previous collective impact efforts.

Different from these efforts is that VPA includes agreement of a common agenda among six affiliate organizations and the client organizations they serve, while other collective impact initiatives typically involve more stakeholders (Kania & Kramer, 2011). In spite of a reduced number of stakeholders involved with the agenda, throughout the expansion of VPA from a single university setting to six individual chapters, the need to reinforce a common agenda and continuously commit to the central mission of VPA has become more relevant of late, and is more difficult to accomplish from different physical locations. Thus, in contrast to the beginning of VPA, reinforcement of a common agenda is now accomplished through several mechanisms.

First, VPA chapters re-visit goals and align their purpose formally on an annual basis through a conference call with key stakeholders, an initiative started in 2013. In each yearly call, critical updates and information are shared, such as important insights, process changes, and collaborative progress with clients. In addition to the yearly call, it has become clear that chapters benefit even more from in-person interaction than simple phone calls. Thus, starting in the spring of 2015, representatives from each VPA chapter attend an in-person meeting at the annual SIOP (Society for Industrial-Organizational Psychologists) conference, bringing together student volunteers from different chapters, as well as VPA faculty directors. The agenda of the annual conference meeting is to provide an update on client activities in the past year, discuss unique challenges that came up and how they addressed such challenges, and to share meaningful experiences. This in-person venue also allows for students and faculty from different universities to discuss their experiences together and share ideas amongst themselves.

In addition to these two formal mechanisms created to maintain a common agenda, VPA directors remain in close contact about ideas needed to stay on-track and improve the VPA process through email and phone contact, as well as by collaborating on other projects. Several VPA chapters have also begun utilizing social media as recently as 2016, to share information and resources between chapters. Some of the updates stemming from ideas discussed during the annual meeting have led to implementation of new initiatives at all chapters. These include expanding one of the VPA survey items about gender to better reflect gender identity concerns from clients, incorporating a post-survey satisfaction questionnaire to all clients to make sure we are meeting their needs and soliciting feedback, and updating job descriptions of key VPA personnel (e.g., student assistant directors and volunteers). These reforms were all incorporated into the VPA chapters throughout 2016.

Shared Measurement Systems

There are three cross-chapter measurement systems used by VPA, which were in use at the founding chapter, and have been expanded to other chapters in the years since. First, all VPA chapters track the number of clients served each year in the same way, through the use of a client log spreadsheet which contains information about client organizations' name, location, contact info, how many times the client has conducted VPA at their organization, and notes. This system is used to provide an update each year at the annual SIOP conference meeting. VPA chapters also use the same standardized VPA survey itself, which enables each chapter to track key indicators of client success such as volunteer satisfaction, volunteer engagement, and volunteer continuance.

Finally, in creating standards to assess impact, VPA chapters pool their data files every two years. The data is then compiled and then distributed by the founding chapter to create national norms. The advantage of having a national 'standard' is that chapters can use the information to compare meaningfully against new client's VPA results and identify areas in which the organization's volunteers are similar to other volunteers, as well as to identify areas in which the client organization's volunteers are reporting lower scores. This shared norming system ensures that all VPA chapters have the same benchmarks against which to compare client results. Due to the large amount of data collected from client organizations, a recent development in this area, which occurred in 2014, has been the development of specific norms by volunteer category. Currently, VPA chapters have normative scores for volunteers serving in animal welfare, arts and educational groups, health and human services, and police, fire, and rescue volunteer organizations.

These shared measurement systems are certainly in alignment with past collective impact approaches, which have included similar systems such as: (a) evaluating progress based off of previously developed and agreed upon criteria, as well as the same outcomes (e.g., Strive, Edmondson & Santhosh-Kumar, 2017; Kania & Kramer, 2011); (b) coming together to create shared definitions and understanding (e.g., Calgary Homeless Foundation, Hanleybrown, Kania, & Kramer, 2012); and (c) developing ways to measure success while taking into account the context of the evaluation (e.g., Shape Up Somerville, Parkhurst & Preskill, 2014).

Mutually Reinforcing Activities

There is a high degree of overlap between the activities conducted at each VPA chapter, which is different from other collective impact initiatives that tend to involve more diverse activities (Kania & Kramer, 2011). Although there are advantages to this approach, in that the activities of VPA chapters are inherently mutually reinforcing, ultimately this is not consistent with the vision of collective impact, which stresses different stakeholders with different sets of expertise, who are leveraging their individual strengths to create change. However, one redeeming factor is that each chapter has different strengths. Out of these strengths, new ideas to improve best practices, and new materials to help track and keep organized, are frequently developed and shared. For example, some chapters have had more success in drumming up program interest than others, and strategies for identifying new client organizations to work with are shared with chapters that may be struggling. Furthermore, having chapters in multiple locations across the country allows VPA groups to distribute the client workload by passing new clients to other chapters if a certain chapter is already at capacity for the semester. This allows VPA to serve as many clients as possible each semester.

Continuous Communication

Without continuous communication, both formal and informal, the other tenets of collective impact such as maintaining a common agenda, utilizing shared measurement systems, and conducting mutually reinforcing activities would not be possible. Thus, communication across VPA affiliates occurs in multiple ways (e.g., conference calls, in-person meeting, or emails) as well as multiple time points throughout the year. The different VPA chapters may serve different types of organizations, based on their geography and the major industries in their cities. For example, the chapter at North Carolina at Charlotte serves many animal shelter organizations. It has created a unique process to serve those clients, as well as distributed new information to other chapters in 2016 regarding the lessons they have learned about those organizations. Even though the chapters may focus on different nonprofit industries and/or organizations, the continuous communication between chapters keeps them aligned.

Backbone Support Organizations.

This is the main area in which VPA does not resemble a collective impact approach. Although some affiliates have secured support from their universities (e.g., VPA-UNO maintains office space in UNO's Community Engagement Center) or grant funding (e.g., VPA UNCC operates on a grant from the Humane Society of the United States), others operate on an entirely volunteer basis without any paid staff. Given the important role backbone organizations play in maintaining collective impact efforts (Hanleybrown, Kania, & Kramer, 2012; Turner, Merchant, Kania, & Martin, 2012), this lack represents a substantial challenge for the sustainability of VPA. Thus, one of the main goals of VPA moving forward is to find consistent support for each VPA chapter to fund both students and program operating costs, or finding a common source for funding that could be split between the six chapters.

The VPA and its chapters already have a core mission (i.e., agenda) and a clear strategy for how to go about increasing volunteer program effectiveness—through the use of surveys and

consulting that is given free-of-charge to organizations with volunteers (i.e., mutually reinforcing activities). The surveys we deploy with our client organizations are a perfect example of a shared measurement system, however, we need to improve upon our measurement by focusing on other outcomes of the VPA, such as student analyst learning and development. In addition, continuing to facilitate ongoing communication between the chapters will take effort. However, the most important action VPA can take to fully committing to collective impact will be to find a source or multiple sources of funding to cover administrative expenses.

The Impact of VPA

Through the use of collective impact practices so far, Volunteer Program Assessment has made notable gains in improving nonprofit organizational effectiveness using several shared metrics, including program capacity, volunteer satisfaction, and volunteer continuance intentions. To date, VPA has conducted over 300 assessments, providing $4.5 million of in-kind services to nonprofits. The three areas in which VPA partner organizations have improved over time are described below as well as some examples of each metric.

Increased Volunteer Program Capacity of Partner Organizations

As VPA works with clients over time, we track their changes to provide a year to year comparison of each area of the survey. Although it is not always possible for client organizations to implement every change or best practice that VPA recommends each year, we have found overwhelmingly that when organizations are able to devote time and effort toward addressing growth areas, such growth areas tend to improve. Some of the documented efforts of client organizations as well as the resulting improvement found from the VPA survey are noted in Table 2 below.

Table 2. *Program Changes and Score Improvements*

Organization Type	Growth Area	Time 1* Score	Time 2* Score	Changes Made:
Music Education Youth Development Program	Recognition	60	90	Began ending each concert/event by thanking all volunteers. Personalized thank you notes written to all parent volunteers who went above and beyond during the season.
Nutrition and Health Education Program	Perception of Voice	69	86	Shared the results of the VPA survey with volunteers and asked for feedback.
Regional Foodbank	Perception of Voice	44	66	Shared the results of the VPA survey with volunteers and asked for feedback.
Youth Mentoring and Development Program	Satisfaction with Volunteer Colleagues	86	99	Brought volunteers together for volunteer appreciation luncheon incorporating VPA results and Q&A session.
Youth Advocacy Program	Recognition	84	92	Implementation of a new recognition program for volunteers.
Midwest Hospital System	Satisfaction with Paid Staff	75	83	Hiring of a specific coordinator to better support the program.

**Scores for both time 1 and time 2 are rated from 1 to 100.*

Enhanced Satisfaction of Volunteers at Partner Organizations

VPA collects several sources of information regarding volunteers' satisfaction with their experiences, including satisfaction regarding their interpersonal perceptions with others at the organization, satisfaction with the flow of communication coming from the organization, satisfaction with the contribution they feel they have been able to make to the organization, and overall satisfaction with their volunteer work. An aggregated measure of satisfaction including several of these categories of satisfaction is included below, with most organizations finding that their volunteers experience increased satisfaction each year they have participated with VPA.

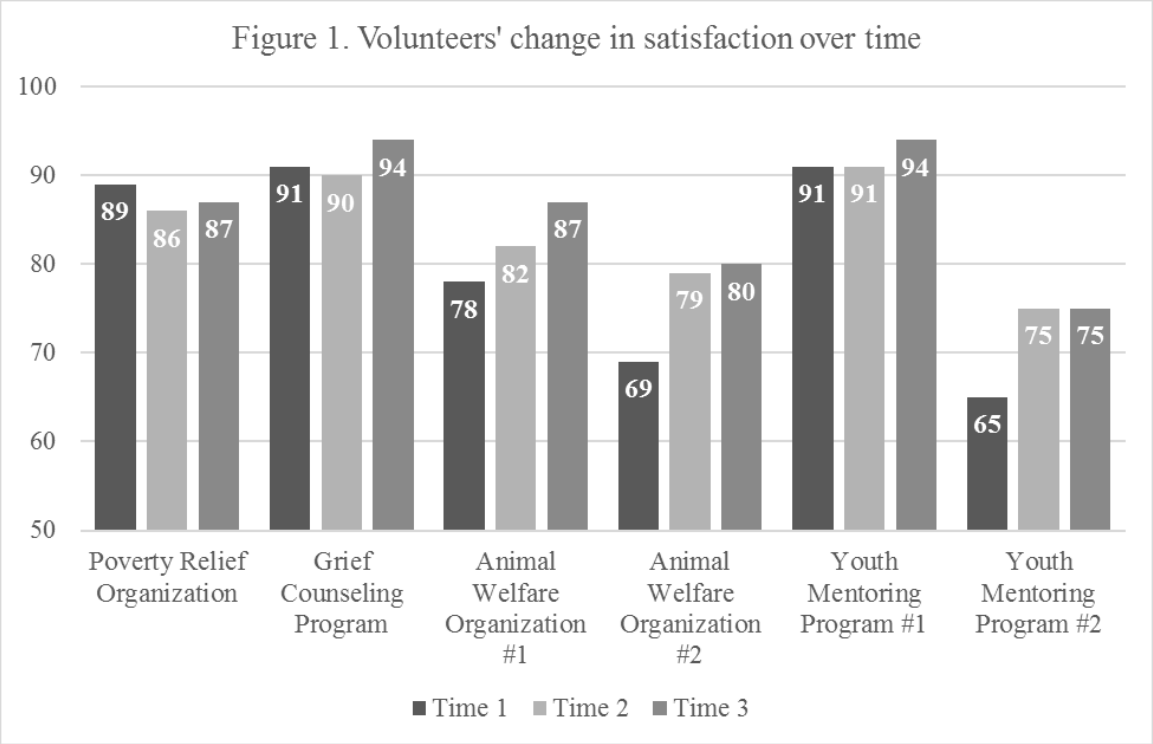

Figure 1. Volunteers' Change in Satisfaction over Time.

Increased Continuance Intentions at Client Organizations

Finally, the VPA includes questions for volunteers about their continuance intentions regarding their volunteer position. We find that most client organizations who work with VPA have a substantial proportion of volunteers who intend to continue service each year, and that the longer client organizations work with VPA, the higher the proportion of volunteers who agree that they intend to continue working with each organization. This is perhaps the biggest indication of client organization success to date.

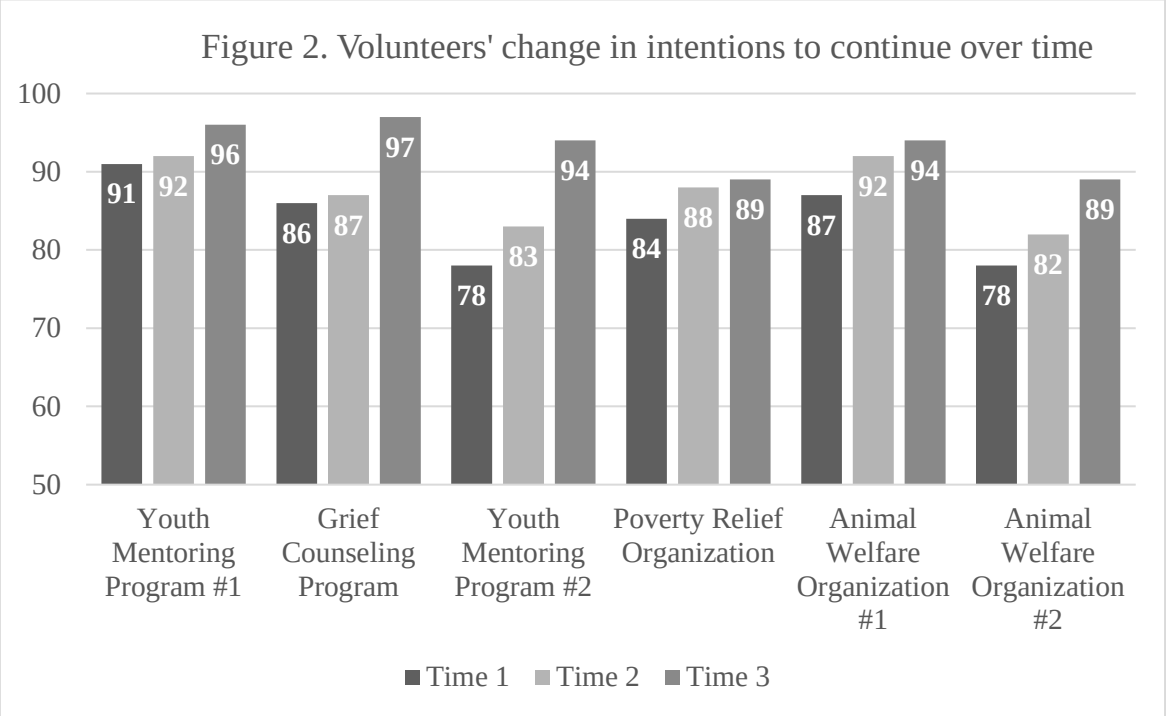

Figure 2. Volunteers' Change in Intentions to Continue Over Time.

Conclusion

Although VPA does not perfectly meet the definition of a collective impact initiative at this time, lacking fully the benefit of a backbone organization, it does closely align with four out of five of the characteristics identified by Kania and Kramer (2011). Born of necessity in continuing to serve client organizations efficiently, steps taken to bring VPA chapters to a collective impact model over the past few years have resulted in positive changes for both the effectiveness of the VPA chapters, as well as allowed VPA to better serve a larger number of clientele. Theoretically, we reinforce that although some efforts to address social issues may not begin as collective impact, over time they may evolve into collective impact by necessity.

The future of VPA will involve greater efforts to meet a collective impact effort, with key goals including securing funding from backbone organizations, developing additional shared measurement systems to assess not only client outcomes, but student outcomes, and continuing to incorporate feedback from client organizations into the process to make it more effective.

References

Bureau of Labor Statistics. (2016). News release: Volunteering in the United States—2015 (Publication No. USDL-14-0314). Washington, DC: U.S. Department of Labor. Retrieved from http://www.bls.gov/news.release/pdf/volun.pdf

Corporation for National and Community Service. (2016). Research: Overview statistics. Retrieved from https://www.nationalservice.gov/vcla/research

Davis, M. H., Hall, J. A., & Meyer, M. (2003). The first year: Influences on the satisfaction, involvement, and persistence of new community volunteers. *Personality and Social Psychology Bulletin*, *29*(2), 248-260. https://doi.org/10.1177/0146167202239050

Edmondson, J., & Santhosh-Kumar, P. (2017). It's about results at scale, not collective impact. *Stanford Social Innovation Review – Solutions – Collaboration.* Retrieved from https://ssir.org/articles/entry/its_about_results_at_scale_not_collective_impact

Eisner, D., Grimm, Robert T., Jr, Maynard, S., & Washburn, S. (2009). The new volunteer workforce. *Stanford Social Innovation Review, 7,* 32-37. Retrieved from https://search-proquest-com.leo.lib.unomaha.edu/docview/217170729?accountid=14692

Flood, J., Minkler, M., Lavery, S., Estrada, J., & Falbe, J. (2015). The collective impact model and its potential for health promotion: Overview and case study of a healthy retail initiative in San Francisco. *Health Education and Behavior, 42*(5), 1-15. https://doi.org/10.1177/1090198115577372

Fulbright-Anderson, K., Auspos, P., & Anderson, A. (2001). *Community involvement in partnerships with educational institutions, medical centers, and utility companies*. Aspen, CO: Annie E. Casey Foundation.

Hanleybrown, F., Kania, J., & Kramer, M. (2012, January 26). Channeling change: Making collective impact work. *Stanford Social Innovation Review*, *20*(1). Retrieved from http://ssir.org/articles/entry/channeling_change_making_collective_impact_work.

Kania, J., Hanleybrown, F., & Splansky Juster, J. (2014). Essential mindset shifts for collective impact. *Stanford Social Innovation Review 12* (4), 2-5. Retrieved from https://ssir.org/articles/entry/essential_mindset_shifts_for_collective_impact

Kania, J., & Kramer, M. (2011). Collective Impact. *Stanford Social Innovation Review 9*, (1), 36-41. Retrieved from https://ssir.org/articles/entry/collective_impact

Nonprofit Association of the Midlands (n.d.). Retrieved from http://www.nonprofitam.org/?page=MissionValues.

Olien, J. L., Dunn, A, M., Lopina, E. C., & Rogelberg, S. G. (2014). Outreach to nonprofit volunteer programs: Opportunity for impact, improving graduate education, and an invitation to

become a part of the Volunteer Program Assessment. *The Industrial Organizational Psychologist 51* (4), 51-60. Retrieved from http://www.siop.org/tip/april14/olien.pdf

Parkhurst, M., & Preskill, H. (2014). Learning in action: Evaluating collective impact. *Stanford Social Innovation Review 12* (4), 17-19. Retrieved from https://ssir.org/articles/entry/learning_in_action_evaluating_collective_impact

Points of Light: What We Do for Nonprofits (2017). Retrieved from http://www.pointsoflight.org /for-nonprofits

Prange, K., Allen, J. A., & Reiter-Palmon, R. (2016). Collective impact versus collaboration: Sides of the same coin OR different phenomenon? *Metropolitan Universities, 27*(1), 86-96. Retrieved from https://journals.iupui.edu/index.php/muj/article/view/21119

Scales, P. C., Roehlkepartain, E. C., Neal, M., Kielsmeier, J. C., & Benson, P. L. (2006). Reducing academic achievement gaps: The role of community service and service-learning. *Journal of Experiential Education, 29*(1), 38-60. https://doi.org/10.1177/105382590602900105

Turner, S., Merchant, K., Kania, J., & Martin, E. (2012). Understanding the value of backbone organizations in collective impact: Part 1. *Stanford Social Innovation Review – Solutions – Collaboration.* Retrieved from https://ssir.org/articles/entry/understanding_the_value_of_ backbone_ organizations_in_collective_impact_1.

Urban Institute. (2004). *Volunteer management capacity in America's charities and congregations: A briefing report*. Washington, D.C.: The Urban Institute. Retrieved from http://webarchive.urban.org/UploadedPDF/410963_VolunteerManagment.pdf

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Capacity Building for Social Innovation: A Collective Impact Approach

Ellen J. Szarleta

Abstract

Business, nonprofit, and government institutions generally agree that a vibrant economy is critical to addressing the multi-faceted, complex issues faced by urban communities. Yet, despite significant targeted efforts aimed at revitalizing economic activity over the past few decades, the state of many communities remains unchanged. A collective social entrepreneurship model, focused on building social entrepreneurial capital networks, is proposed as a complement to more traditional models focused on building individual capacity for social entrepreneurship. This article contends that one way universities can play a role in building social entrepreneurial networks is by serving as conveners. The lessons learned from a university-community initiative suggests that a collective impact framework and university leadership in a convening role, can support and inform the use of the social entrepreneurship approach to more effectively address issues of economic vitality.

Keywords: Collective social entrepreneurship; convener; wicked problem

Introduction

The issues facing communities, particularly urban communities, often elicit demands for action (Baum, 2000) and positive social change. These demands create challenges for university-community partnerships grounded in relationship-building processes including divergent expectations regarding communication, decision making and authority (Prins, 2005). Addressing the immediate and pressing concerns of communities, while building mutually beneficial relationships requires more than modifying existing process; it requires innovative solutions based in systems change, e.g., such as reframing issues. The urgency to confront issues such as economic vitality provides universities and communities with an opportunity to combine the theories of collective impact and social entrepreneurship to leverage place-based knowledge to build community capacity for defining, implementing, and evaluating change.

This article examines the role of a community-university social entrepreneurship initiative in building collective capacity for long-term economic vitality. Building on the theory of collective impact, and incorporating tenets of social entrepreneurship, the early lessons of an urban farm initiative suggest that community demands can be better addressed when a network of social entrepreneurs adopts a collective impact framework. The experience also suggests that, by creating and supporting a collective approach to social entrepreneurship, the community is empowered to work toward tackling wicked problems through the lens of collective action.

The Context

Communities in Northwest Indiana, as in many blighted, urban areas, face substantial obstacles to economic development including high rates of poverty and the loss of an industrial base. These once thriving urban areas are now recognized across the country as context for "wicked problems" (Rittel, 1973). IU Northwest, a regional campus of Indiana University, is located in Gary, a city characterized by conditions of extreme poverty and industrial decline.

Gary, IN is also burdened with conditions commonly associated with wicked problems, or problems that are resistant to resolution as a result of their characteristics (Rittel & Webber, 1973). Rittel (1973) first characterized these types of problems with 10 or 11 properties. Conklin (2009) later condensed these wicked problem properties (2009) to six:

- The problem is not understood until you have developed a solution,
- There is no single stopping rule,
- Solutions are not right or wrong,
- Each wicked problem is unique and novel,
- Every solution is a “one-shot operation” with consequences,
- Alternative solutions are not a given.

The socio-economic conditions in the City of Gary, like those in many urban industrialized areas, set the context for a myriad of wicked problems. Approximately, 38% of Gary’s residents, 89% of which are African American, live in poverty. The city’s poverty rate (Census, 2014) exceeds that of the county (18%), the state of Indiana (15.4%) and the United States (13.8%). The City of Gary, founded by United Steel Corporation in 1908, was once the anchor of economic vitality in the 7-county Northwest Indiana region, and the second largest city in the State of Indiana. Gary is now the 5th largest city in the state, experiencing dramatic population losses in the last 40 years (Census, 2014). In the early decades following the city’s establishment, both the city and the region were proud of their “industrial pre-eminence”—the economic foundation of prosperity (Federal Writers Project, 1939).

Today, communities take pride in resilience in the face of significant challenges. The community’s resilience is evidenced in part by the number of businesses in the city; more than half of all business in Lake County, Indiana are now located in Gary (5,700 of the 9,843 businesses in the county); 69% of the city’s businesses are black owned. While the number of smaller businesses is impressive, the city’s economic resilience is limited by socio-demographic conditions. Per capita income (in 2013 dollars) is roughly $16,000, or approximately 2/3 of the state per capita income level. The median value of home is less than half of the median value in the state and the city’s home ownership rate is 53% compared to 70% in the state. In a city of 78,000 people, 28,000 individuals make up the labor force and 25,000 are employed (Indiana labor force estimates, August 2015). Education levels of residents further limit economic opportunity. Among those aged 25 and over, only 12.3% possess a bachelor’s degree, making the prospect of attracting high-earning positions to the city a significant challenge (Census, 2014).

The statistics cited above tell the story of a city plagued by factors believed to contribute to urban decline. Another statistic, the number of businesses in the city, suggests an untapped

source of socio-economic capital that can be leveraged for urban renewal: small business. The City of Gary is home to over half of all business in Lake County, Indiana, and more than half of all businesses in the county employ 1-4 individuals (4,862 of 9,843). Small businesses are powerful agents of social change (Mair & Marti, 2006; Aldrich & Zimmer, 1986) and have the potential to advance local social interests previously unrecognized by larger corporations.

Yet, in the City of Gary and in the region, economic development nevertheless falters. This poses many interesting questions, including: *How can community-university partnerships harness the economic potential of individual entrepreneurs to effect transformational community change*? To begin answering this question, two models, social entrepreneurship and collective impact are examined.

Social Entrepreneurship

While social entrepreneurship has enjoyed wide recognition for its successes (Mair & Marti, 2006), a widely accepted definition of the phrase in academic circles does not yet exist. Two decades ago, the literature focused on distinguishing business entrepreneurship and social entrepreneurship based on social-value creation. Venkataraman (1997) states that under business entrepreneurship, social wealth is a by-product of economic value, while the focus of social entrepreneurship is on social value creation. More recently, Seelos and Mair (2005) argue that the boundary between business and social entrepreneurship does not lie in the distinction between profit motive and altruism, but suggest that the motivation of social entrepreneurs is one of not only doing good, but also doing well and pursuing personal fulfillment.

Internationally recognized social entrepreneurship initiatives include Professor Muhammad Yunus' work empowering women in Bangladesh. The Grameen Bank, founded by Yunus, provided credit to the poor by removing the need for collateral, and created a banking system based on trust, accountability, creativity and participation (Yunus, 2007). As of October of 2011, the Grameen Bank had 8.349 million borrowers, 97% of whom are women. (Yunus, 2017). More recent efforts, such as Kiva, the first online peer-to-peer microcredit marketplace, facilitate entrepreneurship across the global by leveraging the financial resources of similarly minded individuals. Operating outside the United States since 2005, Kiva began funding loans to small US-based business owners in 2012, introducing a significant innovation in the field: social underwriting or banking based on character. This program has now sourced more than $25 million in new loans (Sahni, Lanzerotti, Bilss, & Pike, 2017)

With such generally accepted success it is clear why social entrepreneurs are seen be vital to the production of social capital. However, an important limitation of social entrepreneurship is the limited ability to capture the value that is created particularly in areas where enterprise is focused on meeting basic needs (Seelos & Mair, 2005) as the capacity to earn profit is constrained by lower levels of income. Mair and Marti (2006) suggest that embeddedness, as a mindset, is particularly limiting in areas where the pool of resources has run dry. In such areas, the positive effects of embeddedness, e.g., the ability to leverage relationships to access resources, are outweighed by individual entrepreneurs' diminished willingness or ability to take on a challenge. Collective social entrepreneurship, an emerging concept in the literature, is one vehicle for overcoming embeddedness.

Collective Social Entrepreneurship

Montgomery, Dacin and Dacin (2012) define collective social entrepreneurship as collaboration among stakeholders for the purpose of applying business principles to solving social problems. The value of collective social entrepreneurship, as opposed to individual social entrepreneurship, lies in its potential to bring about the institutional arrangements that will support transformative, as opposed to transformational change. These forms of change, explained below, are distinct in both their process and their outcome.

Transformational change is a familiar concept to organizations in all sectors. Strategic planning, commonly undertaken by businesses, government, and nonprofits, is one process used to effect a transformational change. This form of change is both pervasive and intentional. It occurs over a period of time and if successful, strongly influences institutional culture (Eckel & Kezar, 2003). Notably, the outcome of this process is a change in the internal functions of an organization with the goal of supporting its historical purpose or mission. For instance, in the business sector, transformational change leads to an overhaul of strategy and organizational restructuring (Bess & Dee, 2008); in education, transformational change may take the form of alternative methods of teaching, research and service, while preserving the institution's focus on all three areas (Holley, 2009). The frame of reference, in both cases, remains unchanged while internal functions are reorganized to improve outcomes consistent the organization's existing frame of reference.

Transformative change, on the other hand, requires the development of new frames of reference (Mezirow, 1997), or the habits of mind or points of view that help us to understand our experiences (Moore, 2005). Unlike the process of transformational change, where existing frames of reference are preserved, transformative change seeks to expand knowledge in a way that leads to new frames of reference. At the same time, the process recognizes and seeks to balance the tension between those who seek to modify existing practices to address issues as opposed to a collective reframing of the issues. A transformative change approach was recently adopted by the United Nations in developing the latest set of United Nations Sustainable Development Goals (SDGs), published in 2015. In framing the new SDGs the issues of sustainable and inclusive societies were addressed at a more fundamental level, including the questioned use of science and technology policy for meeting social needs. (Schot & Steinmueller, 2016)

The policies emerging from the use of this frame challenge the long-held assumption that science, technology and innovation, as defined to date, are compatible with social welfare and progress. A deeper set of questions, addressing both social goals and innovation processes emerged and policy makers thinking, was broadened beyond support for R&D while encourages the development of a greater set of views and alternatives (Schot & Steinmueller, 2016). In sum, a transformative change frame examines systems and their embedded thinking processes. It also facilitates a deeper understanding of the interconnectedness of, for example, social and economic systems. Employing this frame in the context of wicked problems, such as SDGs, and economic vitality, provides communities and universities with an opportunity to overcome a mindset of embeddedness.

Collective social enterprise, if well-functioning, has the capacity to create new knowledge and new frames of reference resulting in transformative learning experiences and change for communities. Community-university partnerships supportive of collective enterprise networks can leverage these experiences and move beyond incremental approaches to transformative approaches to tackling wicked problems.

However, well-functioning networks of socially minded businesses are not always present in our communities, and overcoming a mindset of embeddedness requires a willingness to think beyond individual gain. It is not enough, as is the case of businesses in Gary, to have large numbers of individual entrepreneurs functioning in a resource-limited area with a mindset of embeddedness; rather, if harnessed collectively and supported, the interests and talents of socially-minded entrepreneurs have the potential to overcome this mindset and more effectively identify and address complex, interdependent issues. Collective impact, a transformative change approach to effecting social transformation, offers one practical approach for building such networks and universities can play a role.

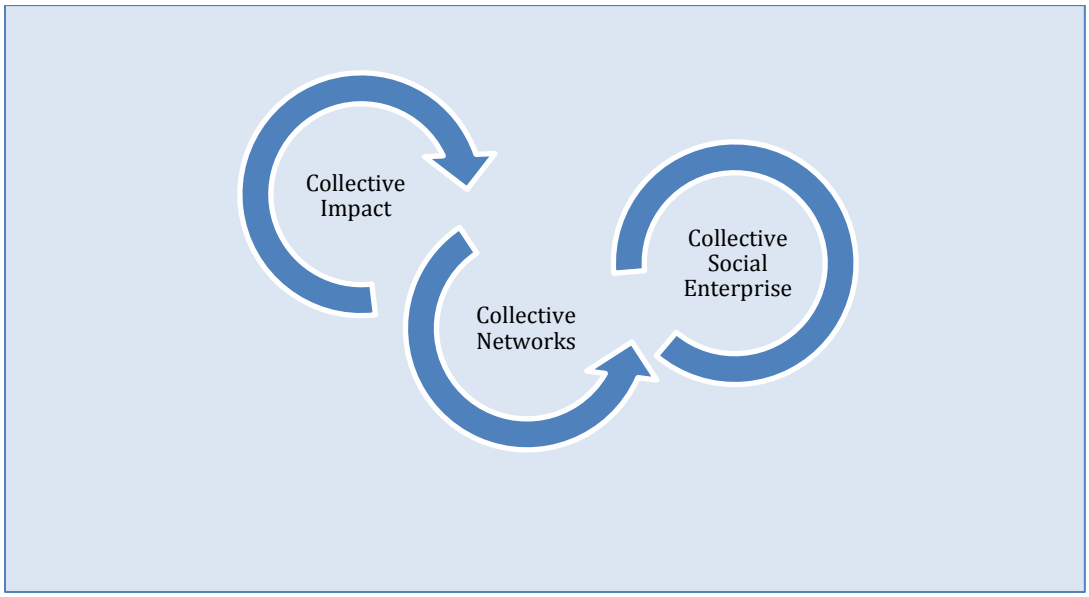

Figure 1. Collective impact in support of collective social enterprise. This figure illustrates the relationship between collective impact, collective networks, and collective social enterprise.

Collective Impact is a framework for tackling deeply entrenched and complex social problems. It focuses on making collaboration work across sectors and citizens to achieve significant and lasting social change. It calls for multiple organizations or entities to abandon their own agenda in favor of a common agenda (Kania, 2011). In the collective impact model, the process and the results are emergent and not predetermined, resources are uncovered, learning is continuous, and adoption occurs simultaneously among the organizations involved (Kania & Kramer 2011). Conveners or backbone organizations support collective impact initiatives as they coordinate and manage participants in a manner that supports fidelity (Kania & Kramer 2011). Their common activities include: (a) guiding the vision and strategy; (b) supporting aligned activities; (c) establishing measurement practices; (d) building public will; (e) advancing policy; and (f) mobilizing funding (Turner, Merchant, Kania and Martin, 2013).

Engaging in these activities also brings challenges, particularly when managing networks addressing "wicked" problems. So while, as Weber and Khademian (2008) note, networks are good alternatives to existing systems for developing public policy, managers still face significant challenges. The advantages of networks, including their flexibility, efficiency and innovative ways of organizing that accomplish collective goals are documented in studies by Powell, (1988), Aldrich and Zimmer, (1986), Borgatti and Cross (2003); and Van Bueren, Klign, and Koppenjan (2003).

The literature suggests that collective impact, supports the formation of collective networks. (Figure 1). However, the literature has not significantly addressed the management of networks including the challenges that emerge when addressing "wicked problems." Turner et al. (2013) offer insight on network management in the context of collective impact, but there work remains to be done in this area.

As noted above, collective social enterprise can be thought of as collaboration for the purpose of applying business principles to solving social problems (Montgomery, 2012). The collective impact framework and the collective social enterprise share an assumption that collective action is a vehicle for transformative change. Both embrace a social movement that challenges the existing frame of reference. They are distinct in that collective impact offers a structured approach for collaboration while collective social enterprise focuses on the application of business principles to social issues. This paper provides an example of how, together, collective impact principles and collective social enterprise concepts can be employed to address the challenge of economic vitality in urban and metropolitan areas. Specifically, the collective impact framework offers the process and structure to enable the formation of the collective networks necessary for collective social enterprise.

In this case study, we discuss how, using the collective impact model, IU Northwest has played a role in facilitating the development of a social entrepreneurship network that is in the early stages of creating a new mindset for addressing food insecurity while advancing K-12 educational experiences. The study provides an example of how the collective impact framework, supported by a university convener, fosters a network of shared knowledge and contributes to the growth of collective social enterprise.

Case Study: Advancing Collective Social Enterprise

Indiana University Northwest is a non-residential regional campus of Indiana University. The campus of more than 5,600 students is located in Gary, Indiana. It offers both undergraduate and graduate degrees in more than 70 campus and hybrid degree programs. Serving 7 counties in the northwest corner of Indiana, the campus seeks to enhance the quality of life of the most diverse, urban, industrialized region of the state (IU Northwest, 2017). The campus values collaboration with external partners, other educational institutions, and the Northwest Indiana community, and identifies community engagement as a strategic priority. As a result the campus engages in community-based collaborations supportive of research, teaching and service.

The campus' path to advancing collective social enterprise, using the collective impact model, began more than 5 years ago. Prior to 2012, faculty with an interest in social enterprise engaged in conversations with individual entrepreneurs and business organizations, seeking information and knowledge on this new form of business practice. During the 2012-2013 academic year a more systematic exploration of social entrepreneurship was undertaken when the campus participated in the "Leadership IU" – an Indiana University leadership capacity building initiative. The IU Northwest "Leadership IU" team made up of three faculty members and four City of Gary municipal administrators, together identified a critical community need—food insecurity—and explored the potential of social entrepreneurship models for improving economic vitality in the city. The team focused on developing a strategy for increasing awareness and understanding of the social enterprise as a way for individual businesses to meet community needs, including identifying goals and priorities related to coursework and internship opportunities. However, the initiative, while useful for building a stronger university-city relationship, remained in the planning stages.

One of the most important lessons learned from the Leadership IU initiative was that advancing individual social entrepreneurship training would require broader community support and a larger network of social entrepreneurs. Individuals and organizations, without significant resources, were unwilling take the risks essential to advancing a new form of enterprise, or as mentioned earlier, the mindset of embeddedness limited opportunity. Without significant community recognition of the need for and value of social entrepreneurship there was limited incentive for the university and the community to commit scarce resources. The Leadership IU team determined that a broader base of support was needed and alternative models, including those of collective social entrepreneurship should be explored. The campus continued this work by broadening a campus-secondary education partnership in the area of urban farming, to explore the development of a collective social enterprise.

Food Insecurity: Growing K-12 Social Entrepreneurs

The initiative began with a school-based 4-H garden project. In 2013, the director of an after-school 4-H urban garden project approached the campus seeking guidance on ways to connect the 4-H garden project to science and math learning objectives in elementary and middle school classes. A pilot project was implemented, and teachers soon began the process of integrating garden activities into their academic lessons. Soon thereafter, teachers, administrators, parents and community members became increasing aware of the food and nutrition needs of students and the community. The project expanded quickly, and the 4-H program acquired poultry in the second year, despite the lack of housing for hens. Momentum for the expansion of the garden into an urban farm had taken hold.

In the midst of increased community and school interest in addressing food insecurity, and student learning through an urban farm initiative, the campus remained engaged in the process of partnership building including, at one point temporarily providing needed space for farm activities. This show of commitment by the campus opened the door to the next phase of the project: the creation of collective social entrepreneurship network that would support transformative change in the school and in the community.

The University: The Collective Impact Model

Defining the university's role in building the collective social entrepreneurship network required reflection and planning. Specifically, a formal evaluation of stakeholder readiness to move beyond collaboration to collective impact was undertaken. The first step required an assessment of the initiative's readiness for collective action. O'Neil and Griffiths (2011) suggest there are 5 types of assessments that can assist in determining readiness. The choice of an assessment method depends on many factors including the type of information available and resources that can be expended to advance the initiative. Often what is assessed is the initiative's readiness for the five elements of a successful collective impact initiative. These five elements are:

- Common agenda,
- Shared Measurement,
- Mutually reinforcing activities,
- Continuous communication, and
- Backbone support.

Assessing the readiness of the 5 common elements begins with an examination of the common agenda, commencing with the questions, "what exists among the partners?" and "what is desired?" In the present case, the emerging social partnership members included the charter school (teachers and administrators), 4-H program leaders and administration, university faculty and administration local business representatives, and interested community members including the school's founder. We observed signs of effective organizational pairing, a phenomenon consistent with successful partnership formation (Seitanidi, Koufopoulos, & Palmer, 2010) and agenda setting. Successful pairing originates in early interactions that are sustained over time. Collaborating organizations, as in the instance case, do not rush into the partnership in order to capitalize on partnership benefits while overlooking costs. The university, for instance, was engaged on a limited basis (e.g., occasional meetings, hosting poultry) for more than one year, prior to providing formal training on social entrepreneurship and engaging in program development.

The literature also suggests that effective pairing requires participants to engage in systematic planning and preparation (Jamali & Keshishian 2009) in the development of mutually reinforcing activities. In the present case, the partners had in fact invested time in the process of identifying organizations with the potential to develop a shared common agenda bringing different but essential sets of resources to the table (Seitanidi et al., 2010). This method of tacit partnership formation is an indicator that the initiative was ready for a collective impact approach to building social entrepreneurship networks. The activities undertaken, including a social entrepreneurship workshop for students and business community members, combined university-school-business resources in an effort to increase awareness and build interest in collective social enterprise, while fostering the development of a social enterprise network.

The researcher, using the five conditions of successful collective impact initiatives as a guide, undertook an assessment of the initiative's readiness for action. After reviewing information and consulting the partners it was determined that 3 of the 5 conditions were present: (a) the partners engaged in continuous conversations over a two-year period; (b) they developed a common agenda to address food insecurity and K-12 business learning; and (c) participated in mutually

beneficial activities over the course of their engagement. Two conditions however, were not yet satisfied: backbone support was limited, and shared measurement was not occurring. Significant challenges lie ahead, but the role of the university also became clear, and a decision made to support the initiative in the role of convener.

The University: Backbone Organization

The need for a backbone organization and for shared measurement could be met if the university transitioned from collaborator to convener. If the university were to embrace the role as convener, it needed to take responsibility for the six activities identified by Turner, Merchant, Kania and Martin (2013) as common to backbone organizations:

- Guide vision and strategy,
- Support aligned activities,
- Establish shared measurement practices,
- Build public will,
- Advance policy, and
- Mobilize funding.

To determine university's readiness for assuming the role, the researcher conducted a review of the university's convening role in prior community-university initiatives. The University's community engagement center, over time, had successfully served as a leader in 5 of the 6 activities, including guiding vision and strategy, establishing shared measurement practices, building public will, advancing policy and mobilizing funding. In many cases, our involvement consisted of a subset of these activities, e.g., in a recent community-building project the university facilitated visioning and strategy sessions while building public will. However, serving as a convener meant expanding our role and breaking new ground. The university in this role would assume the full set of activities. In addition, resources would be dedicated to developing the capacity to support partner-aligned activities.

The university realized this to be a significant challenge, particularly in the face of a long tradition of balkanized local government, competition among nonprofit organizations, and a staunchly market-based private sector orientation. This was also, however, an opportunity to build community capacity to overcome these barriers with the support and interest of the partners in the urban farm initiative, and align a collective social enterprise network, which would be essential for transformative change to take place in the region. Effectively supporting the aligning activities of the partners would not only help accomplish more specific objectives for the initiative. It would also foster a network of social entrepreneurs that, over time, would create new social and economic infrastructure.

The first opportunity for alignment came in the area of collective education and awareness. A workshop, created by the university's community-university engagement center, brought together small business leaders with charter school students studying social entrepreneurship. The workshop goal was to help build a collective network of experienced business professionals wanting to explore social enterprise concepts, with youth learning about social enterprise in and educational setting. Noting that the best social alliances involve intensive educational efforts and

require learning on the part of both partners, (Berger, Cunningham, & Drumwright, 2004) The university designed the workship to foster the reciprocal transfer of, on the one hand, practical small business development skills, and on the other, deep insight on and experiences with wicked problems facing youth. The motivation of both of these groups was to improve the overall quality of life in the community through innovative approaches, and effective alignment supported these intentions.

The workshop served to bring two groups together that might not otherwise recognized a shared interest, while building the collective capacity of the network. Approximately 30 people attended, the majority of whom were high school students. Together, teams of students worked with a small business owner to develop a new social enterprise concepts or, alternatively, provide feedback on existing ideas for addressing pressing social concerns with business methods. Feedback from the workshop was obtained. Participants welcomed the opportunity to interact with one another. Business leaders found inspiration in student ideas, and students valued the experience of local business leaders. These observations are supported by the results of a survey of participants.

As a result of the workshop's success, the local chamber of commerce financially supported a social entrepreneurship training workshop open to the business community, providing education to an even larger and more diverse set of potential business partners. The university's effective support took the form of organizational planning, space, and relationships, of school-business sector activities. This in turn helped spur the development of a social entrepreneur's network that could work to create a strategic plan, one that would set specific goals for expanding the urban farm while deepening student learning in high school business classes.

Strategic planning provided a second opportunity to align partner activities. The success of the previous workshops and classroom activities, as well as strong community interest, led to the request by community partners to develop a strategic plan. From the beginning of the strategic planning process, the university recognized that cross sector collaborations are complex, consisting of inherent contradictions (Kanter, 1999), and fraught with conflicts resulting from incompatible objectives, ideas and values (Selsky & Parker, 1997). However, a review of participating organization missions suggested that realizing shared values and a shared vision would be possible. The organization mission/purpose statements contained phrases such as, "develop a sense of reciprocal obligation," "develop the knowledge, skills, work attitudes and habits," "foster local and regional economic development," and "prepare young people to be leaders in their community…through hands-on experiences."

The process began with a visioning session—often a challenge in well-formed organizations. However, in this case, facilitation by the university not only brought the core group of partners together, but also revealed a need to expand the network. In an initial meeting of five partners, a vision statement was created and later shared with the leadership of each of the individual organizations. As the partners had been working together on separate but related small-scale initiatives, the visioning process essentially was a formalization of the shared interests expressed publically as a collective social enterprise. Each representative participant was then able to take back to their organization a vision for social change, which could be used to encourage choices

leading to transformative actions. Martin (2000) identifies this type of organizational transformation as one mode of social change.

Simultaneously, over the course of the next year, momentum for the urban farm grew and the high school business enterprise class formed a student-run business. Students leveraged existing business relationships and established connections with local businesses in need of fresh eggs; a fledgling collective social enterprise was formed. The strategic plan, facilitated by the university, identified key partnerships that would be required to sustain the social enterprise, as well as an approach to integrating learning objectives associated with team building and leadership into the business curriculum.

Thus, the support provided by the university, serving as a convening backbone organization, permitted the partners to navigate the complex obstacles of boundaries both between and within organizations. By convening a network of individuals and organizations interested in creating a strategic plan, the university enabled its partners to focus on bringing resources, knowledge, and expertise to the table. They identified unique solutions and explored whole-system innovations, such as student-based social enterprise embedded in a high school curriculum. The university's role as a convener was to champion the initiative, in a way that permitted partners to navigate both internal and external obstacles and boundaries (Dorado & Vaz, 2003).

In the present case, the university's support in the planning and community education and awareness obstacles contributed to the initiative's success in the initial critical stages of collective enterprise formation. Even with the support of the university, the process of network creation, both internally and externally continues to be challenged by the disparate views of stakeholders and competing goals and priorities. In the context of a wicked or complex social problem, the convener serves to convince others to address issues jointly, initiate challenge and build social capital (Dorado, 2005; Svendsen & Laberge, 2005). This role is vital to collective social entrepreneurship.

Lessons Learned

In the present case study, the seeds of transformative change initially lay in the hands of a small number of passionate local leaders seeking to address a wicked problem characterized by urban food insecurity and the need to improve K-12 educational experiences. The loose affiliation of participants, and absence of experience in social entrepreneurship and network building, limited the partner's ability to move forward. After careful review of available resources, as well as an assessment of the benefits and challenges of university participation, the university determined that it might best serve as a convener.

Conveners build the community's capacity to define issues, identify innovative solutions, and implement a coordinated approach to addressing community concerns. Universities possess the skills, knowledge and expertise to undertake initiatives (often without community participation), but a transformative approach requires a different frame of reference. As a convener, the campus assumed the role of capacity builder. It supported partners as they sought to identify and facilitate collective activities, create networks, engage in transformative change, and ultimately seek social progress. This role employed the existing skills and resources of the university, e.g.,

facilitation, critical thinking, while also providing opportunities for research and student learning.

This initiative is a first step in improving our understanding the university's role as convener for collective social enterprise. From the experience, we also learned that by borrowing key concepts from collective social entrepreneurship and collective impact models an environment characterized by conditions that support transformative change can be created. These conditions include:

- Clearly identified community-identified needs,
- Socio-political infrastructure,
- Community education efforts focused on the topic of collective impact,
- Community willingness to adopt a collective impact model, and
- Support from university institutional leadership.

To build a network supportive of transformative change, it was helpful to assess the challenges posed to managers of "wicked" problems. These challenges have been categorized as: (a) the need for a broad knowledge bases from both inside and outside of the network; (b) the need to develop useable new knowledge to solve problems; (c) the need to create shared knowledge that facilitates cooperation and the continuous transfer, receipt and integration of knowledge that supports the development of long-term problem-solving capacity (Weber & Khademian 2008). It is this last challenge—the creation of shared knowledge—that points to the need for the development of long-term problem-solving capacity that focused the work in this case study.

It also provided the university with the opportunity to identify a new role in community engagement initiatives. Through a process of critical reflection, universities can compare their capacity to the long-term problem-solving capacity identified by Weber & Kahdemian (2008) as necessary for transformative change. The case study provides one example of how a campus engaged in a process of critical reflection, and arrived at a decision to serve as a convener, in the context of "wicked" problems. It is also important to note that the campus recognizes the need to further explore the potential for serving in this role in the future and to evaluate our effectiveness.

In the instant case, the campus assumed the role of convener, facilitating the collective's functioning as opposed to serving in the role of partner. Conveners build capacity. Partners work is focused directly on addressing the wicked problem (e.g., food insecurity or K-12 educational improvements). By contrast, the role of convener is focused on building the capacity of the partners to address the wicked problems through collective action. Acting as facilitator for the collectives' functioning positioned the university as a convener and collective capacity builder. What was learned in the present case is that regional universities can assume either role. In the past, the campus efforts were dedicated to partnering with the communities and sharing expertise, financial and other resources. In the present context, the university engaged in activities that supported network building, while the community partners defined problems and identified solutions collaboratively.

What is known is that the absence of effective backbone support from conveners is the number one reason why collective impact initiatives fail (Turner et al., 2013). Community-based research and teaching clearly can place (and has placed) the university in the role of partner. Higher education has successfully participated in mutually beneficial and reciprocal relationships that have transformed communities. This article suggests that by using the collective impact model to guide activities in the role of convener, universities can be employed in an alternate way—not as a partner, but as a collective capacity builder. Universities serving in the role can realize benefits and face challenges.

As a convener, universities can find rich opportunities for research, teaching, and service. Conveners are in a unique position of providing not only the support needed, but determining the type of support that will best advance the participants' collective goals. Researchers can contribute to a plethora of emerging topics, because the work in collective impact and collective social enterprise is relatively recent, and many issues remain to be explored. For example, there is room to contribute to conversations on whether or not social entrepreneurship is a discipline, on the role of social entrepreneurship networks in promoting long-term change, and on the value of applying a collective impact framework in the social entrepreneurship context. Students, guided by faculty can examine and participate in the role of convener acquiring skills in listening, facilitation, needs assessment, and project management and implementation. Ultimately, these experiences can enrich and inform the community-university relationship for the benefit of both partners.

The case study explores a regional university's approach to assessing the potential for and usefulness of this model for advancing social entrepreneurship in the context of "wicked problems." We assert that this framework is not only useful to understanding the challenges of network management, but also to the assessing a regional institution's role as a convener/network manager. Significant work, however, remains. For example, additional studies could be conducted exploring the university's success in the convener role, including assessment of the conditions for institutional readiness, and how its effectiveness would inform decision making and implementation.

Social entrepreneurship, or innovation focused on solving a social problem, or "social capitalism" can offer opportunities for revitalizing communities. Currently, however, the capacity for social entrepreneurship and capacity-building efforts are limited in Northwest Indiana. Increasing awareness and knowledge of social entrepreneurship will both be important to economic revitalization, and to long-term economic vitality.

Next Steps

The collective impact model provides a framework for universities as they assume the role of backbone organizations in collective social enterprise (Axelrod & Dubb, 2010). In this case, the work is firmly entrenched in the early stages of applying the collective impact model, guiding vision and strategy, and simultaneously supporting aligned activities towards addressing the wicked problem of food deserts and economic vitality. In the next phase of the work, the campus will identify best practices for supporting aligned activities emerging from the collective social enterprise network as well as assessing the existing social enterprise network capacity. To date,

the activities identified by the network in support of collective social enterprise include developing a full-scale urban farm plan, as well as spinoff businesses e.g., a student-run restaurant. One longer-run goal is to develop, in collaboration with the university, a high school/university curriculum that supports learning in support of sustainability principles. A pilot curriculum project was conducted in the spring of 2017.

As a convener, the campus will continue to identify and implement methods of building network capacity. One proposed activity is to have the network develop shared measurement practices for outcomes and indicators. The university will guide the network through this process while simultaneously identifying funding opportunities. This interconnected process assists partners in understanding the value of shared measurement, not only for the purposes of improving process and outcomes, but also for obtaining the financial resources so needed in addressing "wicked problems."

Conclusion

Transformative change can and should be supported by the community-engaged universities located in environments beset by the "wicked" problems of both urban decay and economic stagnancy, particularly when these environments contain limited social and human capital. The literature from the fields of social enterprise, collective social enterprise and collective impact informs development of innovative approaches to transformative change—specifically the development of networks.

As is evidenced in the literature (Hausmann, 2015; Heinze, Banaszak-Holl & Babiak, 2016; Phillips, Lee, Ghobadian, O'Regan & James, 2015), social entrepreneurship networks can provide tools to communities seeking to address economic and social issues. The structures inherent in such networks support interactions that provide the social mechanisms needed to lower the probability of failing and enable the knowledgeable actors to change structures, (Hausmann, 2015) thus facilitating transformational change. These networks ultimately simulate collective impact and sustainable social innovation (Hausmann, 2015).

The value of conveners to these networks is unmistakable. Collective impact participants believe that without these organizations, the collective would revert back to a small group of stakeholders making decisions for the community (Hanleybrown, Kania, & Kramer, 2012). Particularly in the early stages of collective impact initiatives, backbone organizations play an important role in guiding vision and strategy, while supporting aligned activities (Hanleybrown et al., 2012). Collective social enterprise initiatives, as relatively recent developments in social change practice, may lack the resources and capacity to collectively develop vision, strategy, and support the activities chosen to effect social change. Collective impact offers the university a role in the process, consistent with a university's expertise and knowledge.

This paper suggests that a systematic method of determining the readiness of a university to serve as a convener of collective social enterprise networks can lead to valuable contributions to addressing "wicked" problems. By supporting the alignment of collective activities, as determined in a cross sector partnership, and subsequently changing its role through the collective impact process, the university can assist in developing the social capital that is often

missing when undertaking transformative change. This initiative, in the early stages of the collective impact process, will result in a collection of lessons that can be shared to better inform and build the university's capacity to serve as a backbone organization for social capital capacity building.

References

Axelroth, R., Dubb, S. (2010). *The Road Half Traveled: University Engagement at a Crossroads*. Retrieved from http://community-wealth.org/sites/clone.community-wealth.org/files/downloads/report-axelroth-dubb.pdf

Baum, H. S. (2000). Fantasies and Realities in University-Community Partnerships. *Journal of Planning Education and Research , 20*, 234-246. https://doi.org/10.1177/0739456X0002000208

Berger, I. E., Cunningham, P. H., & Drumwright, M. E. (2004). Social alliances: Company/nonprofit collaboration. *California management review*, *47*(1), 58-90. https://doi.org/10.2307/41166287

Bess, J. L., & Dee, J. R. (2008). *Understanding college and university organization: Dynamics of the system* (Vol. 2). Stylus Publishing, LLC.

Borgatti, S. P., & Cross, R. (2003). A relational view of information seeking and learning in social networks. *Management science*, *49*(4), 432-445. https://doi.org/10.1287/mnsc.49.4.432.14428

Conklin, J. (2009, Winter). Building Shared Understanding of Wicked Problems. *Rotman Magazine* (Winter*)*, pp. 17-20.

Dorado, S. (2005). Institutional entrepreneurship, partaking, and convening. *Organization studies*, *26*(3), 385-414. https://doi.org/10.1177/0170840605050873

Dorado, S., & Vaz, P. (2003). Conveners as champions of collaboration in the public sector: A case from South Africa. *Public Administration and Development*, *23*(2), 141-150. https://doi.org/10.1002/pad.270

Eckel, P. D., & Kezar, A. J. (2003). *Taking the reins: Institutional transformation in higher education*. Greenwood Publishing Group.

Federal Writers Project, the Calumet Region Historical Guide. (1939). Complied by the Workers of the Writers Program of the W.P.A.

Hanleybrown, F., Kania, J., & Kramer, M. (2012). Channeling change: Making collective impact work. *Stanford Social Innovation Review*, *20*(1). Retrieved from https://ssir.org/articles/entry/channeling_change_making_collective_impact_work

Hausmann, R. C. (2015). *Organizing Ecosystems for Social Innovation: The Relationality of Contexts and Mechanisms in a Social Entrepreneurship Network* (Doctoral dissertation, The George Washington University).

Heinze, K., Banaszak-Holl, J., & Babiak, K. (2016). Social Entrepreneurship in Communities. *Nonprofit Management and Leadership*, *26*(3), 313-330. https://doi.org/10.1002/nml.21198

Holley, K. A. (2009). Interdisciplinary strategies as transformative change in higher education. *Innovative Higher Education, 34*(5), 331-344. https://doi.org/10.1007/s10755-009-9121-4

Indiana Labor Force Estimates (2015 August). Retrieved from http://www.in.gov/activecalendar/EventList.aspx?fromdate=9/1/2015&todate=9/30/2015&display=Day&type=public&eventidn=231631&view=EventDetails&information_id=220574

IU Northwest. (2017). *Mission - Indiana University Northwest* . Retrieved August 29, 2017, Retrieved from http:///www.iun.edu/mission

Jamali, D., & Keshishian, T. (2009). Uneasy alliances: Lessons learned from partnerships between businesses and NGOs in the context of CSR. *Journal of business Ethics, 84(2),* 277-295. https://doi.org/10.1007/s10755-009-9121-4

Kania, J., & Kramer, M. (2011). Collective impact.

Kanter, R. M. (1999). From spare change to real change: The social sector as beta site for business innovation. *Harvard business review*, *77*(3), 122-133. Retrieved from https://hbr.org/1999/05/from-spare-change-to-real-change-the-social-sector-as-beta-site-for-business-innovation

Mair, J., & Marti, I. (2006). Social entrepreneurship research: A source of explanation, prediction, and delight. *Journal of world business, 41(1),* 36-44. https://doi.org/10.1016/j.jwb.2005.09.002

Martin, R. (2000). *Breaking the code of change,* 453.

Mezirow, J. (1997). Transformation theory out of context. *Adult Education Quarterly*, *48*(1), 60-62. https://doi.org/10.1177/074171369704800105

Moore, J. (2005). Is higher education ready for transformative learning? A question explored in the study of sustainability. *Journal of transformative education, 3*(1), 76-91. https://doi.org/10.1177/1541344604270862

Montgomery, A. W., Dacin, P. A., & Dacin, M. T. (2012). Collective social entrepreneurship: Collaboratively shaping social good. *Journal of Business Ethics*, *111*(3), 375-388. https://doi.org/10.1007/s10551-012-1501-5

O'Neil, C. & Griffiths, S. (2011, October) Collective Impact Readiness Assessments. Retrieved from http://vibrantcanada.ca/files/collective_impact_readiness_assesssments.pdf

Phillips, W., Lee, H., Ghobadian, A., O'Regan, N., & James, P. (2015). Social Innovation and Social Entrepreneurship: A Systematic Review. *Group and Organization Management, 40*(3), 428-461. https://doi.org/10.1177/1059601114560063

Prins, E. (2005). Framing a Conflict in a Community-University Partnership. *Journal of Planning Education and Research, 25*(1), 57-74. https://doi.org/10.1177/0739456X04270370

Raab, J., & Milward, H. B. (2003). Dark networks as problems. *Journal of public administration research and theory, 13*(4), 413-439. https://doi.org/10.1093/jopart/mug029

Rittel, H. W., & Webber, M. M. (1973). Dilemmas in a general theory of planning. *Policy sciences, 4*(2), 155-169. https://doi.org/10.1007/BF01405730

Roberts, N. C. (1992). Roberts: public entrepreneurship and innovation. *Review of Policy Research, 11*(1), 55-74. https://doi.org/10.1111/j.1541-1338.1992.tb00332.x

Sahni, N., Lanzerotti, L., Bliss, A., & Pike, D. (2017, August 1). Is Your Nonprofit Built for Sustained Innovation? *Stanford Social Innovation Review*. Retrieved from https://ssir.org/articles/entry/is_your_nonprofit_built_for_sustained_innovation

Schot, J., & Steinmueller, W. E. (2016). *Framing Innovation Policy for Transformative Change: Innovation Policy 3.0.* Sussex, UK: Science Policy Research Unit - University of Sussex.

Seelos, C., & Mair, J. (2005). Social entrepreneurship: Creating new business models to serve the poor. *Business horizons, 48*(3), 241-246. https://doi.org/10.1016/j.bushor.2004.11.006

Seitanidi, M. M., Koufopoulos, D. N., & Palmer, P. (2010). Partnership formation for change: Indicators for transformative potential in cross sector social partnerships. *Journal of Business Ethics, 94*, 139-161. doi:10.1007/s10551-001-0784-2

Selsky, J. W., & Parker, B. (2005). Cross-sector partnerships to address social issues: Challenges to theory and practice. *Journal of management, 31*(6), 849-873. https://doi.org/10.1177/0149206305279601

Svendsen, A. C., & Laberge, M. (2005). Convening Stakeholder Networks. *Journal of Corporate Citizenship, (19)*. doi:10.9974/GLEAF.4700.2005.au.00013

Turner, S., Merchant, K., Kania, J., & Martin, E. (2012). Understanding the value of backbone organizations in collective impact: Part 2. *Stanford Social Innovation Review*. Retrieved from https://ssir.org/articles/entry/understanding_the_value_of_backbone_organizations_in_collective_impact_2

U.S. Census. (2015). *Quickfacts*. Retrieved from https://www.census.gov/quickfacts

Van Bueren, E. M., Klijn, E. H., & Koppenjan, J. F. (2003). Dealing with wicked problems in networks: Analyzing an environmental debate from a network perspective. *Journal of public administration research and theory, 13*(2), 193-212. https://doi.org/10.1093/jopart/mug017

Venkataraman, S. (1997). The distinctive domain of entrepreneurship research. *Advances in entrepreneurship, firm emergence and growth, 3*(1), 119-138.

Weber, E. P., & Khademian, A. M. (2008). Wicked problems, knowledge challenges, and collaborative capacity builders in network settings. *Public administration review, 68*(2), 334-349. doi: 10.111/j.1540-6210.2007.00866.x

Yunus, M. (2007). *Banker to the Poor*. Penguin Books India.

Yunus, M. (2017, August 28). Grameen Bank. Retrieved from http://www.grameen-info.org/about-us

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Collective Impact Approach: A "Tool" for Managing Complex Problems and Business Clusters Sustainability

Alessandra De Chiara

Abstract

Environmental pollution occurring in industrial districts represents a serious issue not only for local communities but also for those industrial productions that draw from the territory the source of their competitiveness. Due to its ability to take into account the needs of different stakeholders, the collective impact approach has the potential to address these problems, whereas single actors may not have the resources. The implications of the paper are addressed to institutions for industrial policies which individuate potential courses of action for developing and strengthening clustering-based approaches, as well as implementing viable policies in support of the sustainable competitive model.

Keywords: Collective impact; sustainability; industrial districts; social welfare; multi-stakeholders

Sustainability and the Collective Impact Approach: The Importance of Relationships

Facing environmental problems and implementing sustainability plans requires a relational approach for obtaining concrete results. Relational approaches are quite clear in their different theoretical guidelines related to sustainability: at the firm level (i.e., corporate social responsibility [CSR]), the relational approach explains its implementation process and refers to obtainable benefits at organizational, customer, and society-based level (trust, reputation, motivation, commitment, transparency, etc.) (Orlitzky et al., 2003; Porter and Kramer, 2006; Perrini et al., 2006); at the production-line level, it refers to the management of relationships within the supply chain (Carter & Jennings, 2002; Reuter et al., 2010); at the network and system level it refers to the positive impact on the entire community (Hemmati, 2002; Zadek, 2006; Caroli & Tantalo, 2011).

Collaboration with institutions, communities, and businesses is crucial, especially at a time of limited economic resources, private and public alike. Therefore, the creation of networks and the development of new synergies are the key premises to improve efficacy and efficiency of operations. The collaboration with different stakeholders contributes to accessing innovative potential that exists within the cooperation (Tencati & Zsolnai, 2009), and increases the value and quality of processes and outputs (Dallocchio et al., 2010). Collaboration also allows the participation of small and medium-sized businesses (SMEs) (Speence & Schmidpeter, 2003). For these actors, relationships and stakeholder engagement are vital connectors and amongst the best viable approaches for sustainability development. SMEs should engage in responsible conduct due to their strong ties to the local system (Harvey et al., 1991; Perrini & Tencati, 2008), while the ability to develop harmonic and trustful relationships with stakeholders remains the basis of their long-term performance (Spence et al., 2003).

Above all, the engagement of various stakeholders assures an increased level of sustainability within the entire supply chain or local system, with a positive impact on the whole community, while preventing the unethical misconduct of others from undermining the efforts. Stakeholder engagement plays a crucial role in two respects. In the decision-making process, it allows for the inclusion of different variables and needs and the choice of sustainable initiatives and polices to satisfy the expectations of all parties involved. Furthermore, in the processes of implementing decisions and strategies, engagement provides a powerful means to ensure a positive spin-off for sustainable development. This relational approach allows for the creation of common visions and missions, reduced environmental impact, and an application of rules within each organization, providing higher standards for working conditions (Fichter & Sydow, 2002).

While it is true that the multi-stakeholder approach has become the indispensable pillar of sustainability strategies within supply chains, networks, and local systems, very often collaborative interactions are not sufficient. For example, in the presence of complex problems, engagement often fails (Kania and Kramer, 2011). In the *collective impact approach*, it is argued that engagement should evolve from an informal to a more collaborative-based approach with a well-defined organizational structure. Managing change in terms of complex problems, such as pollution or social unease, has prompted this approach to define projects based on a regulated engagement, so as to effectively contribute to the well-being of the community (Hanleybrown et al., 2012; Kania & Kramer, 2011). This approach underlines that "large-scale social change requires a broad cross-sector coordination" and a commitment by "a group of important actors from different sectors to a common agenda to solve a specific social problem" (Kania & Kramer, 2011, p. 36). This perspective stresses that the different types of traditional collaborations, such as the *funder collaborative*, *public-private partnerships*, *multi-stakeholder initiatives*, and *social sector networks organizations*, have failed in the attempt to solve complex social problems. The *collective impact approach* refers to a type of collaboration that solicits a separate organization (or organizations) with specific sets of staff skills, shared tools, and a structured process to create a common agenda.

This perspective identifies the need to create a backbone structure with a dedicated staff to cope with complex issues or adaptive problems, i.e., the education reform, rehabilitation of polluted sites, improvement and protection of health of the community, etc., and other factors preventing single enterprises from enabling change.

Establishing a centralized structure should prompt the involved parties to implement a common agenda through a structured process that identifies the sub-objectives and strategies, shared tools, communications means, and measuring results systems (Kania & Kramer, 2011). The model suggested by the *collective impact approach* starts with the identification of some pre-conditions to establish the required contributions and work phases, which are divided into three major stages (Figure 1). The first stage focuses on defining the initial preparation related to the group composition, history of the territory or community, and database collection. The second stage refers to the definition of a backbone structure, the creation of a common agenda with specific objectives and strategies, promotion of the community engagement, and implementation of measuring procedures. The third stage deals with the pursuit of actions for the implementation of objectives and strategies, community engagement monitoring, and effective feedback processes.

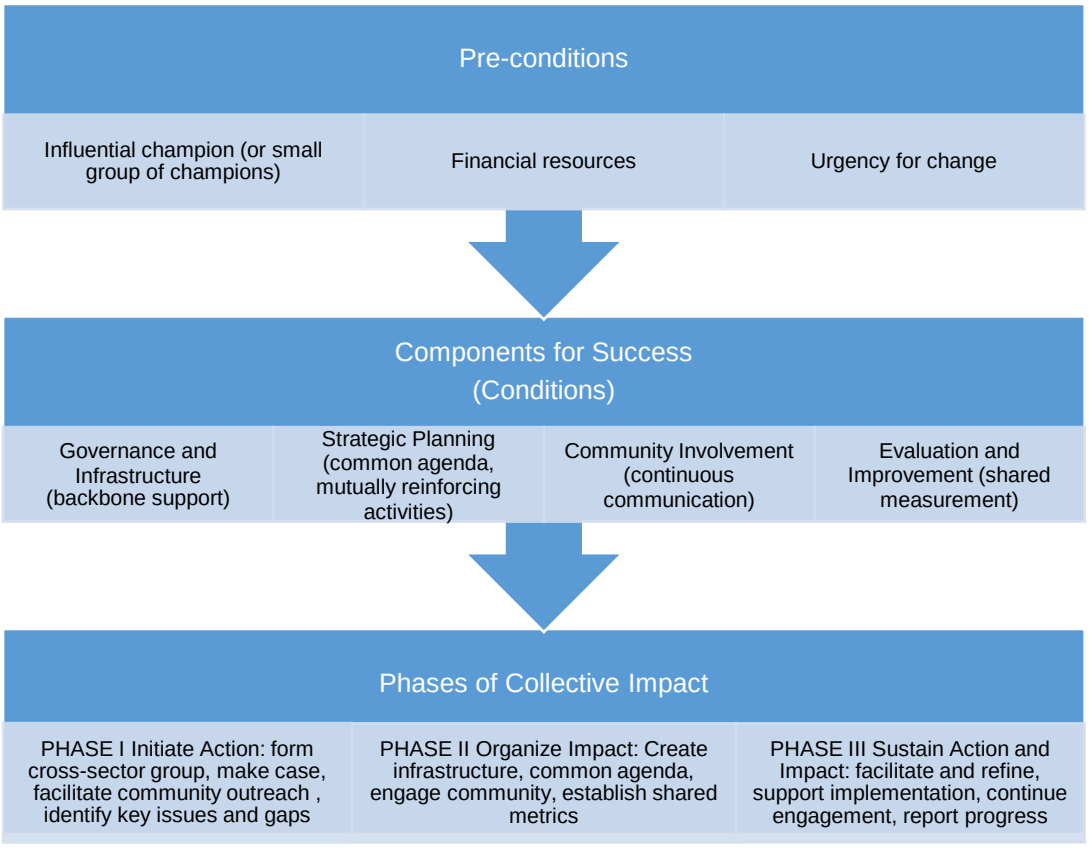

Figure 1. Pre-conditions, components, and phases for the implementation of the collective impact approach (adapted from Hanleybrown et al. 2012)

Members' behavior is fundamental in the *collective impact approach*. Kania and Kramer (2011, p. 39) state that the success of this approach "is not merely a matter of encouraging more collaboration or public-private partnerships. It requires a systemic approach to social impact that focuses on the relationships between organizations and the progress toward shared objectives." They add that the "expectation that collaboration can occur without a supporting infrastructure is one of the most frequent reasons why it fails" (Kania & Kramer, p. 41).

Collective Impact Approach for Sustainability in Business Clusters

Sustainability is also an opportunity to build collaborative interactions and partnerships between public and private actors, which can enhance competitiveness of a local system. Establishing a special bond among economic, institutional, and social systems appears an essential pre-condition not only to manage an area with a complex problem of pollution, but also for enhancing its territorial specialization and distinctiveness.

The identification of sustainable paths, capable of re-qualifying local processes and products and of boosting local economy and improving its competitive advantage, can be investigated by way of the *collective impact approach*. This perspective is applicable to those areas where economic-productive tissue has the characteristics of a *milieu*, that is to say, a high concentration of

production systems which has strong ties to the socio-cultural features of a territory (Beccatini & Sforzi, 2002). The set of natural conditions characterizes a given territory, and all permanent socio-cultural aspects rooted in a specific geographical area are due to the historical evolution of their inter-subjective connections and ties to local environmental ecosystems (Beccatini & Sforzi, 2002). Actors, resources, activities, and relationships are thus the territory's core elements, which has led the territorial dimension to progressively emerge as a significant key of interpretation to how production is organized and implemented in different contexts.

The influence of the territory on business competitiveness has been widely investigated in the theoretical debate i.e., the classical economy, the theory of business clusters, the international marketing and territorial marketing researches. These theories have examined all salient aspects from different angles, and agreed on the undeniable value and power of the territory over business competitiveness.

In the idea of business cluster, there is an interconnection between economic production and socio-cultural conditions, which significantly contributes to business profitability. In current times, the renewed interest in clusters appears to have its grounds in its role as a development vector for local economies. In debate, the relationships between "businesses, external economies, and economic development" and technologies, spillovers, agglomerations, and regional economic development have been extensively investigated (Feser & Bergman, 2000).

Business clusters are integral parts of the territorial heritage since they mirror the area in which they are embedded. At the same time, places reflect the specific characteristics of a productive business network, thus, the comparative advantage arising from the specific resources of the area in line with sustainable strategic approaches would not only foster district upgrading and businesses/local system competitiveness, but also strengthen the district interconnected relationships with its cultural background (Beccatini, 2000).

Where the territory is strongly influenced by the presence of an industrial district, and in turn the district is conditioned by the socio-cultural features of a territory, the *collective impact approach* could intervene in:

- defining a strategic plan with a common agenda for the implementation of sustainability projects created for the social and economic development of the area;
- determining the participation of economic, social, and political actors with the establishment of a backbone structure;
- promoting communication and measuring procedures.

The single parties have an important role but they need to join together to pursue a common project; for this aim the *collective impact* can be a useful approach.

Companies have the capacity to exploit the relational, social, and cultural fabric of their places of production. They can use their relationships and social capital to create a unique network abounding with cultural traditions and expertise in each different territory. However, within districts, the common geographic relationships must evolve toward a relation-based and shared management approach. Common social roots, competences, and knowledge sharing may

reinforce social interactions, but this transition does not occur automatically when considering the overall competitive network of business clusters relationships. Clustering activities, when relying on a high level of productive business interdependence and relationships based on trust, turn out to be an asset for the implementation of sustainability plans aimed at improving district performances, local system well-being, and enterprise competitiveness. It is equally true, however, that significant governance concerns and considerable problems arise in the adoption of suitable tools to foster engagement.

Similarly, institutions have an equally important role of balancing the differences of all the actors so that the network constitutes an effective resource for local development: some authors note that "local solutions of civic-engagement and self-regulation are playing an increasing role in guaranteeing successful interaction in everyday-life" (Spence & Schmidpeter, 2003, p. 96). The institutions aim to develop policies and services for companies and to value the networks and territory's aptitudes and inclinations (Iannone, 2007; Barile et al., 2013), as well as to create conditions so even small-sized companies can increase their contribution to the common good (Bennett, 1999). Public institutions need to play an active role in the civil society and trigger a learning process that will facilitate the adoption of sustainable behavioral patterns (Rivoli & Waddock, 2011). Local authorities should find the right balance between legislation and appropriate actions to pursue. This enables districts and production centers to adopt sustainable competitive models, not only for their own benefit, but also for the well-being of the community as a whole. In this respect, the viable sustainable approach of local business clusters is crucial as it sets the scene for regular output and activity upgrading, which, in turn, will boost production competitiveness. Institutional governance standards of conduct should enhance local expertise as well as the distinctive features of every single process to create those unique competitive models capable of contributing to the social and economic development of the entire community.

Finally, research has emphasized the important role of the community in shaping business behaviors and calls upon local authorities to re-establish or enforce new regulations (Calvano, 2008). Therefore, the work of institutions must function alongside the work of the companies that are connecting with other economic actors and institutions to benefit from their social capital. For sustainable development of an area, it is necessary to consolidate relationships between companies and local systems, connecting the company and the local environment (Iannone, 2007; Pilotti et al., 2013). The *collective impact approach* can enhance engagement on a local level, pursuing economic competitiveness and social welfare. Both of these benefit from a relationship of mutual conditioning. It is not only necessary to create cross-sector public and private partnerships, but also to initiate a systematic approach focused on the relationships between different stakeholders and a progression toward shared goals.

Some Experiences: The Failure of Traditional Networks

This paper reports the experiences of two cases that describe the failure of traditional networks in the presence of a complex problem of pollution in areas where significant industrial districts are located.

The first case refers to the environmental crisis of an area in the south of Italy, called the "The Land of Fires," which has created serious difficulties for the structural stability of many agro-

food businesses, and indeed, the entire community. To face this problem, businesses have promoted a network involving other economic actors of the area, as well as local public institutions. Despite many efforts over the years, this network has failed.

The second case refers to the experience of the tannery district of Solofra in the south of Italy which has planned a significant environmentally sustainable project, described as an eco-label scheme for the district of Solofra. Though there are many certified eco-labeled businesses in the district, the project is failing due to both a lack of funding and, above all, the lack of a well-defined and structured governance for planning and implementing the district's sustainable development.

These two cases highlight critical elements that led to the failure of the traditional networks, and collect the reflections of the actors involved and managerial problems of the engagement. It is believed these difficulties could diminish or even disappear if management of the cooperation is organized according to the approach of *collective impact*, especially after the setting of a backbone support and a common agenda.

The Environmental Crisis of the "The Land of Fires"

The case of the area named Agro Caleno, located in Campania (Italy) and belonging to the territory recently named "The Land of Fires" due to the fires that are lit around the area's mounds of waste, suggests some considerations. A succession of environmental and health crises has afflicted this area, creating serious difficulties for the structural stability of many businesses that produce protected designation of origin (PDO) food items, as well as the entire community.

After the waste emergency, the dioxin crisis of 2008-2009, and the new environmental crisis, it was immediately clear to businesses in the territory that it would be extremely difficult, if not impossible, for a single actor to manage these difficulties. Rather, solutions must be found within the supply chain (i.e., the network), particularly by involving local institutions. The research developed demonstrates the strong strategic importance of the decision to create a network addressing the consequences of environmental problems faced by businesses in Agro Caleno (De Chiara, 2015). The network, devised by a group of buffalo and agricultural businesses, has promoted the creation of a plan of conservation and development of the regional landscape of the Agro Caleno area, which has gained the approval of many municipalities in the area. In 2011, the plan was turned into the document *Memorandum of Understanding, (Protocollo d'intesa per la valorizzazione dell'Agro Caleno-basso Volturno-sud Garigliano e del Water-front della provincia di Caserta),* primarily aimed at the economic growth of the area, together with social progress and enhancement of cultural heritage.

However, while it was found that there is a considerable level of cooperation, the network has not produced the estimated results, and the *Memorandum* was not followed by a concrete process of action implementation to achieve agreed-upon objectives.

The research collected different considerations of the stakeholders involved. Local companies believe it is important to strengthen the action of the network to which they belong through meetings with district municipalities and to reaffirm the desire and need to give life to a

redevelopment project that is supported by technical and local administrations. Local municipalities consider provincial and regional policies to be sophisticated procedures; local institutions were found to believe that the shortage of funds means that neither the transparency, nor the feasibility of the territorial reorganization is guaranteed. In addition, the research found a lack of effective coordination between the different initiatives and interviewees declared that national and regional plans constitute only positive intentions and assumptions of measures.

Thoughts of the local community are contained in an interview with Roberto Saviano, a famous Italian writer who has often addressed the issue of environmental pollution in Campania, published by *La Repubblica* (20 March 2014). He has described the work of the Inter-Ministerial Commission (which was demonstrated in the report entitled *Results of Technical Research for the Mapping of the Territories Allocated to the Agriculture of the Campania Region*) as unsatisfactory, using the word "minimizing" to describe the operations undertaken by the government, stating that "it is clear that the step taken in these first few months of work is only a small initial one to understand what has happened and continues to happen" (Saviano, 2014).

It seems clear that different actions have been carried out by the various parties acting independently. Lack of coordination and joint planning has resulted in an unsolved problem. Research results corroborate the hypothesis that in the face of complex problems (e.g., environmental pollution) and consequent crises faced by businesses that use the land as a productive factor, it is not sufficient to develop sustainable initiatives and collaborate with economic actors, industrial associations, and the local authorities. Resolving these crises requires more than cross-sector public and private partnerships; rather, it is necessary to initiate a systematic approach focused on the relationships between different stakeholders and progression towards shared goals. In this context, the *collective impact approach* could be applied to determinate the participation of economic, social, or political actors with the establishment of a backbone structure. Furthermore, by applying this approach, it should be possible to create a dedicated structure that could guarantee the participation of different actors. Moreover, it would enable the activation of a shared decision-making process, marked by precise phases, which could generate coordinated initiatives in the interest of all the parties.

As noted in the survey, companies have combined to form the Confagricoltura Campania, an entity representing all professional agricultural organizations in Campania. This entity could be the link between economic operators and institutions and, according to *collective impact approach*, could be an influential champion, able to resume a fruitful dialogue with local municipalities and define a more structured project to raise awareness on issues related to land and the environment involving local governments. Furthermore, it is believed that a clear definition of the different steps for this approach's implementation could assist its development by local institutions.

The Tannery District of Solofra

The tannery district of Solofra has represented one of the most interesting industries in southern Italy for a long time. The origins of tanning activities in Campania date back to the 16th century, when the production system had its own structure and possessed 51 tanneries overall. Today, in

this area, there are about 600 operating businesses, 500 of which are mostly micro or small-sized enterprises (0-50 employees), while less than 100 are medium enterprises (51-250 employees).

Legal recognition of the Solofra tannery district was granted by the regional resolution No.70 on June 2, 1996 but research has shown that a path towards the creation and recognition of the district has not been conclusive (De Chiara, 2016). In actuality, the full operation of the district and a strategic implementation of its committees has never officially been approved; thus, all initiatives conducted by the district and for its development are transferred to public institutions or rely on the commitment of single entrepreneurs who strive to pursue viable actions.

In the area of sustainable development, research, consistent with thematic areas as indicated by ISO 26000 guidelines, highlights the major fields of concern on environmental issues and the community's engagement and development. This particular attention to the environment may be the result of the district's inner nature, namely its core businesses, whose impact has been reinforced by the presence of small businesses in the chemical industry and growing public concern about sustainability issues.

The district's most significant environmentally sustainable project is titled "An eco-label scheme for the district of Solofra." The project earned the Homogeneous Production Area certification, issued by EMAS, making its objectives prominent in southern Italy (The Tannery district website).
The project's major objectives are to:

- create the best environmental conditions for the leather district
- achieve the Homogeneous Production Area (HPA) as a first step towards the EMAS certification for the entire district of Solofra
- re-launch the image of the district, allowing the operating businesses to improve international competitiveness through marketing actions focused on reducing the impact of their business practices on the environment.

The project, funded to point 4.3 Campania's regional operational program 2000-2006, sets as its primary objectives the creation and promotion of an eco-label for the tannery district of Solofra based on a method consistent with Regulation (EC) no.761/2001 governing the voluntary uptake of single organizations to the Community's Eco-Management and Audit Scheme (EMAS).

The project engaged several stakeholders in Campania who collaborated to create a Committee composed of the Chamber of Commerce of Avellino, the Campania Region, the Province of Avellino, ARPAC, and other trade associations, such as ASI Consortium of Avellino, and select labor organizations of Avellino including CGL, CISL, and UIL, and the handmade organization of Avellino, CNA, as well as technical and scientific bodies (universities, CNR, the Institute for Experimental Leathers), the River Sarno body, and the district municipalities.

The leading committee has been entrusted with multiple tasks, including the definition and implementation of the district environmental policy, the orientation of the environmental management system, research into funding sources, the selection of partners for carrying out the

program in all its stages, the drafting of rules for the voluntary labeling method, and the designing of the eco-label logo for the district of Solofra.

At present, 25 companies have the eco-label, but the project stopped due to lack of funds, and research justifies businesses' reluctance in exploiting the eco-label model due to poor market gains. Ideally, the adoption of the eco-label should have made businesses eligible for tax incentives or additional scores for tenders, but this has never been the case, not even in the notice of internal competitions issued by the Chamber of Commerce, thus explaining the lack of business interest in eco-label programs.

The absence of a unified and legitimate representation of a district governance has clearly influenced the possibility for businesses to create long-term policies and project planning development. Despite this absence, the environmental project has triggered a virtuous circle on a territorial level that managed to bring the local community closely in-line with district practices. In particular, the research singled out a few initiatives implemented by the district to benefit the community in which it operates. First, the eco-labeling initiatives may be interpreted as territorial marketing actions. A dedicated website for the district allows enhanced eco-label visibility to attract a broader number of businesses operating in the territory that can keep up to date with the project developments, namely new eco-labeled certified businesses, as well as performance results, news, conferences, and events. Furthermore, an interactive CD-ROM explaining eligibility for eco label certification and an informative leaflet indicating eco label advantages has been produced and is available. Both the CD-ROM and leaflets have been made available during the events organized by the Chamber of Commerce and/or Trade Associations.

Sustainability initiative management within the tannery industrial district of Solofra cannot rely on a decision-maker institution, as the district lacks a well-defined governance. The survey clearly shows that the district entrusts occasional committees with the task of developing and implementing sporadic projects, but the presence of a large number of firms in the district and the relevance of its production activities on the local community requires the definition of a small group of stakeholders who can decide on development strategies for the district and local systems. This group must be representative of various economic, political, and social sectors, but also, within the supply chain, of the different economic and structural characteristics of businesses, compared to the activities of the chain over which they are presiding.

Research suggests that the *collective impact approach* could be useful in defining a backbone structure and all subsequent aspects concerning the engagement of relevant members. This structure is essential to pursuing a sustainable development of district and of the local community. The business cluster examined is a typical Made in Italy district; it clearly enjoys a competitive advantage on an international level due to its strong ties with the economic and cultural heritage of the territory. However, this recognized advantage should be further strengthened by drawing on the adoption of collaborative approaches and sustainable competitive models, which will enable both the district to upgrade its production activities while reducing the pressure of competitive low-cost policies from developing countries, and also to anticipate and meet the increasing needs of the ethical market.

Industrial district development means social upgrading and, thus, public institutions need to play an active role in civil society to trigger a learning process (Rivoli & Waddock, 2011) that will facilitate the adoption of sustainable behavioral patterns.

By applying the *collective impact approach*, institutions should become influential champions and contribute to strengthening clustering approaches based on solid governances. The setting of a specific structure, or a leadership room, should allow the active participation of major components, namely district representatives and various actors in charge of the different phases and processes in the tannery supply chain. This structure should define the rules of the decision-making process and serve as the backbone for the entire initiative while coordinating participating organizations.

Finally, for the situation described in this case, the identification of specific phases necessary for the implementation of the *collective impact approach* appears to be a useful path to address the work of local governments.

Conclusions

The cases evaluated witness a failure of the traditional network and reaffirm that even if there is willingness to solve an environmental problem and constitute public- private partnerships, actions are not sufficient and the implementation of the *collective impact approach* could have better results.

It can be surmised that the distinctive nature of this approach is not ascribable to single elements, as certain pre-conditions (influential champion and financial resources) and conditions (governance and infrastructure, strategic planning, community involvement, evaluation, and improvement) are, which would assure the success of public-private partnerships. In fact, many of these elements are widely debated within the research as an issue of districts' and networks' governance (Schmitz & Nadvi, 1999; Nelson & Pritchand, 2009; Hemmati, 2002; Gereffi & Lee, 2016). Rather, within the definition of a process, articulated in pre-conditions, conditions, and phases of implementation, appears the distinctive element of this approach that can represent a guarantor function, so that choices can be taken and implemented in the interest of all.

Another important aspect of this approach, in order to produce consistent and effective results, is to stress that all stakeholders must be aware that they need to completely change their own behavior to create a solution to serious problems. The *collective impact* is a new collaboration format designed to put an end to isolated impact and short-term solutions' (Prange, Allen & Reiter-Palmon, p. 86), but the question is: Are the principal actors ready for this change? Do local public institutions understand the importance of reexamining the issues? The questions are still open, perpetuated by the issue of training the key actors towards the alignment of their behavior with this approach.

Further research can be addressed to deepen this issue and propose suitable practices for problem-solving through public-private partnerships.

References

Barile, S., Saviano, M., Polese, F., & Di Nauta, P. (2013). Il rapporto impresa-territorio tra efficienza locale, efficacia di contesto e sostenibilità ambientale. *Sinergie*, *90*, 25-49. doi: 10.7433/s90.2013.04.

Becattini, G. (2000). *Dal distretto industriale allo sviluppo locale*. Torino: Bollati Boringhieri.

Becattini, G., & Sforzi, F. (2002). *Lezioni sullo sviluppo locale*. Torino: Rosenberg &Sellier.

Bennett, R. (1999). Business associations: Their potential contribution to government policy and the growth of small and medium-sized enterprises. *Environment and Planning C: Politics and Space*, 17(5), 593-608. https://doi.org/10.1068/c170593

Calvano, L. (2008). Multinational corporations and local communities: A critical analysis of conflict. *Journal of Business Ethics*, *82*(4), 729–805. https://doi.org/10.1007/s10551-007-9593-z

Caroli, M., & Tantalo, C. (2011). (Eds), Le Reti d'Imprese come strumento privilegiato per la diffusione di una Sostenibilità di Sistema. Luiss Business School. Retrieved from http://www.reloaderitalia.it/wp-content/uploads/2013/01/rapporto_luiss_reti_imprese.pdf.

Carter, C.R., & Jennings, M.M. (2002). Logistics social responsibility: An integrative framework. *Journal of Business Logistics, 23*(1), 145-180. https://doi.org/10.1002/j.2158-1592.2002.tb00020.x

Dallocchio, M., Perrini, F., Vurro, C., & Russo, A. (2010). *Creare valore nella supply chain: modelli di gestione a confronto.* Milano:EGEA.

De Chiara, A. (2015). From stakeholder engagement to the collective-impact approach for sustainability paths in complex problems. *Sinergie, 33*(96), 75-91. https://doi.org/10.1080/00343400050005844

De Chiara, A. (2016). *Implementing sustainability strategies in networks and clusters – principles, tools and new research outcomes*. Berlin: Springer International Publishing.

Feser, E., & Bergaman, E.M. (2000). National industry cluster templates: Framework for applied regional cluster analysis. *Regional Studies*, *34*, 1-19. doi:10.1080/00343400050005844

Fichter, M, & Sydow, J. (2002). Using networks towards global labor standards? Organizing social responsibility in global production chains. *Industrielle Beziehungen, 9*(4), 357-380.

Gereffi, G., & Lee, J. (2016). Economic and social upgrading in global value chains and industrial clusters: why governance matters. *Journal of Business Ethics*, *133*(1), 25-38. https://doi.org/10.1007/s10551-014-2373-7

Hanleybrown, F., Kania, J., & Kramer, M. (2012). Channeling change: Making collective impact work. *Stanford Social Innovation Review*. Retrieved from http://www.ssireview.org/blog/entry/channeling_change_making_collective_impact_work.

Harvey, B., Van Luijk, K., & Corbetta, G. (Eds.) (1991). *Market morality and company size*. London: Kluver. https://doi.org/10.1007/978-94-011-3556-6

Hemmati, M. (2002). *Multi-stakeholder Processes for Governance and Sustainability*. London: Earthscan Publications Ltd.

Iannone, R. (2007). Lo specchio della rete. Dinamiche sociali ed economiche a confronto. In R . Benini. (Ed.), *L'impresa responsabile e la comunità intraprendente* (pp.23-50). Matelica (MC): Halley Editrice.

Kania, J., & Kramer, M. (2011). Collective impact. *Stanford Social Innovation Review*, Winter. Retrieved from http://ssir.org/articles/entry/collective_impact.

Neilson, J., & Pritchard, B. (2009). *Value chain struggles: Institutions and governance in the plantation districts of South India*. Malden, MA: Wiley. https://doi.org/10.1002/9781444308723

Orlitzky, M., Schmidt, F.L., & Rynes S. L. (2003). Corporate social and financial performance: A meta-analysis. *Organization Studies, 24*(3), 403-441. https://doi.org/10.1177/0170840603024003910

Perrini, F., & Tencati, A. (2008). *Corporate social responsibility*. Milano: Egea.

Perrini, F., Pogutz, S., & Tencati, A. (2006). *Developing corporate social responsibility. A european perspective.* Cheltenham: Edward Elgar Publishing.

Pilotti, L., Apa, R., Tedeschi-Toschi, A., & Sarman, I. (2013). La competitività dinamica degli ecosistemi territoriali. Il caso degli ecosistemi turistici multilocali tra Italia e Svizzera. *Sinergie*, *91*, 83-102. doi:10.7433/s96.2015.05

Porter, M.E, & Kramer, M.R. (2006). Strategy &society: The link between competitive advantage and corporate social responsibility. *Harvard Business Review, 84*(12), 78-92.

Prange, K., Allen, J. A., & Reiter-Palmon, R. (2016). Collective Impact versus Collaboration: Sides of the Same Coin OR Different Phenomenon?. *Metropolitan Universities, 27*(1), 86-96.

Reuter, C., Foerstl, K., Hartmann, E., & Blome, C. (2010). Sustainable global supplier management - the role of dynamic capabilities in achieving competitive advantage. *Journal of Supply Chain Management, 46* (2), 45-63. https://doi.org/10.1111/j.1745-493X.2010.03189.x

Rivoli, P., & Waddock, S. (2011). First they ignore you…: The time context dynamic and corporate responsibility. *California Management Review, 53*(2), 87–104. https://doi.org/10.1007/s10551-012-1519-8

Saviano, R. (2014). Il dossier ministeriale sull'inquinamento dei terreni tra Napoli e Caserta suscita perplessità. E solo il punto di partenza. Ecco come andare avanti. *La Repubblica*, 20 marzo.

Schmitz, H., & Nadvi, K. (1999). Clustering and industrialization: Introduction. *World Development, 27*(9), 1503–1514. https://doi.org/10.1016/S0305-750X(99)00072-8

Spence, L.J., & Schmidpeter, R. (2003). SMEs, social capital and the common good. *Journal of Business Ethics, 45*(1-2), 93-108. https://doi.org/10.1023/A:1024176613469

Spence, L.J., Schmidpeter, R., & Habisch, A. (2003). Assessing social capital: Small and medium size enterprises in Germany and U.K. *Journal of Business Ethics*, *47*(1), 17-29. https://doi.org/10.1023/A:1026284727037

Tencati, A., & Zsolnai, L. (2009). The Collaborative Enterprise. *Journal of Business Ethics, 85*(3), 367-376. https://doi.org/10.1007/s10551-008-9775-3

Zadek, S. (2006). *The logic of collaborative governance: corporate responsibility, accountability, and social contract*. Corporate Social Responsibility Initiative Working Paper No.17. Cambridge, MA: J.F Kennedy School of Government, Harvard University.

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Applying Collective Impact to Wicked Problems in Aboriginal Health

Kylie Gwynne, Annette Cairnduff

Abstract

Aboriginal people fare worse than other Australians in every measure of health, including in a ten-year gap in life expectancy, infant mortality, cardiovascular disease, dental disease, mental health, chronic disease and maternal health. Despite sustained government effort, progress to improve Aboriginal health has been very slow. The collective impact tool may offer a solution. This paper provides examples of the application of collective impact, to address the significant gap in Aboriginal health and as a tool to enable community control. Three case studies in Aboriginal health demonstrate the stages and phases of collective impact to facilitate positive change.

Keywords: Aboriginal health; collective impact; wicked problems; Indigenous; cardiovascular disease; allied health; oral health

Introduction

Wicked problems are those that appear impossible to solve. They are complex, long-standing, seemingly intractable, and there are divergent opinions about the ways to address them (Head, 2008; Rittel and Webber, 1973). Wicked problems do not occur in a vacuum. They are enmeshed in wider social, cultural and political issues (Head, 2008; Rittel & Webber, 1973; Periyakoil, 2007; Raisio, 2009). Typically, governments and other organizations attempt to fix wicked problems through a particular lens or focus (such as housing, education or health) when, for real and lasting impact, these problems need multidimensional, dynamic and sustained solutions (Head, 2008; Rittel & Webber, 1973; Periyakoil, 2007).

Aboriginal and/or Torres Strait Islander peoples (hereafter Aboriginal) are the indigenous people of Australia and comprise approximately 3% of the Australian population. Like Indigenous peoples globally, Aboriginal people bear an unacceptably high burden of disease (Commonwealth of Australia, 2016a; Commonwealth of Australia, 2011; Holland, 2016; SCRGSP, 2014). Successive governments since the colonization of Australia in 1788 have developed and implemented strategies and policies related to Aboriginal peoples (Australian Law Reform Commission, 1986; Commonwealth of Australia, 2009; Thorpe et al., 2016). These included removing Aboriginal children from their families, disconnecting people from their land and culture and not recognizing Aboriginal people in the census until 1967, which have led to significant inter-generational trauma and subsequent disadvantage faced by many Aboriginal people today (Australian Law Reform Commission, 1986; Commonwealth of Australia, 2009).

The disparity in health outcomes for Aboriginal people results in a ten-year life expectancy gap between Aboriginal people and other Australians (Commonwealth of Australia, 2016a). Australian governments agreed in 2008 to a long term initiative to close the gap in life

expectancy for Aboriginal Australians by 2030 (Commonwealth of Australia, 2016a; Holland, 2016; Marmot, 2008). This program, known as Closing the Gap, has specific health targets of infant mortality and life expectancy, as well as targets for social determinants of health such as education and employment (Commonwealth of Australia, 2016a; Holland, 2016). Closing the Gap is monitored by the Council of Australian Governments (COAG) where the heads of each state/territory government and the Prime Minister meet to address matters of national importance (Commonwealth of Australia, 2016a). The Closing the Gap targets are:

- halve the gap in mortality rates for Indigenous children under five within a decade;
- ensure all Indigenous four years-olds in remote communities have access to early childhood education within five years;
- halve the gap for Indigenous students in reading, writing and numeracy within a decade;
- halve the gap for Indigenous students in year 12 attainment or equivalent attainment rates by 2020; and
- halve the gap in employment outcomes between Indigenous and non-Indigenous Australians within a decade (Commonwealth of Australia, 2016a; Holland, 2016).

Despite bi-partisan support, funding, policy and national reporting, progress in closing the gap in health outcomes has been very slow. Indeed, the only area where population parity has been reached is in the employment of university graduates (Li et al, 2016). Infant mortality remains almost double the rate of the wider Australian population and employment at 47.5% compared with other Australians at 72.1% (Commmonwealth of Australia, 2016a).

In 2013, the Australian government combined all Aboriginal-related funding in a new Indigenous Advancement Strategy with five areas of focus: Jobs, Land and Economy; Children and Schooling; Safety and Wellbeing; Culture and Capability; and Remote Australia Strategies (Commonwealth of Australia, 2014). This funding, the majority of which was already being used for Aboriginal-related projects across the country, was subject to a tender process (i.e., one where organizations were invited to submit proposals for funding which were assessed against published criteria and successful tender proposals were awarded funding under the Indigenous Advancement Strategy) which led to significant changes in the purpose and allocation of funding and in practice, program closures and development of new programs (Commonwealth of Australia, 2016b).

Despite these significant and sustained government action, the poor health outcomes of Aboriginal peoples meet the definition of a wicked problem. It is wicked because it is seemingly intractable, long standing and complex, with no single solution. Roberts (2000), describes three strategies to tackle wicked problems: authoritative; competitive and collaborative (Roberts, 2000). Authoritative solutions are prescribed by a small number of people who hold decision-making authority. Competitive solutions are those where organizations compete with each other for limited resources by pitching their solution. Collaborative solutions require stakeholder engagement in defining the problems and the solutions. Initially, the Australian government appears to have utilized what Roberts would define as authoritative approaches by placing the solutions in the hands of a few senior government officials through COAG and Closing the Gap. More recently, the government has used a competitive approach through the Indigenous Advancement Strategy. The approach we adopted was collaborative and we selected collective

impact because of the consensus approach which aligns well with the decision-making approaches of Australian Aboriginal communities.

Rittel asserts that solutions to wicked problems need collaborative approaches that engage stakeholders in the planning processes (Rittel & Webber, 1973). Collaborative approaches to Aboriginal health have developed over time with an emphasis on community engagement and consultation. Collective impact is more than collaboration, it provides a framework for bringing multiple parties together to define the problem and its complexities and priority, and to jointly develop, implement and evaluate multifaceted solutions (Aragón & Garcia, 2015; Banyai & Fleming, 2016; Bryan et al., 2015; Gillam et al., 2016; Kania & Kramer, 2014; Kania & Kramer, 2011).

Hanleybrown et al. (2012) identified three preconditions for selecting collective impact as the tool to address a complex problem: (a) strong and influential champions; (b) urgent issue requiring sustained response; (c) understanding of why existing solutions are not effective (Hanleybrown et al, 2012). Aboriginal health meets each of these criteria: (a) Aboriginal leaders and elders are strong and influential champions for their communities, (b) Aboriginal health is an urgent problem, and (c) we understand why the existing solutions in Aboriginal health are not working (Marmot et al., 2008). Once the preconditions for selection of collective impact as a tool have been met, collective impact projects have three phases of implementation identified by Hanleybrown et al. in 2012.

The three phases of implementation of collective impact are demonstrated in this paper through three case studies, each at a different phase of implementation: (a) phase 1 initiating action, as applied in Aboriginal cardiovascular disease; (b) phase 2 organizing for action, as applied in improving access to allied health services; and (c) phase 3 sustaining action and impact, as applied in oral health (Hanleybrown et al., 2012). Within each phase, the five stages of collective impact are utilized.

There is a considerable body of evidence that the mainstream health system is ineffective for Aboriginal people (Bar-Zeev et al., 2014; Kildea et al., 2012; Steenkamp et al., 2012) and that health services intended for Aboriginal people must be tailored in order to achieve sustained and measurable health improvements. Yet health care systems across Australia continue to offer usual health care to Aboriginal people (Bar-Zeev et al., 2012; Gao et al., 2014; Kildea et al., 2012; Steenkamp et al., 2012). There are few examples of tailored services, most notably is the Aboriginal Community Controlled Health Services sector, which as the name implies, are governed by, trusted and utilized widely by Aboriginal people. However, Aboriginal Community Controlled Health Services provide only a small and diminishing percentage of health care services for Aboriginal people. Most health care services for Aboriginal people are provided by mainstream health services (Panaretto et al., 2014). Many Aboriginal Australians access the health care system only in the late stages of the disease process or in emergencies, due to fear, racism and distance from services (Bainbridge et al., 2015; AIHW, 2014). It is therefore vitally important in addressing the health care needs of Aboriginal people that tailored, culturally safe care is available across all health care providers. Our hypothesis is that a structured and shared process from conception, through to design, implementation and evaluation increases the

likelihood that health services will be utilized by Aboriginal people and that, as a result, health outcomes will improve.

Potential Consequences

There is a long history in Australia of non-Aboriginal people defining the problems and solutions in Aboriginal health (Thorpe et al, 2016). Collective impact provides a framework and process for engagement and power sharing with Aboriginal people, and is particularly suitable because it begins with agreeing on the problem that needs to be addressed from the collective or community perspective. The potential consequence of this approach is that health outcomes for Aboriginal people measurably improve, which is a worthy and important goal. This paper provides three examples of how the Poche Centre for Indigenous Health at the University of Sydney worked alongside Aboriginal communities utilizing collective impact to address wicked problems in three areas of Aboriginal health.

Description/Analysis/Methods

Three examples of the application of collective impact to address wicked problems in Aboriginal health are detailed in this paper: preventing stroke; improving access to allied health and improving oral health. The same processes as described in Figure 1, were applied in each of the three examples.

> Case study one applies phase one of collective impact, initiating action, in cardiovascular disease by detecting and treating atrial fibrillation and preventing stroke. A mixed methods pilot study is implemented to determine if the smart phone technology and software application (App) are effective tools for Aboriginal communities to identify patients with Atrial Fibrillation (AF) and facilitate access to further assessment and treatment.

On average, Aboriginal people develop AF approximately 20 years earlier than non-Aboriginal people and have a higher rate of associated co-morbidities than the wider Australian population (Katzenellenbogen et al, 2015; Wong et al, 2014). Risk factors for AF such as hypertension, diabetes, chronic kidney disease, and rheumatic heart disease are all more common in Aboriginal people and at a younger age than in non-Indigenous people (AIHW, 2014).

Figure 1. Collective impact stages as applied in three case studies in Aboriginal health.

A smartphone App with Therapeutic Goods Administration approval which had already been proven to be effective in non-Aboriginal people, was presented to Aboriginal communities as a potential tool to reduce stroke. The communities (including health workers, community members and elders and leaders) were initially invited to consider participation in the project. Those communities that agreed then participated in a series of meetings. At the meetings the resources each party would allocate to the project and how decisions would be made were discussed. In addition, the common agenda, measurement, mutually reinforcing activities, and communication processes were agreed and documented. The Poche Centre for Indigenous Health at the University of Sydney assumed the role of backbone in partnership with community organizations. Fundamental to the approach was that there would be no payment to people participating in the project (other than reimbursement for a Registered Nurse to collate the data). It was considered that unless there was inherent benefit to the communities such that they too would contribute resources to the project, then it should not proceed in that community. Table 1 shows how collective impact was applied to this project.

Table 1. Elements of collective impact in preventing stroke in Aboriginal people.

Common agenda	Shared measurement	Mutually reinforcing activities	Continuous communication	Backbone support
Preconditions for collective impact have been met: champions have been identified; cardiovascular disease is the leading cause of death for Aboriginal people and is therefore an urgent issue; and we understand why existing responses are not working.				
Preventing stroke by identifying people with asymptomatic Atrial fibrillation—a precursor to stroke—and facilitating access to assessment and treatment. Discussion and development of the common agenda over a twelve-month period with communities across three Australian jurisdictions to establish common agenda and the processes for achieving this including customized referral pathways and training for each participating community.	Local investigators from every site on the decision-making team. Local Aboriginal staff use the device and App to detect AF. The App provides a diagnosis in 30 seconds. Cloud based data directly from the App is available to all investigators. Only local investigators have data linked to individual people in order to facilitate further assessment and treatment where this is indicated.	Training is provided for the local Aboriginal Health workforce in the device and cardiovascular disease health more broadly so that overall health literacy is an additional benefit to the community. Aboriginal Health Workers trained to screen Aboriginal people using a smart phone device and App to detect Atrial Fibrillation. Each Aboriginal Health Worker conducted 50 screens as part of the project and retained the device to use in their practice. Patients with a non-normal result assisted to access further assessment and treatment.	Monthly meetings of the project decision- making team. Aboriginal health workers and investigators meet formally and informally to implement and refine the process and to ensure the optimal outcome for patients and the study Written letters of support were provided from each community once the common agenda, shared measurement and mutually reinforcing activities were agreed by all parties. Information sheets and consent forms customized to each location to reflect community language, customs and beliefs.	The Poche Centre purchased the equipment, acquitted the funding, arranged logistics, organized the meetings and supplied the technology.
Shared aspects of control: Local people from each site are on the decision-making team, local health workers implement project as part of their existing roles, data held and owned locally and shared on request, identifying information is never shared, local leadership of implementation, and shared decision-making and approaches to dissemination of findings.				

The research protocol for this study was significantly shaped by the collective impact process (Gwynne et al, 2016). For example, the research team initially imagined a single participant information sheet incorporating pictorial elements. Through the collective impact process, it was decided that each site required a customized brochure, incorporating local language and meaning, written in plain English and supplementary pictures, which not only provided information about the study for participants but also the consent processes and information about cardiovascular health. This shaped the training for health workers, as they needed to be competent and confident to explain the information in the brochure. This approach was more substantial and potentially more effective than a typical participant information sheet. A further feature is that the research team anticipated partnering with one organization at each site; that organization would coordinate the project locally. Through the collective impact process, this was managed differently at different sites. At one site, five organizations took part in the design and implementation, at another site there was a single organization.

Each party to the collective impact process contributed resources and shared decision-making responsibility. Specifically, in this project, local investigators led the data collection, held the data, and only shared the data when it was agreed by the project partners.

Data collection for this study is currently in progress and is expected to be completed in mid-2017. The analysis and dissemination of the results will be coordinated through the established collective impact process. Depending on the qualitative and quantitative findings, participating communities may wish to extend this project to examine the efficacy (including adherence) of treatment options for Aboriginal people with AF and track long term whether or not this approach impacts on premature deaths and disability as a result of AF stroke.

Case study two demonstrates the application of phase 2 of collective impact, organizing for action, to improve access to allied health services. A mixed methods study to design and implement allied health services to best meet the needs of Aboriginal people living in rural Australia. Allied health services include services such as physiotherapy, speech pathology and occupational therapy.

After preliminary scoping discussions, semi-structured interviews gathered input from Aboriginal organizations and community members across rural and remote Aboriginal communities. Early findings indicated the importance of local expertise to facilitate access to assessment and treatment, provide treatment, and assist families and health workers to navigate the service system for people requiring allied health services. A decision-making group has been established and resources pooled, and a common agenda has been agreed and documented. The first stage of demonstrating a local support model in the form of Aboriginal Allied Health Assistants (AAHAs) has commenced in five rural Aboriginal communities. The AAHAs are employed regionally and funded from the pooled resources. Table 2 documents our early progress. It has taken two years to get to this stage which reflects the lengthy process of engagement and shared decision-making when utilizing the collective impact approach.

Table 2. Elements of collective impact in improving allied health services for Aboriginal people.

Common agenda	**Shared measurement**	**Mutually reinforcing activities**	**Continuous communication**	**Backbone support**
Preconditions for collective impact are met: champions have been identified; there are very limited allied health services available to Aboriginal people in rural and remote areas which is impacting for example on early identification and treatment of issues such as coordination, speech and behavior in young children and effective management of chronic disease management; and we understand that reasons for the paucity of allied health services.				
Improving allied health by designing service models with communities and demonstrating implementation. Research team includes local Aboriginal service providers	50% of the investigators on the research team are Aboriginal and they are directly shaping the study design and implementation. Semi-structured interviews with Aboriginal people including families, service providers and community leaders. Thematic analysis of interviews by the research led to the design of pilot model of Aboriginal allied health assistant role. Process and output data to be collected by the AAHAs as part of pilot study.	Demonstrate allied health assistant roles in five communities. Local education, employment and local priority setting. Development of a local skilled and supported AAHA workforce that supports visiting allied health professionals	Weekly meetings with Aboriginal allied health assistants. Quarterly meetings with decision- making group. Monthly meeting of project team for AAHA project.	The Poche Centre acquitted the funding, arranged logistics, organized the meetings and funded the research.
Shared aspects of control: Local people from each site are on the decision-making team, AAHAs employed regionally and funded from pooled funds, data held and owned locally and shared on request, identifying information is never shared, and shared decision-making and approaches to dissemination of findings. A jointly owned document details roles and responsibilities within the project and is regularly reviewed and developed by the decision-making group.				

The third case study demonstrates the application of phase 3 of collective impact, sustaining action and impact, to improve oral health.

A longitudinal, mixed-methods study was developed and implemented using collective impact to design and deliver the best available evidence to reduce dental disease and promote oral health in Aboriginal people. This study began with two communities and has since expanded to a further nine. The communities identified oral health as a thirty-year problem and were seeking local solutions (Gwynne et al, 2015). The oral health of the Aboriginal communities was significantly poorer than Aboriginal people in other parts of Australia, and non-Aboriginal people locally and elsewhere (Gwynne et al., 2016). Governments had attempted to provide oral health services to these communities, however, an effective response had not been delivered (Gwynne et al, 2015; Gwynne et al, 2016). The Poche Centre for Indigenous Health was invited in 2013 to assist the communities in developing solutions to improve oral health and utilize a collective impact approach to achieve this (Gwynne et al., 2015).

Local community organizations, schools, health care workers, community members, elders and other leaders came together to discuss and agree the common agenda and measures of success. They also agreed how and what resources would be pooled and what decision-making and communication processes would be followed. The measures themselves were discussed at length, as well as the process of collection, storage, reporting and access. During these early discussions, a temporary emergency dental service was established using a dental van at each of the two initial communities. This helped to build trust and also provided employment for local Aboriginal people as Trainee Dental Assistants (i.e., it is possible to work as a Trainee Dental Assistant without a qualification in Australia. Once qualified, Dental Assistants have increased remuneration).

Once the common agenda and measurement had been agreed, the services were established at existing community facilities (schools, pre-schools and community health centers) and began the mutually reinforcing activities. In addition to being known and safe places, the community facilities provided reception, cleaning, power, waiting areas and other ancillary support which enabled the services to operate effectively. Local employment and skills development were part of the common agenda and as such all Trainee Dental Assistant positions were filled by local Aboriginal people who were also assisted to complete Dental Assistant qualifications. The service is coordinated and delivered by local Aboriginal people with the support of clinicians who live and work locally. The services have been operating for three years utilizing a collective impact approach as detailed in Table 3.

Table 3. Elements of collective impact to improve Aboriginal oral health.

Common agenda	**Shared measurement**	**Mutually reinforcing activities**	**Continuous communication**	**Backbone support**
Preconditions for collective impact have been met: local Aboriginal leaders and elders are champions and decision makers in the project; high rates of oral disease are impacting on nutrition, overall health and self-esteem of Aboriginal people and is an urgent priority for the community; and we understand why previously existing services were ineffective.				
Improving oral health by providing comprehensive oral health services as close as possible to where people live and developing the local Aboriginal oral health workforce.	Patient data held by local Aboriginal organizations and shared with stakeholders on request. Joint research project with local service and university investigators. Joint analysis and publication of results.	Shared equipment and training; shared supervision by senior clinicians; and shared employment of staff. Regional employment within existing health care services. Assisting local Aboriginal people to complete qualifications in oral health with a view to local backbone/ management overtime.	Formal meetings weekly with the joint teams. Quarterly meetings with community members and stakeholder organizations about service outcomes and issues. Annual research reports to communities. Informal communication daily about service outcomes and issues.	Shared between the Poche Centre for Indigenous Health and Armajun Aboriginal Community Controlled Health Service Both hold and acquit funding, Armajun produces reports, shared training, each responsible for clinical governance at half of the sites. Supply technology and other equipment.
Shared aspects of control: Local people from each site are on the decision-making team, local dental assistants and coordinators manage and deliver the services from existing community facilities, data held and owned locally and shared on request, identifying information is never shared, and shared decision-making and approaches to dissemination of findings. A jointly owned document details roles and responsibilities within the project and is regularly reviewed by the decision-making group.				

The findings of this study to date have been promising. Two published studies by Irving et al report positively on the experience of the service from the community perspective (Irving et al, 2016a) and the clinicians living in the communities (Irving et al, 2016b). In addition, a paper

comparing this model of oral health care with a visiting service model over two years (2014 and 2015) found that this service model delivered 47% more treatment at 25.2% of the cost of a visiting service (Gwynne et al, 2016).

Rationale/Reflection/Replication

The ways we have applied collective impact align to the original work of Kania and Kramer (2011) and the subsequent model development by Hanleybrown et al (2012). Whilst collective impact is a relatively straightforward framework, it is complex and time rich to implement, and the approach permeates all aspects of the project. One of the great strengths and challenges of collective impact is transparency. This transparency is achieved through collective responsibility, pooled and shared resources, goals, reporting and evaluation, and focusses attention on the problems and their resolution through collective action. All of the parties to the collective impact projects described in this paper are accountable to each other for the process and outcomes, and collectively the parties contribute to achieving the common agenda and results.

In all of the three projects, the Poche Centre for Indigenous Health at the University of Sydney provides the backbone, either singularly or in partnership with an Aboriginal Community Controlled Health Service. Whilst there is an intention to transition the backbone role to community control over time, this currently is a limitation of our approach. It is our hope that as the approach becomes well understood, Aboriginal Community Controlled Organisations will initiate and lead collective impact projects.

The case studies in this paper demonstrate promising progress and the next steps will be to cycle through the phases of collective impact, increase local sustainability and measure impact over time. The capacity to transition the backbone to local organizations and sustain the programs will be key markers of the efficacy of collective impact as a tool for tackling wicked problems in Aboriginal health. Given the similar health issues faced by indigenous peoples globally, collective impact may provide a tool for engaging effectively with indigenous communities to define problems and design, deliver and evaluate solutions.

Conclusion

Many solutions to wicked problems exist. They exist in research, communities, and in public policy, but the execution of the solutions and the customization of the responses requires a structured and shared process, such as collective impact. Collective impact requires all parties to have a stake in the resources and decision-making, and assumes all parties have part of the picture which collectively contributes to the goals and the solutions. Importantly, all parties have a part to play in designing, customizing and implementing local sustainable solutions. Given the enormous disparities in Aboriginal health and the failure of governments and other organizations to address this, collective impact provides one approach to define problems and develop solutions collectively. Collective impact is a slow process, one of influencing and sharing resources and knowledge, one of trust and mutual accountability. Yet when applied effectively, positive change can result.

References

Australian Bureau Services (ABS). (2014). *Deaths, Australia, 2013*. Retrieved from Canberra: http://www.healthinfonet.ecu.edu.au/health-facts/health-faqs/deaths#fnl-3

Aboriginal Health & Medical Research Council. (AHMRC) (2016). *AHMRC oral health position paper: Achieving oral health equity for Aboriginal communities in NSW*. Retrieved from http://www.ahmrc.org.au/media/resources/public-health/oral-health/306-oral-health-position-paper/file.html

Aragón, T.J., & Garcia, B.A. (2015). Designing a learning health organization for collective impact. *Journal of Public Health Management & Practice, 21*(Supplement 1), S24-33. https://doi.org/10.1097/PHH.0000000000000154

Australian Institute of Health and Welfare (AIHW) (2014). *Australia's health 2014*. Retrieved from Canberra: http://www.aihw.gov.au/publication-detail/?id=60129547205

Australian Law Reform Commission. (1986). Recognition of Aboriginal Customary Laws 31. Retrieved from http://www.alrc.gov.au/publications/3.%20Aboriginal%20Societies%3A%20The%20Experience%20of%20Contact/impacts-settlement-aboriginal-people

Bainbridge, R., McCalman, J., Clifford, A., and Tsey, K. (2015). Cultural competency in the delivery of health services for Indigenous people. Retrieved from http://www.aihw.gov.au/uploadedFiles/Closing TheGap/Content/ Our_publications/2015/ctgc-ip13.pdf

Banyai, C., & Fleming, D. (2016). Collective impact capacity building: Finding gold in Southwest Florida. *Community Development, 47*(2), 259-273. https://doi.org/10.1080/15575330.2015.1135174

Bar-Zeev, S. J., Barclay, L., Farrington, C., & Kildea, S. (2012). From hospital to home: the quality and safety of a postnatal discharge system used for remote dwelling Aboriginal mothers and infants in the top end of Australia. *Midwifery, 28*(3), 366-373. https://doi.org/10.1016/j.midw.2011.04.010

Bradshaw, P. J., Alfonso, H. S., Finn, J., Owen, J., & Thompson, P. L. (2011). A comparison of coronary heart disease event rates among urban Australian Aboriginal people and a matched non-Aboriginal population. *Journal of Epidemiology & Community Health, 65*(4), 315-319. https://doi.org/10.1136/jech.2009.098343

Brown, A. (2010). Acute coronary syndromes in indigenous Australians: opportunities for improving outcomes across the continuum of care. *Heart, Lung & Circulation, 19*(5-6), 325-336. https://doi.org/10.1016/j.hlc.2010.02.011

Bryan, J L., Haldipur, J., Martin, M., & Ullrich, S. (2015). Envisioning a broader role for philanthropy in prison reform. *Society, 52*(6), 572-579. https://doi.org/10.1007/s12115-015-9951-x

Chrisopoulos S., Harford J.E. & Ellershaw A. (2016). *Oral health and dental care in Australia: key facts and figures 2015*. Retrieved from Canberra.

Commonwealth of Australia (2016a). *: Prime minister's teport.* Retrieved from http://www.closingthegap.dpmc.gov.au

Commonwealth of Australia (2016b). Commonwealth Indigenous Advancement Strategy tendering processes. Retrieved from http://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Finance_and_Public_Administration/Commonwealth_Indigenous/Report

Commonwealth of Australia. (2015). Healthy Mouths, Healthy Lives: National Oral Health Plan 2015-2024 Retrieved from Canberra: https://www.mah.se/PageFiles/1541119092/Australias-National-Oral-Health-Plan-2015-2024_uploaded-170216.pdf

Commonwealth of Australia. (2014). *Indigenous Advancement Strategy*. Retrieved from http://www.indigenous.gov.au/indigenous-advancement-strategy

Commonwealth of Australia. (2011). *Census of Population and Housing - Counts of Aboriginal and Torres Strait Islander Australians*. Retrieved from http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/2075.0main+features32011

Commonwealth of Australia. (2009). *Closing the gap on indigenous disadvantage: The challenge for Australia*. Retrieved from Canberra: https://www.dss.gov.au/sites/default/files/documents/05_2012 /closing_the_gap.pdf

Gao, Y., Gold L., Josif, C., Bar-Zeev, S., Steenkamp, M., Barclay, L., & Kildea,, S. (2014). A cost-consequences analysis of a Midwifery Group Practice for Aboriginal mothers and infants in the Top End of the Northern Territory, Australia. *Midwifery, 30*(4), 447-455. https://doi.org/10.1016/j.midw.2013.04.004

Gillam R.J., Counts, J.M., & Garstka, T.A. (2016). Collective impact facilitators: how contextual and procedural factors influence collaboration. *Community Development, 47*(2), 209-224. https://doi.org/10.1080/15575330.2015.1133684

Gwynne K., Flaskas Y., O'Brien C., Jeffries, Jr. T., McCowen, D., Finlayson H, Martin T, Neubeck L, & Freedman B. (2016). Opportunistic screening to detect atrial fibrillation in Aboriginal adults in Australia. *British Medical Journal (Open), 6*(11). https://doi.org/10.1136/bmjopen-2016-013576

Gwynne, K., McCowen, D., Cripps, S., Lincoln, M., Irving, M., & Blinkhorn A. (2016). A comparison of two models of dental care for Aboriginal communities in New South Wales. *Australian Dental Journal*. https://doi.org/10.1111/adj.12496

Gwynne, K., Irving, M.J., McCowen, D., Rambaldini, B., Skinner, J., Naoum, S., & Blinkhorn, A. (2015). Developing a sustainable model of Oral Health care for disadvantaged Aboriginal people living in rural and remote communities in NSW, using Collective Impact methodology. *Journal of Health Care for the Poor and Underserved: 2016 Supplement 27*, 46-53. https://doi.org/10.1353/hpu.2016.0032

Hanleybrown, F., Kania, J., & Kramer M. (2012). Channeling Change: Making Collective Impact Work. Retrieved from https://ssir.org/articles/entry/channeling_change_making_collective_impact_work

Head, BW. (2008). Wicked Problems in Public Policy. *Public Policy, 3*(2), 101-118.

Holland, C. (2016). Close the Gap: progress and priorities report 2016. Close the Gap Campaign Steering Committee. Retrieved from https://www.humanrights.gov.au/sites/default/files/document/publication/Progress_priorities_report_CTG_2016_0.pdf

Irving, M.J., Gwynne K., Angell, B., Tennant, M., & Blinkhorn, A. (2016a). Client perspectives on an Aboriginal community led oral health service in rural Australia. *Australian Journal of Rural Health*, doi:10.111/ajr.12307.

Irving, M.J., Short, S., Gwynne, K., Tennant, M., & Blinkhorn, A. (2017 October). "I miss my family, it's been a while…" A qualitative study of clinicians who live and work in rural/remote Australian Aboriginal communities. *Australian Journal of Rural Health*,*25*(5), 260-267. https://doi.org/10.1111/ajr.12343

Kania, J., Hanleybrown, F., & Splansky Juster, J. (2014). Essential Mindset Shifts for Collective Impact. Collective Insights on Collective Impact Supplement in the Stanford Social Innovation Review.

Kania, J. and Kramer, M. (2011 Winter). Collective Impact. *Stanford Social Innovation Review*, *9*(1), 36-41.

Katzenellenbogen, J.M.., Teng, T.H.K., Lopez, D., Hung, J., Knuiman, M.W., Sanfilippo, F.M., Hobbs, M.S. & Thompson, S.C. (2015). Initial hospitalisation for atrial fibrillation in Aboriginal and non-Aboriginal populations in Western Australia. *Heart, 101* (9), 712-719. https://doi.org/10.1136/heartjnl-2014-306678

Kildea S, Stapleton H, Murphy R, Low NB, and Gibbons K. (2012). The Murri clinic: a comparative retrospective study of an antenatal clinic developed for Aboriginal and Torres Strait Islander women. BMC *Pregnancy & Childbirth, 12*, 159. https://doi.org/10.1186/1471-2393-12-159

Li, I.W., Mahuteau, S.M., Dockery, P.N. and Mavromaras, K. (2016). Labour Market Outcomes of Australian University Graduates from Equity Groups. Retrieved from https://www.ncsehe.edu.au/wp-content/uploads/2016/03/Labour-Market-Outcomes-of-Australian-University-Graduates-from-Equity-Groups.pdf

Marmot, M., Friel, S., Bell, R., Houweling, T.J.A., and Taylor, S. (2008). Closing the gap in a generation: health equity through action on the social determinants of health. *Lancet* (372), 1661–1669. https://doi.org/10.1016/S0140-6736(08)61690-6

Panaretto, K., Wenitong, M., Button, S., and Ring, I. (2014). Aboriginal community controlled health services: leading the way in primary care. *Medical Journal of Australia, 200*(11). https://doi.org/10.5694/mjac13.00005

Periyakoil, V.S. (2007). Taming wicked problems in modern health care systems. *Journal of Palliative Medicine, 10*(3), 658-659. https://doi.org/10.1089/jpm.2007.9955

Raisio, H. (2009). Health care reform planners and wicked problems: Is the wickedness of the problems taken seriously or is it even noticed at all? *Journal of Health Organization & Management, 23*(5), 477-493. https://doi.org/10.1108/14777260910983989

Rittel, H.W.J & Webber. (1973). Dilemmas in a General Theory of Planning. *Policy Sciences, 4*, 155. https://doi.org/10.1007/BF01405730

Steering Committee for the Review of Government Service Provision (SCRGSP). (2014). Overcoming Indigenous Disadvantage: Key Indicators 2014. Productivity Commission, Canberra. Retrieved from http://www.pc.gov.au/research/ongoing/overcoming-indigenous-disadvantage/2014

Steenkamp, M,, Rumbold, A., Barclay, L., & Kildea, S. (2012). A population-based investigation into inequalities amongst Indigenous mothers and newborns by place of residence in the Northern Territory, Australia. *BMC Pregnancy & Childbirth, 12*, 44. https://doi.org/10.1186/1471-2393-12-44

Thompson, P.L., Bradshaw, P.J., Veroni, M., & Wilkes ET. (2003). Cardiovascular risk among urban Aboriginal people. *Medical Journal of Australia, 179*(3), 143-146. Retrieved from https://www.mja.com.au/system/files/issues/179_03_040803/tho10633_fm.pdf

Thorpe, A., Arabena, K., Sullivan, P., Silburn, K., & Rowley K. (2016). Engaging First Peoples: A Review of Government Engagement Methods for Developing Health Policy. Retrieved from http://www.lowitja.org.au/sites/default/files/docs/Engaging-First-Peoples.pdf

Wong, C.X., Brooks, A.G., Cheng, Y.H., Lau, D.H., Rangnekar, G., Roberts-Thomson, K.C., Kalman, J.M., Brown, A., & Sanders, P. (2014). Atrial fibrillation in Indigenous and non-Indigenous Australians: a cross-sectional study. *BMJ Open, 4* (10). ttps://doi.org/10.1136/bmjopen-2014-006242

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A Community in Crisis: The Opioid Epidemic on Staten Island

Patricia A. Tooker

Abstract

There is no “magic potion” or vaccine to prevent youth from using alcohol or other drugs. Adolescent substance abuse prevention programs have been largely ineffective because the messaging is taken for granted. Efforts based on theories of growth and development patterns, and are inclusive of strategies beyond the classroom and home, have demonstrated encouraging findings particularly when members of the community are involved. This paper will explore factors behind illicit substance use among youth in Staten Island, New York and how Wagner College is playing an important part of a collective impact initiative that is starting to make a difference.

Keywords: Youth; drugs; coalition; prevention; health promotion

An Epidemic of Substance Abuse on Staten Island

Staten Island’s substance abuse epidemic is real and it is not going away. In 2014,74 borough residents died from drug overdoses, up from 64 the year before (Wrobleski,2014).Powerful batches of high-quality heroin are flowing into New York and taking lives, as Staten Island struggles to fight this frightening epidemic. The highly potent substance is what drug experts say is contributing to the spike in overdose deaths here and across the city. The heroin isn’t just stronger today, there is also more of it coming into New York. The Drug Enforcement Administration’s New York division has seized 1,951 pounds of heroin this year, up from 1,139 pounds in 2014, according to DEA records. In 2009, the DEA confiscated just 189 pounds of heroin (Lavis, 2015).

“The Antidote: Can Staten Island’s middle class neighborhoods defeat an overdose epidemic” by Ian Frazier was published in The New Yorker on September 8, 2014. This article proved to be the first in a series of many that brought to light a serious health issue on Staten Island. N.Y. Times authors J. David Goodman and Michael Wilson followed Frazier with five more articles published in 2014 in the New York Times between the months of April through November. StatenIslandlive.com followed on November 21, 2014 with a brief but powerful blog that began with the statement “It is no secret that Great Kills is one of the busiest hot spots on the Island for heroin”. Adam Lener who owns Portobello Cafe, a popular Italian restaurant on a main thoroughfare in Great Kills, further detailed how “you see this all over the neighborhood” and how he has watched “good neighborhood kids” transform over time to “unrecognizable” addicts who are hardly able to stand on their own two feet (Lavis, 2014).

In the 20 years he has been in business, he has watched his neighborhood change, and feels that families are suffering and merchants are the addicts’ prey. This businessman went on to say how he recently witnessed two people “shooting up” heroin just across the street from his restaurant

and how a young man used a cinder block to shatter the front window of his restaurant to remove a cash register (Lavis,2014). This is just one of many recently documented crime events on the Island that have been linked to illicit drug use.

Along with the higher incidence in crime rates, the borough also saw the second highest rate of heroin overdose deaths per 100,000 residents according to Epi Data Brief, one of the many statistical databases within the New York City Department of Health and Mental Hygiene. In 2012, Staten Island residents had the highest (10.2 per 100,000) of drug poisoning deaths involving heroin, followed by the Bronx (8.8 per 100,000). The rate in Staten Island was more than three times that in Queens (2.8 per 100,000) more than double in Brooklyn 4.2 per 1000, 000), and nearly double the rate in Manhattan (5.4 per 1000, 000).

Drug addiction, notably of prescription pills, then heroin, has increasingly plagued the borough in the last several years, accounting for dozens of deaths, primarily of young adults. More than 100 Staten Islanders have died of heroin overdoses alone since 2010, according to the city Department of Health. Staten Island has the highest proportion of youth who have used a prescription pain reliever. The effect of devastating drug abuse is evidenced by the local obituaries we see every day as young people are dying of addiction. It is now called an epidemic and it has reached record numbers, as the overdose and death-toll rates increase each day. Many youth are in denial until their families or teachers confront the youth with their behavior, or they are hospitalized or arrested (DOHMH, 2012).

Heroin Use Increasing

In 2013-2014, an estimated 444 New Yorkers per 100,000 residents aged 12 or older used heroin, more than double the corresponding prevalence in each of the two year periods dating back to 2007-2008.After lagging the national rate for most of the decade, the prevalence of heroin use in New York jumped, and exceeded the national rate by 49 percent in 2013-14. Overdose deaths, one of the starkest signs of this problem, reached new peaks in New York in 2014. While Orange and Suffolk counties had higher heroin overdose rates, Staten Island exceeded all counties in prescription opioid overdoses in that same time frame. Treatment admission rates for both heroin and prescription opioid abuse have increased over the past decade among all New Yorkers aged 12 and over (https:www.samsha.gov.data/sites/default/files).

Prescription Drug Abuse is a Pathway to Heroin Addiction/ Funding for Help

Today, the effect of prescription drug abuse in teenagers in the United States remains a serious problem, and also contributes to a rising behavioral health epidemic. The outcomes of drug abuse in general always negatively affect many aspects of one's life. Physical and behavioral health, social and legal complications are the most dominant societal issues. At a drug forum titled "Scared Straight", held recently in a Staten Island high school, one leading Island advocate said "she knows of 10 drug related deaths so far in 2016—and others fear the totals for 2015 will be far worse than 2014, which saw 47 drug related deaths" (Simontacchi, 2016). Data from the National Institute of Drug Abuse indicates that one in five teenagers reported that they have abused prescription drugs (NIDA, 2011), which many on Staten Island say is the precursor or

gateway drug to heroin use. “We’re in the middle of a crisis……It’s not the kind of problem you can fix with arrests,” said one NYPD chief (commanding officer of Staten Island). “You’ve got to get to the children and convince them that this is not a good way of life” (Simontacchi, 2016). So what does this all mean for Staten Island? We have to start speaking about it, was pronounced at the forum. However, the biggest issue according to the NYPD chief has to do with the families of addicts not tackling the issue head-on, because of the shame associated with it.

Speaking during a conference call with reporters last spring, Jackie Cornell-Bechelli, regional director of Health and Human Services (HHS) region II, announced grants for New York and New Jersey, calling the opioid epidemic "one of the most pressing issues we have. The epidemic reaches across rural, urban and suburban areas, and overdoses are now the leading cause of death in the U.S. In 2014, 200 New Yorkers died every month from overdoses, as compared to 100 people every month in New Jersey. "These are our families, our friends, our neighbors, and without these funds they might not be able to get the treatment that they need," Cornell-Bechelli said further. It is unclear whether any of the treatment facilities on Staten Island applied for the grant funding, but what is clear is that nothing is coming to Richmond County. HHS does not disclose which organizations apply for grants, only those that are awarded, according to a spokesman (Shapiro, 2016).

"Staten Island is the epicenter of the opioid abuse epidemic, and has been for years," U.S. Rep. Daniel Donovan, R-11th District, said in a statement. "I would hope that federal agencies consider this fact when writing grant formulas. I'm reaching out to the Department of Health and Human Services to find out what happened here, and how we can ensure Staten Island health centers receive the resources and attention from the federal government that they need” (DHHS,2016).

Citing the heroin and prescription drug epidemic, Staten Island District Attorney Michael McMahon has asked the city for more funding for the DA's office and Governor Andrew Cuomo recently addressed a large forum on Staten Island as part of his New York State Combatting Heroin tour.

"The drug epidemic on Staten Island is off the charts. The drugs on the street are too accessible," McMahon told the local press shortly after being elected in last November. "We have to get the drug dealers off the streets. That's where we have to partner with the police department and community leaders. We need enforcement, treatment and prevention" (Shapiro, 2016).

Figure 1. Staten Island, New York.

Demographics

Staten Island is a predominantly white middle-class community with high median income and high school graduation rates. Staten Island is southwest of New York City (Figure 1). It is the southernmost part of both the city and state of New York. The borough is separated from New Jersey by the Arthur Kill and the Kill Van Kull, and from the rest of New York by the New York Bay. With a 2014 census-estimated population of 473,279, Staten Island is the least populated of the boroughs but is the third-largest in area at 58 sq. mi (150 km^2). Staten Island has been sometimes called "the forgotten borough" by inhabitants who feel neglected by the city government. Staten Island is the only borough with a non-Hispanic majority.
According to the 2010 Census, 64.0% of the population was non-Hispanic White, down from 79% in 1990, 10.6% Black or African American, 0.4% American Indian and Alaska Native, 7.5% Asian, 0.2% from some other race (non-Hispanic) and 2.6% of two or more races. 17.3% of Staten Island's population was of Hispanic or Latino origin (of any race).

In 2009, approximately 20.0% of the population was foreign born, and 1.8% of the populace was born in Puerto Rico, U.S. Island areas, or born abroad to American parents. Accordingly, 78.2% of the population was born in the United States. Approximately 28.6% of the population over five years of age spoke a language other than English at home, and 27.3% of the population over twenty-five years of age had a bachelor's degree or higher.

According to the 2009 American Community Survey, the median income for a household was $55,039, and the median income for a family was $64,333. Males had a median income of $50,081 versus $35,914 for females. The per capita income for the borough was $23,905. About 7.9% of families and 10.0% of the population were below the poverty line, including 13.2% of those under age 18 and 9.9% of those age 65 or older (https://www.wikipedia.org).

David Goodman and Michael Wilson report that the “blue collar” population is to blame in their New York Times article entitled “Heroin’s New Hometown, on Staten Island, Rising Tide of

Heroin Takes Hold." The workforce is primarily made up of police, firefighters and city workers who are able to access the health care system and obtain pain reliever prescriptions for often on the job injuries and related health issues (https://www.nytimes.com.2014/05/05). Staten Island residents exhibit some of the worst risk factors for chronic and preventable diseases in comparison to residents citywide. Despite having the highest median income of all five boroughs of New York City, Staten Island residents suffer from higher incidences of cancer and heart disease, with mortality rates exceeding those of the other four boroughs and New York State. They smoke more, weigh more, exercise less and consume more sugary drinks than their counterparts in other boroughs. All of these are factors that contribute to their increased risk for chronic disease and pain (Goodman & Wilson,2014).

An overabundance of "leftover meds", many of which were sitting in household medication cabinets, made their way to the street hence creating recreational opioid pill abuse.
Pills could be found everywhere, which led to a local rap song in 2012 called "Painkiller Paradise, Staten Island." Doctors' offices were flooded by users requesting illegal prescriptions for habits that required 20 to 30 pills a day ($30 each). It then became easier and cheaper to switch to a $5 or $10 single glassine of heroin, which has always been available in neighboring New York City (Goodman & Wilson, 2014).

Staten Island has a Particularly High Incidence of Substance Abuse

No community is immune to heroin, alcohol or prescription opioid addiction. Opioid abuse and misuse is a problem in rural, suburban and urban communities across the state and nation. In 2013 substance abuse rates among Staten Island high school youth was 8.2% while the overall rate for NYC was slightly lower at 7.6% (https://www.drugfree.org). According to the Talk 2 Prevent Program in New York State, teens will most likely know other kids who use alcohol and drugs, and many are willing to express their thoughts or concerns with a parent about it (https://www.Talk2Prevent.NY.gov). In fact, when teens feel that they can access a drug easily, it sends the message that it is a drug they may choose to use (Burroughs, 2003). In the NSDUH report, 29.7 % of 12th graders say that heroin is easy to obtain and 12.6% of 8th graders agree(NSDUH, 2015). Teenage heroin use continues to be a major concern for this vulnerable age group (Figure 2). In the still-developing teenage mind, social media, stress from school, friends and romances, family pressures, and problems as well as the transition to fitting in, all play an important part in drug use, particularly if the teen has not learned the facts about drugs and alcohol (https://www.drugfree.org). Heroin use among teens continues to remain steady year after year. Heroin is a very powerful and addictive drug. However, can heroin use and overdose rates among Staten Islanders be curtailed with more public awareness and community involvement as key factors in addressing this problem? Staten Island teenagers may be attracted to heroin as a street drug of choice over alcohol or prescription painkillers which are now known as the gateway drugs to heroin.

Health Promotion is a Key Strategy for Prevention

No one single factor can address the problem of heroin use but community readiness and health promotion in our schools may be an important step in combating this issue. In 2014, 56% of 7-12th graders said their parents did NOT talk to them in the past month about the dangers of

underage drinking. If parents let their kids know that they disapprove of any drug/alcohol use, the child is less likely to use them, and a child who gets through his/her teen years without abusing drugs or alcohol is highly unlikely to develop the problem as an adult (https://www.drugfree.org).

The concept of prevention is a key component of modern community health practice. In popular terminology, prevention means inhibiting the development of the disease before it occurs. Primary prevention applied to a generally healthy population precedes disease or dysfunction, while secondary prevention is the early detection and treatment of adverse health conditions (Anderson & McFarlane, 2015). A main concern are the community's recognition of existing and further health-related problems, including the need to monitor and provide teaching to the targeted population. Programming for teen awareness and prevention of substance abuse is most often times implemented in school settings. However, when a community at risk has been identified, health information necessary to develop health-oriented skills, attitudes, and related behavioral changes will require further input from community participants and representatives.

Figure 2. Substance Abuse Information.

The Power of Opioids

Heroin is an opiate; a depressant that inhibits the central nervous system. Heroin can be administered in several ways: smoking, snorting, or shooting/injecting. Each time a user administers heroin, more is needed to get the same consistent high. It has been found that teens are more likely to first use heroin by means other than injection. Dr. Herb Kleber, Director of The Center on Addiction and Substance Abuse (CASA), says that "non-injection makes it psychologically easier to start, removing the needle barrier and letting the teen delude himself that such use is not dangerous or addicting." However, one can die from an overdose or become addicted from these non-injecting routes as well.

Those who are addicted to heroin may need to have frequent access to it (three times a day is typical), so they may frequently make excuses for having to be by themselves. After a dose, they may show signs of sedation, such as a slowed, shuffling gait or nodding off. If they do not or are unable to continue use, they may exhibit heroin withdrawal symptoms, which may include restlessness, muscle and bone pain, insomnia, diarrhea, vomiting, cold flashes with goose bumps, and involuntary leg movements.

For the chronic user, withdrawal may be severe and the accompanying cravings may be intense and long-lasting. While for most people withdrawal takes days, for some, the symptoms may last for months, and cravings may persist for years. Some users combine heroin with other drugs, especially cocaine and benzos, and this can result in other dangerous effects. Additionally, drug use among U.S. adolescents inched up between 2008 and 2009 (see Figure 3), in what federal officials called a troubling "warning sign" of teen substance abuse. Recent reports compare and contrast drug and alcohol use in college-age adults from 1994-2014.

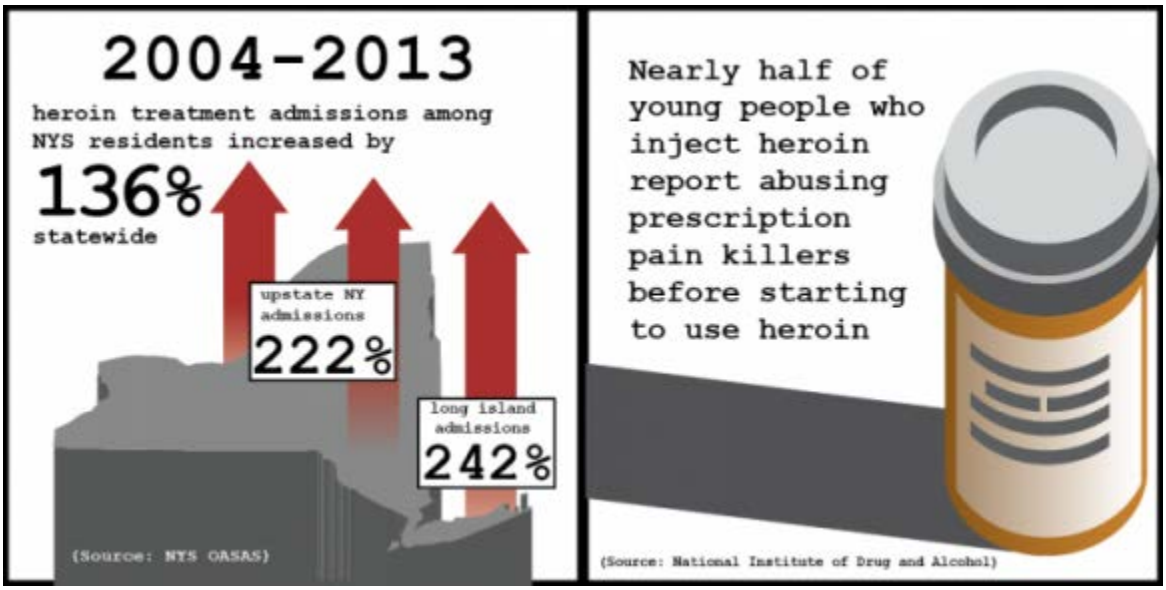

Figure 3. Rising drug use among U.S. adolescents from 2004 to 2013.

Behavioral Traits and Health Promotion

Healthy People 2020, a national health promotion and disease prevention initiative from the Dept. of Health and Human Services, specifically includes youth development in its goals and objectives: Improve the healthy development, health, safety, and well-being of adolescents and young adults.

Adolescents (ages 10 to 19) and young adults (ages 20 to 24) make up 21 percent of the population of the United States. The behavioral patterns established during these developmental periods help determine young people's current health status and their risk for developing chronic diseases in adulthood. Although adolescence and young adulthood are generally healthy times of life, several important public health and social problems either peak or start during these years.

Examples include:

- Homicide,
- Suicide,
- Motor vehicle crashes, including those caused by drinking and driving,
- Substance use and abuse,
- Smoking,
- Sexually transmitted infections, including human immunodeficiency virus (HIV),
- Teen and unplanned pregnancies, and
- Homelessness.

Because they are in developmental transition, adolescents and young adults are particularly sensitive to environmental—that is, contextual or surrounding—influences. Environmental factors include family, peer group, school, neighborhood, policies, and societal cues. These conditions can either support or challenge young people's health or well-being. Addressing the positive development of young people facilitates their adoption of healthy behaviors and helps to ensure a healthy and productive future adult population. Researchers further indicate that adolescent health is so important because adolescence is a critical transitional period, which includes the biological changes of puberty and the need to negotiate key developmental tasks, such as increasing independence and normative experimentation (https://www.healthypeople 2020.gov)

The Health Promotion Model

There are many examples of effective policies and programs that address adolescent health issues and many theoretical frameworks to choose from across the disciplines to support community-wide education programs in the middle and high school aged population. The Health Promotion Model designed by Nola J. Pender Ph.D. (2005) is a "complementary counterpart to models of health protection." It defines health as a positive dynamic state rather than simply the absence of disease. Health promotion is directed at increasing a patient's level of well-being. The health promotion model describes the multidimensional nature of persons as they interact within their environment to pursue health. Health promotion concepts are targeted at supporting individuals, families, and communities in order to reach their optimal health potential, even in a diseased or debilitated state.

The emergence of health promotion as the central strategy for improving health has shifted the paradigm from defining health in traditional medical terms (the curative model within a biological perspective) to a multidimensional definition with social, economic, cultural, and environmental dimensions (Pender, Murdaugh & Parsons, 2015). Health promotion is easily seen in both primary and secondary prevention. School settings and community organizations are typical venues to provide such information.

Forming the Coalition

In order for community members to battle an epidemic, they should unite and work toward a clearly defined goal. As defined by John Kania and Mark Kramer of FSG in 2011, collective

impact is the commitment of group of actors from different sectors coming to a common agenda for solving a specific problem using a structured form of collaboration. Organizations trying to create lasting solutions to a large scale problem must coordinate their efforts and work together moving away from the "isolated impact" to a collective impact. According to FSG the formation of a cross-sector coalition must meet five criteria in order to be considered collective impact. They are as follows:

- a common agenda,
- a shared measurement system,
- mutually reinforcing activities,
- continuous communication, and
- a backbone organization (https://ssireview.org.)

The Tackling Youth Substance Abuse (TYSA) Initiative is a cross-sector coalition aimed at driving major improvements in youth substance abuse on Staten Island, with the ultimate goals of decreased use of alcohol and prescription drugs, and youth making healthy choices. TYSA is a project of the Staten Island Partnership for Community Wellness (SIPCW), a non-profit 501(c) 3 organization. SIPCW provides staffing, administrative oversight, physical space, and serves as the backbone for the collective impact model.

The Staten Island Foundation has supported this initiative from its inception in early 2011. This effort began when Take Care Staten Island, the Staten Island Partnership for Community Wellness, and the Staten Island Foundation convened people interested in addressing community health issues, with the assistance of FSG, a global non-profit consulting firm. After looking at community health data, it became clear that Staten Island youth, when compared to the rest of NYC, were burdened by substance abuse issues, specifically prescription drug abuse and underage drinking. The emerging coalition adopted a high-level strategic framework in November 2011, including a common agenda with shared data, goals, and indicators, and a blueprint for implementation covering organizational structures and processes, to transform the plan into action, thus forming the Tackling Youth Substance Abuse Initiative. In May 2012, staff were hired and the Initiative was formally launched in September at a standing-room-only event at Staten Island Borough Hall (https://sipcw.org).

SIPCW has moved beyond traditional partnerships, engaging all sectors of the borough to test new models of collaboration. Staten Island's geographic isolation from the greater NYC metropolitan area produced a tight-knit community with a strong sense of family ties and connection to the borough. Partnerships are built on familiarity and trust. There is strong leadership from our anchor institutions such as schools, hospitals and well established businesses. Institutions of higher education have a vested interest in serving the community and building strong relationships in the areas surrounding their campuses. However, too few act to advance that interest. Many have field trips or episodic community projects, which do not contribute to a true partnership model, which must be ongoing and reciprocal.

Wagner College is a small, private, residential, co-educational, liberal arts college located on a wooded hilltop site on Staten Island, a borough of New York City. Over 2,000 students in more than 30 academic programs, five graduate and one doctoral program make up the Wagner

College community. Wagner is deeply committed to teaching and learning both within and outside of the classroom and campus. Our mission statement clearly states that Wagner works to prepare students for life as well as careers, by emphasizing scholarship, achievement, leadership, and citizenship. The curriculum is a comprehensive educational program that is anchored in the liberal arts, experiential and co-curricular learning, inter-culturalism and service to society.

Under the "Wagner Plan for the Practical Liberal Arts" faculty and students alike are creating, and living through, integrative and experiential teaching and learning covering a wide range of topics. "Learning by doing" is our guiding motto as the curriculum is closely linked to real world issues both locally and abroad. Wagner has the faculty, staff and student body that are prepared, and consistently called upon, to assist with community engagement, community research and participatory learning projects and programs particularly on Staten Island. SIPCW is one of many community organizations with whom Wagner has had a long standing relationship. This led to an invitation to join the TYSA initiative when it began in 2011.

SIPCW has over 124 organizations and stakeholders that have been active participants in many of their initiatives and are readily convened and engaged as issues arise. This has been the case with the TYSA project, because we have the participation of the Island anchor institutions mentioned earlier, as well as 19 substance abuse prevention stakeholders, 7 active design organizations, 6 law enforcement agencies, 8 government partners, 12 youth organizations, 5 faith based organizations and 8 nonprofits. Our elected officials also bring leadership and bipartisan support on health care issues. Our coalitions, with borough-wide reach, are particularly critical in the absence of a district public health office. The Staten Island community is a smaller landscape that is easier to navigate than in other boroughs, which is a strong advantage when using a community approach to a public health issue. Being geographically isolated with a smaller share of city services has taught us to quickly identify need, generate support, and activate strategies.

What Does TYSA Do?

SIPCW believes strongly in the power of the "collective impact" approach to inform strategies and activities. Collective impact efforts grow out of the recognition that key stakeholders across the community have a deep, vested interest in improving outcomes. The outcomes depend on a complex range of challenges that can only be improved through a systematic and coordinated approach owned by the many relevant players. Community readiness to address substance use should be directed at information gathered from key informants, interviews and focus groups to identify: (a) community knowledge of the problem (issues and efforts); (b) leadership; (c) community climate; and (d) resources. This is evident in how the work has been distributed in the various committees in the TYSA framework, which is accessible on their website. TYSA is a dynamic partnership of both private and nonprofit organizations, city and state government agencies, philanthropists, parents, teachers and teen volunteers, many of whom have been working to combat alcohol and drug abuse for years. The call to address this issue has never been stronger than now due to the recent surge in opioid drug abuse which has made national headlines.

TYSA has an executive committee, a steering committee, and 5 workgroups. TYSA has a dedicated project director and coordinator, overseen by the executive committee of the SIPCW board of directors. SIPCW is governed by its own bylaws. The strategic direction of TYSA is governed by a steering committee comprised of a broad range of community stakeholders. This committee is responsible for overall administration and management of the coalition's activities and serves as the governing body of the coalition. Decisions are made by consensus or a 2/3 majority vote although the project director and SIPCW board may assist with decisions on the day to day and financial activities. Membership strives to represent all community sectors and is intentionally diverse (local government officials, local business, schools, law enforcement, faith ,media, hospital and professional health care providers, parent advocates, partner coalitions, service/civic/volunteer groups, substance abuse prevention and treatment providers and philanthropy). Membership duties and responsibilities are clearly outlined for all members (https://sipcw.org).

The cross sectoral workgroups guide implementation of TYSA, including strategy –setting and refinement and stakeholder engagement. Each workgroup has 2 co-chairs who also serve on the steering committee. TYSA has created the following workgroups and their respective purpose:

- Social Norms creates data driven messaging and education to target the attitudes and behaviors of parents, youth and other stakeholders who influence youth substance abuse across the community.
- Alcohol Availability works to reduce the retail and marketplace availability of alcohol and develop policies that impact the availability of alcohol.
- Continuum of Care develops new approaches to screening, referral, treatment, and recovery that reaches all Staten Island youth in need.
- Opioid works to reduce the supply of prescription drugs (opiates) to youth for illicit use and increase access to opioid prevention services.
- Policy and Advocacy develops and advances a policy platform that impacts availability of substances, quality of treatment, and other key facets of youth substance abuse.

Each workgroup's role is to select evidence informed strategies to make progress against each outcome (short term) and to continuously improve strategies in an ongoing way (long term). They engage the community in meaningful and ongoing ways and focus on the implementation of strategies and activities (https://sipcw.org).

The TYSA Initiative focuses all of its member's efforts into achieving the same goals. Staten Island doctors, pharmacists, law enforcement officials, drug treatment providers, hospitals, educators and youth organizations are all working together to help one another, and the whole community, tackle youth substance abuse, according to Adrienne Abbate MPA, executive director of SIPCW and project director of TYSA. TYSA is not intended to be a new "program" nor an attempt to compete with any of our community's noteworthy health initiatives. Our aim is to build strong public awareness of the urgent need to tackle youth substance abuse, help to better align current efforts and fill necessary gaps, and create a strong strategic framework for improved collective impact (https://sipcw.org).

Coalition members responded to a capacity checklist survey in an effort to effectively implement environmental strategies. The steering committee orients new members joining the coalition to ensure that they are well aware of the work TYSA is doing and subsequently they can talk about it and promote TYSA at their respective organizations within the larger Staten Island community. Main objectives (and principal methods) of the coalition are listed as:

- Educates community on substance abuse issues (Parent Workshops, Community Forums, Media Campaigns);
- Collects and shares data and personal stories (Focus Groups, Surveys, Testimonials)
- Trains professionals (Pharmacists, Physicians, Youth Service Providers, Beverage Servers, Business Owners);
- Provides opportunities for youth and community ownership of issue (Youth Council, Workgroups, Town hall Meetings);
- Connects community with needed resources (Fact Sheets, Web Resources, Parent Toolkit, Treatment Resource Guide); and
- Advocates for systems-level change at the local, state, and federal level (Treatment services, Prescription Monitoring Programs) (https://sipcw.org).

Data collected from the Staten Island 2014 youth development survey (YDS 12-17 year olds) and the 2015 young adult survey (YAS 18-25 year olds) gave TYSA members clear information that there was overall evidence indicating a high lifetime prevalence of alcohol and prescription drug use among these groups. They also collected data on the total number of emergency department admissions for heroin and opioid overdoses at the two hospitals on Staten Island. The New York State open source data was accessed to calculate arrest rates for Staten Island. Schools, including the three college campuses on the island, were targeted with short FAQs that were displayed on busy bulletin boards and published on online formats in order to reach large student bodies. Last year Wagner College co-sponsored a forum titled “Staten Island’s Drug Crisis: a Community Conversation” and has held several Naloxone (Opioid Overdose Treatment) training sessions, which were open to the entire community, with the support of student groups and with funding from State Senator Andrew Lanza. R-24th senate district. Public service announcements on local radio and television stations also assisted in the messaging of the coalition’s mission, vision, and goals. St. John's University, Staten Island campus, The College of Staten Island (CUNY) and Wagner College have faculty and students collaborating on a variety of educational forums throughout the department of education, parochial and private school settings. A college-level prevention forum was held in mid-November (2016) which joined forces with the Office of Alcoholism and Substance Abuse Services (OASAS) and Assemblyman Michael Cusick’s office to host a substance misuse awareness panel at St. John’s University. The event was co- sponsored by Wagner College and The College of Staten Island and targeted college students, raising awareness about substance use on Staten Island. Speakers included student leaders and faculty from each campus, the DA, OASAS staff and TYSA backbone staff. Information was shared about the drug landscape on Staten Island along with consequences and next steps.

Conclusion

A progress assessment of TYSA was conducted by FSG in February, 2015. Of the many significant findings which were presented to all of the members of TYSA a few highlighted statements of that report are as follow:

- Overdose deaths decreased dramatically on Staten Island as collective efforts increased.
- Citywide, more youth enter treatment with opioid as their primary drug vs. other substances.
- More Staten Island youth are seeking treatment than in the past for their opiate use.
- Prescription rates are decreasing for the first time in five years.
- TYSA's partnerships and influence bring and align resources to the common agenda.
- Partners align their resources to TYSA activities.
- New resources acquired directly for TYSA's role in the common agenda, and
- TYSA has made significant progress in bringing and aligning resources to the common agenda.

TYSA membership is strong and has reached out to more key community members for greater representation of the Staten Island community. The steering committee currently has close to 80 members and in January 2017 a new executive committee will be elected. Island-wide activities representative of the workgroups are ongoing in the community weekly and monthly. In September, 2016 a large free outdoor community event called "Heroes of Hope" was held on the grounds of a partnering faith based organization. Many of the Island wide organizations were available to discuss and disseminate health promoting and drug abuse prevention materials. An annual health care expo was held at the Hilton Garden Inn on Staten Island (October, 2016) and TYSA members were present once again to provide information and were also participants in a panel discussion. A campaign to provide signage in the restrooms of restaurants and bars regarding heroin overdose information and interventions is underway. The youth task group is working to curtail the sale of alcohol to minors in deli's, bodega's and liquor stores with new signage. A PowerPoint presentation titled "Parents (Teachers) (Coaches), You Matter" is making its way into many Island-wide middle and high schools, and a proposal to provide containers to collect used syringes has been accepted by our Parks Department officials. Work continues with our local law enforcers and political figures to establish new policies and legislation regarding many of the variables related to illicit drug availability and use. District Attorney Michael McMahon has initiated changes in our criminal court system for veterans and first time offenders who struggle with substance use disorders.

The Warm Hand-Off program was launched at Richmond University Medical Center in November, 2016 which connects individuals that enter the emergency department (ED) struggling with substance misuse to resources. They are currently working towards launching this same program at Staten Island University-Northwell Healthcare System. TYSA backbone staff and available members of the steering committee will be attending the Community Anti-Drug Coalitions of America (CADCA) National Leadership Forum in Washington D.C. in February, 2017. They will be participating in a poster presentation concerning the collective impact approach to reducing substance misuse among teens at the conference. A redesign of the TYSA website is in progress on the SIPCW site. It will be comprehensive, with multiple features

and pages including, “get help,” “get informed,” “take action,” and will provide multiple resources for parents, youth and young adults, schools and providers. Students are assisting a local pharmacist to collect and properly dispose of unused medications within our senior citizen day centers and a recent collaboration with The Birds Nest Foundation (www.birdsnestfoundation.org) resulted in a video shoot to educate youth and young adults that heroin use via injection can lead to a higher risk of acquiring hepatitis C. Lastly, in respect to governance, the coalition meeting structure will host larger bi-annual committee meetings, to which steering committee members can invite other guests to attend. This will allow for the coalition to maintain the core group of the steering committee members for high-level, decision making purposes, while also encouraging more community members to get involved through events and to join workgroups.

Wagner College faculty, students and staff are involved in many one of the above-stated projects within the TYSA initiative, through curricular and non-curricular-based placements for the students. Professional development activities for students and faculty are aligned with organizational leaders and staff which allow for cooperative programs within the public, private and voluntary sectors. Wagner will continue to stay committed to the work that is necessary to curtail the ever rising incidence of opioid use, addiction and overdose rates in Staten Island. Wagner is also deeply connected to other programming in the greater community to forward educational improvements, economic development, social reform and health promotion. We are a anchor, placed by necessity, which is able to be a reliable and consistent participant in the needs of an ever changing local and surrounding community. Wagner College is a national leader in civic engagement, serving as a model for liberal arts education that connects teaching and learning with public work in and with our broader community.

References

Anderson, E.T., and McFarlane, J. (2015). *Community as partner. Nursing theory and practice 7th ed.).* Philadelphia: Wolters Kluwer Health.

Burroughs, W. S. (2003). *Junky*. New York: Penguin Group.

Collins, M., Ready, J., Griffin, J., Walker, K., and Mascaro, N. (2007). The challenge of transporting family-based interventions for adolescent substance abuse from research to urban community settings. *American Journal of Family Therapy*, *35* (5), 429-445. https://doi.org/10.1080/01926180601057515

Demographic and geographic variations in injection drug use. (2007, July 19). *The NSDUH Report.* Retrieved from https://oas.samhsa.gov/2k7/idu/idu

Drug Facts: high school and youth trends. (2014). *National Institute on Drug Abuse*. Retrieved from https://www.drugabuse.gov/publications/drugfacts/high-school-youth-trends

Frazier, I. (2014, September 8). Can Staten Island's middle-class neighborhoods defeat an overdose epidemic?*The New Yorker*. Retrieved from https://www.newyorker.com/magazine/2014/09/08/antidote

Goodman, J. D. (2014, April 18). In effort to fight overdoses, Staten Island officers will soon carry heroin antidote. In *The New York Times*. Retrieved from https://www.nytimes.com/2014/04/18/nyregion/staten-island-officers-will-carry-heroin-antidote.

Goodman, J. D. (2014, May 5). Heroin's new hometown. *The New York Times*. Retrieved from https://www.nytimes.com/2014/05/05/nyregion/heroin's-new-hometown-in-staten-island-antidote

Goodman, J. D. (2014, May 27). In expanded program, officers across New York City will carry antidote for heroin overdoses. *The New York Times*. Retrieved from https://www.nytimes.com/2014/05/27/nyregion/in-expanded-program-officers-across-new-york-city-will-carry-antidote-for-heroin-overdoses.

Goodman, J. D. (2014, August 28). Heroin's death toll rising in New York, amid a shift in who uses it. *The New York Times*. Retrieved from https://www.nytimes.com/2014/08/28/nyregion/heroins-death-toll-rising-in-new-york-amid-a-shift-in-who-uses-it

Healthy People 2020. (2015). Retrieved from https://www.healthy people.gov

Kania, J. & Kramer, M. (2011). Collective impact. *Stanford Social Innovation Review*, *9*(1). Retrieved from https://ssir.org/articles/entry/collective_impact

Lankester, T. (2009). *Setting Up Community Health Programs (3rd ed.)* Berkeley, CA: Hesperion Foundation.

Lavis, R. (2014, November 21). Heroin crisis raging in Great Kills; as families suffer, merchants are addicts' prey. *Staten Island Live*. Retrieved from https://www.silive.com/news/index.ssf/2014/11/heroin_problem_rages_on_in_gre

National Institute on Drug Abuse. (2016). Retrieved from https://www.drugabuse.gov

Pender, N.J., Murdaugh, C. & Parsons, M. (2005). *Health promotion in nursing practice (7th ed.).* Upper Saddle River: Pearson.

Shapiro, R. (2016, March 16). Staten Island left out of federal funding for opiod epidemic. *SILive.com.* Retrieved from http://www.silive.com/news/2016/03/staten_island_left_out_of_fede.html

Simontacchi, A.V. (2016, March 10).Silence=death: Lives lost, families devastated. *Staten Island Advance*. Retrieved from https://en.wikipedia/wiki/StatenIsland.

The Substance Abuse and Mental Health Services Administration (SAMSHA). Retrieved from https://www.samsha.gov

Unintentional drug poisoning (overdose) deaths in New York City, 2000-2012 (2013, September). *New York City Department of Mental Hygiene.* Retrieved from https://www.nyc.gov/html/om/pdf/2013/edb_unintentional_drug_poisoning_overdose deaths.pdf

Wilson, M., & Goodman, J. D. (2014, November 30). Heroin takes over a house, and mom, on New York's Staten Island. *The New York Times*. Retrieved from https://www.nytimes.com/2014/11/30/nyregion/heroin-takes-over-a-house-and-mom.html

Wrobleski, T. (2016, March 28). Sobering stats from DA McMahon underline heroin scourge. *Staten Island Advance.* Retrieved from http://www.silive.com/opinion/columns/index.ssf/2016/03/sobering_stats_from_da_mcmahon.html

Young, S. (2017) *Nola J. Pender's Nursing Theory: Health Promotion Model*. Retrieved from https://youngsteve.wikispaces.com/ Nurse+Theorist+Nola+Pender

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