Reinventing the Role of the University Researcher

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This study examines the structuring of university–community research partnerships that facilitate theoretically grounded research while also generating findings that community partners find actionable. We analyze one partnership that positions university-based researchers as members of a team working to create, maintain, and use a longitudinal multiagency data source. Through our focus on the evolution of this university–community collaboration, we show how researchers established their commitment to a mutually beneficial exchange and how data-driven action emerged when community agencies assumed ownership and prioritized action throughout the research process.

Keywords: case studies; collaboration; decision making; educational reform; higher education; leadership; observational research; research utilization

Although the pressing problems of communities benefit from the lenses that academic researchers employ, and integrating theory with real problems greatly enhances scholars' research (Boyer, 1990), universities and community institutions often find it difficult to work together in mutually beneficial research partnerships. At the root of these challenges is the incentive structure built into most research universities, which rewards scholarship over community engagement and theory building over applied knowledge (Firestone & Fisler, 2002; Gronski & Pigg, 2000; Jaeger & Fauske, 2006; Marullo & Edwards, 2000). Although practitioners rely on trusted relationships for research interpretation and use (Tseng, 2012), inequitable power dynamics, ineffective communication, and organizational differences make long-term university–community collaborations difficult to sustain (Corrigan, 2000; Miller, 2005; Sanders & Harvey, 2002), and studies have identified political, structural, and practical barriers to the utility of academic research outside academia (Davies & Nutley, 2008; McLaughlin, 1975; Weiss, 1978, 1979).

Although universities have struggled to shift away from one-directional outreach (Carnegie Foundation, 2006; Mayfield & Lucas, 2000), public opinion has shifted (Kristof, 2014) and university leaders are beginning to acknowledge the importance of grounding research in community problems (Hennessy, 2010; Salovey, 2014). Some scholars have worked to establish and promote mutually beneficial, two-way exchanges between universities and communities (Boyer, 1996; Carnegie Foundation, 2006), engaging in practices such as public scholarship, civic literacy scholarship, participatory action research, public

information networks, and community partnerships (Barker, 2004; Sandmann, 2008).

This study analyzes one community partnership, the Youth Data Archive (YDA) at Stanford University, which positions university-based researchers as members of a collaborative team working to create, maintain, and use a longitudinal multiagency data source. Recent studies suggest that data integration and dialogue play vital roles in policymaking and that university partners are critical to the development and use of data integration systems (Culhane, Fantuzzo, Rouse, Tam, & Lukens, 2010). Our analysis highlights the relationship-based challenges to creating and using data integration systems and how these may be overcome.

The YDA embodies a "youth sector" approach in that youth-serving organizations—schools, after-school programs, public agencies—come together to conduct research to better understand the role of the community as a whole in helping young people thrive (McLaughlin & London, 2013b). The university-based team links individual-level administrative data across sources and over time to create a longitudinal record of students' schooling, program participation, and public service receipts. Participating agencies collectively identify research questions that no agency can answer alone, and then the university-based team supports agencies in understanding research findings. This collaboration enables community partners to make data-driven

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policy and programmatic decisions to improve youth outcomes. When questions arise that are outside the scope of existing administrative data, the university team occasionally conducts supplemental survey or qualitative research. The YDA was developed by one full professor and has been maintained and supported at the university by a staff of non-tenure-track researchers, research assistants, and community engagement specialists, henceforth referred to as "the YDA team."

In this article, we examine the processes through which university-based researchers build and structure relationships with the community in order to facilitate theoretically grounded research that generates actionable findings. The platform for collaboration is shared data, but the lessons learned about the process of university–community collaboration for action-oriented research apply across other contexts. Action, in the context of the YDA, refers to instrumental uses of research—direct changes in policy, practice, or programming or the use of analyses in discussions about making such changes. This study extends current scholarship on university–community research partnerships and data integration systems by taking a developmental approach that considers the structures for building relationships and creating partnerships with the goal of informing action.

University–Community Partnerships

University–community research partnerships have the potential to be mutually beneficial. Integrating theoretical work with real-life problems validates scholarly research (Boyer, 1996; Butin, 2007). Meanwhile, researchers provide relevant theory and analyses to help policymakers and practitioners reflect on current policies and practices, inform grant writing and reporting, and guide change (Bryk, Gomez & Grunow, 2011; Ostrom, Lerner & Freel, 1995; Suarez-Balcazar et al., 2004). Researchers can also support agencies in developing their own evaluation tools (Butin, 2007; Ostrom et al., 1995).

Yet there are challenges to establishing mutually beneficial research partnerships. Often the research questions posed by academic researchers do not match the needs of the communities in which the research occurs. The lengthy process of conducting rigorous research may not align with community partners' timelines for incorporating findings into decision-making processes. Further, the short-term nature of research grants may limit partnerships (Butin, 2007), and the "publish-or-perish" mentality provides little incentive for faculty members to engage in applied research or prepare products aimed at community audiences (Firestone & Fisler, 2002; Gronski & Pigg, 2000; Jaeger & Fauske, 2006; Marullo & Edwards, 2000). More practically, researchers and practitioners possess divergent meeting styles and communication preferences (Miller, 2007), organizational leadership (Bringle & Hatcher, 2002; Johnson & Fauske, 2005), and organizational discourse (Kirschner & Dickinson, 1996).

Successful partnerships are founded on mutually agreed-upon and explicit goals for both scholars and practitioners (Denner, Cooper, Lopez, & Dunbar, 1999; Holland & Gelmon, 1998; Suarez-Balcazar et al., 2004). University researchers may use intermediaries, such as the YDA's community engagement specialists, to act as translators of researchers' technical jargon and methods (Tseng, 2012; Weerts & Sandmann, 2010).

Creating products for multiple stakeholders, including reports and presentations for the community, is also essential (Denner et al., 1999). As flawed collaborative processes and inadequate information sharing can frustrate productive partnerships (Bryk & Rollow, 1996; Sanders & Harvey, 2002), mistake making and relationship repair are endemic to collaboration (Bringle & Hatcher, 2002; Goldenberg & Gallimore, 1991), with early mistakes paving the way for future learning (Reardon, 2000).

Relationships for Research Use

Although the literature has focused on how research can be differently conceived, conducted, and presented to enhance use (Nutley, Walter, & Davies, 2002, 2007; Shulock, 1999), with the emerging technological capacity to link data across agencies, the role of community users demands more attention (Mandell & Sauter, 1984; Rich, 1997). Research users are embedded within overlapping ecologies of interpersonal relationships, organizational dynamics, and local and national policies (Coburn, Honig & Stein, 2009; Nutley et al., 2007; Tseng & Senior Program Team, 2008). At the interpersonal level, trust is paramount (Daly & Finnigan, 2012). Within organizations, structure, capacity, and expertise matter (Culhane et al. 2010; Honig, 2008; Moynihan & Handuyt, 2009). Collaborations across sectors introduce another layer of influence on how research gets used (Tseng, 2012). Bryk et al. (2011) posit that structuring "networked improvement communities" around targeted outcomes and iterative cycles of "plan-do-study-act" is critical to achieving systemic reform. Like Bryk et al., this study investigates linkages between the structuring of networks and their efficacy using data to generate action.

Since its inception, the university-based YDA team has been guided by the theory that "change as the result of data integration is achieved not through the data itself but rather by creating a structure for building relationships and knowledge" (McLaughlin & O'Brien-Strain, 2008, p. 314). By focusing on the process of structuring multiagency collaborations and highlighting the role of community users, this study addresses critical gaps in the literature. We document the evolution of the YDA collaboration over its initial years and demonstrate that through a commitment to a mutually beneficial exchange, data-driven action emerged when community agencies assumed ownership and prioritized action throughout the research process.

Data and Methods

This study focuses on the initial 3 years of the university team's collaboration with nine youth-serving organizations in one San Francisco Bay Area community to build and use the YDA, a longitudinal integrated data system. We focus on the initial years (2007–2010) of the initiative to illuminate the care involved in building the relationships and trust required to share data, agree on research questions and methods, and establish a common view of the meaning of findings. As the YDA is ongoing, many analyses and partnerships in this community and others are not represented in this article. McLaughlin and London (2013a) provide an account of additional projects undertaken with the YDA.

Table 1
Community Partners and the Data They Shared

Agency Type	Type of Data
County health department	Mental health caseload, including diagnosis and treatment
	Pre-to-3 home services, including number and types of services received
County human services agency	Child welfare caseload and placement
	Foster care placement and duration
	TANF participation and services
	Housing assistance
	Welfare
	Medicaid
County office of education	Court and community school enrollment dates
	Preschool for All enrollment
	Special education identification
School districts	Attendance
Elementary	Grades
High school	Credits
Unified	Standardized test scores
	English language development scores
	Demographics
	Parent education
	Free lunch status
	Special education identification
	Disciplinary action
	Student survey data
City agencies	Parks and Recreation, including program enrollment
	Public Library, including library-sponsored programs
Community-based organizations	Sports, arts, and enrichment program participation
Recreational	
Academic enrichment	

Note. TANF = Temporary Assistance for Needy Families.

Table 1 lists all agencies participating in the YDA during the study period and the data each contributed to the YDA. Table 2 lists the projects undertaken, the agencies that collaborated on each, the partnership structure, and subsequent actions that resulted directly or indirectly from the research. All project topics were determined in collaboration with, or at the behest of, community partners. Students in public schools form the population for most YDA analyses. The three school districts included in this study serve predominantly low-income and Latino/a students.

To understand the evolution of this university–community collaboration, we analyze data from participant observation and document analysis. YDA team members acted as participant observers, documenting all meetings and public forums that included the YDA team and community partners for each project, such as meeting with individual agencies to discuss prospective partnerships, convening multiple agencies to brainstorm research questions, survey data collection, and communitywide forums to share findings. Some meetings were initiated by the YDA team; others were initiated by partners. Data sources include field notes, meeting minutes, and e-mail exchanges between the YDA team and agency staff members for each project. We collected between 21 and 212 data sources from each

participating agency (three agencies had 20 to 45 sources, and all others had more than 100 sources) and included all sources in this analysis. The number and type of data sources analyzed for each project varies according to the duration and scope of the collaboration.

YDA team members were eager to learn from their experiences in community partnering and therefore put tremendous effort into documenting the YDA process. Still, concerns about participant research bias are reasonable. It is possible that researchers were unable to document partners' perceptions of their work because these perceptions were not shared with the team or the team was not receptive to hearing them. On the other hand, because the YDA harnesses community data, partners felt responsibility for and ownership over the data and engaged in honest exchanges with the university team—documented here—when they felt their best interests were not being served.

To analyze the data, we developed a coding system consistent with the grounded theory approach (Glaser, 1969). Initial codes captured challenges the YDA team faced at various stages of the partnerships. The next iteration of coding focused on relationship building and communication, the two key themes that emerged from the data and seemed to underlie the challenges

Table 2
Primary Youth Data Archive Analyses, 2007–2010

Project	Participating Agencies (not all agencies contributed data)	Partnership Structure	Action
Linking fitness to academic achievement	Elementary school district High school district	Working group of staff brought together for analysis	Elementary district policy change to encourage physical activity as a strategy to improve test scores Elementary student health initiatives that improve physical education Elementary District receipt of funding for coordinated school health
Examining educational outcomes for foster youth	County human services agency Elementary school district High school district Community-based advocacy organization Juvenile court Community foundation	Multiagency working group meeting in advance of analysis	Information sharing about need to support foster youth in schools (beyond participating school districts) Influence on statewide legislation
Tracking academic progress of alternative school students transitioning into comprehensive high schools	County office of education High school district Community-based organization	Multiagency working group meeting in advance of analysis	Creation of program to support students' transitions from alternative to comprehensive high school
Linking youth participation in community-based organization to English language development among English-learner students	Community-based organization Elementary school district	Little collaboration	None known
Examining middle school students' motivation	Elementary school district	District administrators and school staff brought together for analyses	Continued interest in tracking students' motivation and perceptions of their classrooms over multiple years

observed. These themes permeate the analysis and investigating them led us to lessons about the ways hierarchical organizational contexts complicated collaboration and which collaborative structures were critical in linking data to action. Finally, we identified two phases of collaboration, each requiring distinct strategies for managing the challenges endemic to that phase. In Phase 1, researchers had to demonstrate their commitment to prioritizing community agencies' goals, establish protocols and trust to facilitate data sharing, and build community capacity for generating actionable research questions. This groundwork made possible a second phase, during which researchers continued to deepen and expand relationships with community partners, using existing ties to reposition themselves as invited collaborators in community-driven working groups rather than as leaders or conveners.

Evidence

We present our findings in two sections that correspond with the two phases of building and using the YDA in its initial 3 years. These are not necessarily chronological phases, as partnerships with individual agencies progressed differently; rather they represent phases of the YDA team learning with partners how to engage in collaborative and actionable research. Although outside the scope of this article, 7 years prior to the first YDA meetings, the university team partnered with city leaders and one

community partner to develop a youth leadership program, establishing the university team's commitment to sustained community engagement and impacting the nature of initial conversations about the YDA.

Phase 1, the introduction of the YDA into the community, is characterized by the YDA team's reinventing the role of the university researcher to both the university and community. The team adopted a "community-knows-best" approach and sought to recognize the myriad ways that the goals of the community could inform research goals. In this phase, the university team worked to convince community agencies to share data and coached agencies on how to ask cross-agency questions that were both researchable and actionable. As part of this exploratory process, and because administrative data are notoriously limited, the team began to collect, link, and analyze supplemental survey data alongside school records. Although the university team collaborated with practitioners to set mutually beneficial and explicit goals, translated theoretical jargon into everyday language, and produced products for community audiences, the team still experienced a nonlinear process of relationship building, including many instances of mistake making and relationship repair.

The second phase focused on deepening relationships between the YDA team and the community. Early YDA analyses helped the university team develop a trustworthy reputation, expand relationships with existing partners, and begin partnering with additional agencies. Phase 2 also demonstrated how

high-quality, relevant research sparked the community's desire to act on findings, creating an iterative cycle of research informing action and generating subsequent research questions. We find that actionable research was driven by a community need, with questions generated by community partners and researchers embedded as collaborators rather than leaders. The analyses conducted and lessons learned in these early phases were critical to the YDA's ability to grow deeper within this community and expand across other communities.

In both phases, the YDA team learned important lessons about the value of partnering with community agencies to inform actionable research. The purpose of the YDA team's extensive documentation of the process was to reflect on the efficacy of this nontraditional approach to quantitative data collection and analysis and use the information to advance its own practice as well as practices in the field.

Phase 1: Reinventing the Role of the Researcher

Prioritizing community goals. The YDA initiative grew out of the understanding that community agencies possess a wealth of data and that by harnessing this information in new ways, they could learn more about youth in their community. Rather than approaching partners with a set research agenda that addressed knowledge gaps in the academic literature, the YDA team began meeting individually with agency leaders to hear their needs and interests and began attending meetings of established working groups in the city and county. This approach was new to some on the research team who were not accustomed to having their research agenda defined in nonacademic circles. On the community side, potential partners were intrigued by the concept of the YDA but expressed concerns about data security and protecting their reputations. Several partners shared that they did not want findings they had not vetted reported in the media and were concerned their data might be used for research without their knowledge.

The YDA team took partners' concerns seriously and developed a data use agreement, reviewed by the university's and agencies' attorneys. The following policy was vital to building partnerships that benefited both the university and community:

> Each agency that contributes data helps identify the research questions, interpret results, and review analyses before publication. No analyses are done without explicit approval of an agency representative, and agencies may remove their data from the YDA at any time. Agencies also help decide how results will be shared and in what format. With permission, we may share findings with other partners, publish and post briefs online, or disseminate to the broader research and policy community. (YDA, 2012)

This policy was communicated to partners, both verbally and in writing, to reassure them that they had control over what analyses were conducted and how and if the results were shared. Still the confidentiality and security protocols were not satisfactory for some partners, and they expressed ethical concerns about sharing information on individual children in the YDA without written parental consent. This was mainly a concern for smaller organizations that are not required by law to report outcomes about the individuals they serve.

Another way that the YDA team affirmed its commitment to the community was by collecting data or conducting small within-agency analyses as favors to establish relationships with partners, even if the work did not meet the cross-agency criteria of the YDA. This was not initially part of the YDA plan, but the university team discovered that these small favors helped their partners see that they were genuinely focused on helping the community. For instance, agencies needed to report specific data analyses to funders and policymakers. The university team responded to many requests, such as this e-mail from an executive director:

> We are fast approaching the end of our fiscal year, and I was hoping you might be able to run the same membership analysis you did last year with the new data. We should have the new info in 3 weeks or so. Would that be possible? (personal communication, June 1, 2008)

The YDA team met such requests in the early stages of the initiative but, as relationships were established, processes were solidified, and the team became busy, refrained from conducting them on an ongoing basis. This willingness for the YDA team to commit to making the partnership beneficial to community agencies is one trademark of the reinvented role of the university researcher.

Sharing data. An initial challenge came in navigating the hierarchical authority structures within agencies in order to obtain administrative data. Legal contracts outlined the processes through which the YDA protected the security of sensitive data and laid groundwork for building mutually beneficial partnerships. Although buy-in was required by the agency's highest ranking official, data managers were often unwilling to share data. For example, after initial conversations with an executive director about participating in the YDA, the university team followed up with the agency's data manager, who, as stated in this e-mail, wanted evidence of strategies for protecting the agency's data:

> Just wanted to check in on the status of getting a security document for the place responsible for the data. Also, are you able to give us a specific contact person in the [county agency] so that we can discuss with them how they feel the confidentiality issues play out for patients/clients? These would really help our organization to come to a decision on participation. (personal communication, October 13, 2009)

A month later, the data manager was still struggling with the decision:

> We are still navigating County personnel to check on their rationale. It's proving somewhat challenging as some of those we've spoken to seem to believe they're only handing over aggregate data, which I know can't be true. We're trying to have a substantive conversation with [staff] in the [county agency], and will get back to you when we've managed to progress beyond serial voicemails. (personal communication, November 16, 2009)

Data managers were often protective of their agency's data, even when their supervisors directed them to release the data for YDA

use. They sometimes questioned the need for outside researchers or did not prioritize data extraction and requests for meetings to discuss shared data. For example, after months passed without receiving promised data, a YDA researcher e-mailed the agency's senior staff to explain the need to transfer data in order to proceed with promised analyses. The senior staff replied, saying, "Thanks . . . I was unaware that the data transfer has not occurred" (personal communication, December 11, 2007).

In other cases, technical and logistical issues prevented data transfers. For example, a data manager did not respond to multiple phone and e-mail requests from a YDA researcher and finally e-mailed this response:

> Since I only do the data extracts once a year…it is a big switch of gears for me. With multiple [sites] and [databases] . . . it is not easy for me. I will try to focus on it next week and start sending you some extracts. (personal communication, September 4, 2008)

These delays made it difficult for the YDA team to honor project timelines. Data managers were generally not part of goal-setting conversations for the YDA, but relationships at this level had the potential to threaten partnerships. Delays due to distrust, lagging communication, and logistical issues caused some projects to lose momentum.

Even with these setbacks, the university team was committed to seeing the YDA come to life and made adjustments in its approach in order to establish relationships with each of the partner agencies included in this analysis. One such adjustment was the inclusion of a senior community engagement specialist on the YDA team, who was not a researcher but was "bilingual" in that she could communicate equally well with both the community and university researchers.

Once the two-way nature of the partnership was established, data managers often became engaged partners who were proactive about data sharing and contributed to conversations about future analyses. For example, the data manager quoted above e-mailed the YDA team later the same year, "The end of the school year is here! I want to ask you if I will need to run another report for you? Let me know so that I can do this in the next couple of days" (personal communication, June 16, 2009). The significant investment in relationship building paid off over time and proved to be one advantage to engaging in long-term collaborations.

Generating actionable research questions. During the first phase of the YDA, challenges arose as the university team communicated with partners about research questions and action plans, and many projects fell short of the goal of being both researchable and actionable. Agency staff members were experts on the issues and the youth they worked with. However, many lacked expertise in formulating research questions, particularly cross-agency ones, to inform community goals for youth outcomes rather than their own individual agency goals. As one agency leader voiced during a convening to discuss research findings, "If I don't know what to do with this data, then [I am] not sure why [I] want more" (meeting notes, January 19, 2010). The YDA team could transform a broad question or area of interest into a researchable question but could not always know what would make a question actionable. The link between a researchable and actionable question required conversations in which both the YDA team and agencies shared their expertise.

Another challenge to creating actionable research is the limited nature of the content of administrative data. As a result, some YDA analyses were seen by partners as oversimplifying the problem. For example, in one meeting between the YDA team and community partners, field notes captured agencies' frustrations:

> The working group expressed concern that the analysis suggests that [being disadvantaged leads to] worse outcomes, but it doesn't take into account the factors that [lead to being disadvantaged]. (field note, November 21, 2008)

This was followed by concerns that publishing results would make the agency look as if it were unaware of underlying factors that lead to disadvantage. In other cases, simply "being researched" was of great concern to agencies, and the YDA team needed to assuage agencies' fears that YDA research would be used to make them look bad, as shown in field notes:

> [Administrators] would like to have a meeting with us to go over all the . . . results before we meet with the [other partners] to be aware of what is in the data and to help us think about how to communicate anything that might raise any concerns. (field note, August 20, 2009)

Having community agencies retain control over the release of findings proved vital to building and sustaining relationships without compromising research integrity. This policy of requiring sign-off by all contributing agencies is not the norm among university researchers and has the potential to limit their freedom to publish. Yet, no YDA analysis was blocked from publication. When partners had concerns, these were addressed with added explanation in final products rather than by omitting or revising findings.

The tension between the limits of administrative data and the questions posed by community partners resulted in the YDA team's first supplemental survey project. Even though the motivation for the survey came from teachers and administrators and the format could circumvent the limited content of administrative data, the YDA team struggled to make the project researchable and actionable. Initially, the YDA team developed a survey instrument to measure partners' desired constructs based on existing literature. But administrators did not agree with the wording of questions in established scales. The YDA team was not able to put practitioners' needs first and maintain the integrity of the survey within the academic field. In an effort to demonstrate its commitment, the YDA team acquiesced to administrators' concerns and reworded some survey items. Consequently, the YDA team was unable to use those items to compare to validated scales in academic publications.

Although the YDA team worked to align the survey with practitioners' interests, some administrators were still dismayed by the survey content and findings, as captured in field notes from a meeting between the university team and school personnel:

This is an imposition, these are outsiders, constructs [are] irrelevant in this budget crisis, data do not match what [we] know to be the truth. (field note, January 19, 2010)

In the context of No Child Left Behind and with schools in Program Improvement status, school officials were understandably wary of outsiders' assessments. Just as the YDA team initially invested in relationship building, it subsequently invested in relationship repair. In this case, it acknowledged officials' concerns and adapted the next iteration of the survey to reflect reforms under way in the district. The team also adapted the data collection plan and the way findings were shared, and the district reaffirmed its interest in collaboration.

Despite the challenges, some partnerships generated questions that were both researchable and actionable. For example, the following questions—documented in meeting minutes—emerged from a gathering of directors of multiple agencies with the YDA team:

The group was reminded that a Steering Committee . . . was convened . . . for the purpose of finding ways to improve the academic performance of [target] youth. It was agreed at that meeting that an initial objective would be to get, for the first time, accurate, aggregate data on how kids [served by multiple agencies] fare academically, similar to the way that the county tracks the academic performance of ethnic groups. (meeting minutes, October 7, 2008)

Actionable research questions identified in this meeting included the following:

In order improve academic outcomes for [a target group of youth] it is important to: understand how they are performing academically as a group, and get a better sense of the profile of kids who are successful and those who aren't. (meeting minutes, October 7, 2008)

As captured in field notes, several months later, another working group identified research questions that included suggestions for action before the research was even conducted, demonstrating the development of the YDA process:

Do students who [transition] demonstrate high levels of tardiness, absences, or negative behavior immediately? If students show high levels of absences or negative behavior, this may indicate the need for some sort of transitional help. If students who [transition] attend regularly but show little academic improvement, this may indicate the need for a different learning environment. (field note, January 12, 2009)

During the second phase, the YDA team built on lessons learned about conditions needed for analyses to lead toward action, and high-quality, relevant research sparked an iterative cycle of research informing action.

Phase 2: Deepening Relationships

Deepening relationships. The strong relationships built in Phase 1 helped promote new relationships—and therefore more complete data—in Phase 2, as the YDA team called on current data

contributors as references for new partnering agencies. For example, one agency's data manager sent the following e-mail to another agency on behalf of the YDA team:

It's no problem for [the YDA team] to have full access. . . . They are experienced data analysts/researchers so I am confident they won't compromise the data in any way. . . . [They] have a good track record. (personal communication, July 31, 2008)

Contributors who were once skeptical became allies in linking additional agencies into the YDA. As the YDA gathered momentum and the university-based team proved itself trustworthy, relationship building grew easier.

Repositioning researchers. Although mutually beneficial relationships were necessary to develop the YDA, relationships alone were not sufficient to transform analyses into action. In the early stages of the YDA, the university team took a leadership role, working largely with data managers. This meant that when results were shared, the community leader in the best position to act on the findings was not present. Over time, it became difficult to maintain collaborative partnerships with the YDA team as the leader. Without a sense of ownership on the part of community agencies, questions could not be designed to be actionable.

The structure of the collaboration between the university team and community agencies determined the ways the community acted on findings. There were two primary structures of YDA partnerships. In one, research questions emerged from ideas within one agency but required data from one or more other agencies. In these cases, the YDA team convened relevant partners and brokered relationships, and agencies struggled to assume responsibility for action plans, even though they were willing to share their data. The following e-mail from one administrator illustrates this dilemma:

These aren't our questions and aren't really our priority, we have no problems with you using our data but don't have the capacity to really participate, so just make sure we see the results before anything goes out. (personal communication, November 24, 2008)

In particular, nearly all analyses involved school district data because these were the most complete record of youth and their demographic characteristics. However, district staff could not invest in every conversation about analyses that involved their data. Instead, they approved the topic, data sharing, and analytic plan and then selectively participated in discussions about findings and implications for action. Although action may have been possible within the requesting agency, a cross-agency response was not.

In a second arrangement, representatives from multiple agencies created a working group to address a specific issue and approached the YDA team. The YDA team was integrated into the working group as a partner rather than a leader, and the responsibility for guiding the process and resulting action remained in the hands of community agencies. The YDA team shared its data analysis expertise and worked with the group to ensure findings were informative and presented in a useful way.

Field notes from one working group meeting show the group's collective leadership:

> The working group's purpose was reiterated: examine methods for tracking academic outcomes on an aggregate level. The objective of the day's meeting: decide whether to authorize [the YDA team's] preliminary analysis using the YDA data matching methodology. (field note, November 21, 2008)

Because leadership was assumed by the community, the continuity and momentum required for action were embedded in the working group. The working group arrangement also allowed that the practices of the group were dominated by the organizational styles of the agencies rather than the university. Casting the YDA team as invited guests reinforced community ownership of projects and maintained the group's intentions for action.

Informing action. Another beneficial attribute of the working-group arrangement was that partners began thinking about how data would inform action from the beginning of the collaboration. Members of working groups discussed how their data could be used to reach beyond their own programs, who beyond their collaborative needed to be included to launch or sustain change efforts, and how they would work together to make change happen. For example, the following e-mail from an agency leader shows how analyses informed action:

> Now that [partnering agency has] seen how particularly vulnerable this population is, they need to begin working closely with [other agencies] to better understand this population, its unique challenges, and ways to help better support it. Our office, in collaboration with all the relevant groups, is working on initiating this type of education and collaboration at all levels of the education community—school board, super[indendent]s, principals, administrators, teachers, and parents. (personal communication, September 24, 2009)

Prioritizing the action plan in the initial stages of collaboration let this goal inform the structure and process of the group.

After the analysis and formal inclusion of the YDA team in the working group concluded, partners continued using findings. For instance, in an analysis of foster youth's educational outcomes, partners continued to use the data to advocate for better services and data sharing. This led to a pilot program providing orientation and support for foster youth making school transitions (Castrechini & Sanchez, 2013). Years later, we learned of state legislation aimed at decreasing suspensions and expulsions for foster youth, influenced by analyses the YDA team conducted as part of a working group, and the YDA team was invited to present at a statewide summit on foster youth education.

In another example, findings from a YDA analysis of physical fitness and academic achievement data—which found a strong link between the two—were incorporated into school district policy. Subsequently, the district's formal plan submitted to the state included fitness as a strategy for improving academic achievement (Gerstein & Christensen, 2013). Further, the district partnered with a local health care district and received funds for two student health initiatives in its schools.

It is important to note that although the structural arrangement of the working groups was ultimately successful, it would not have been possible earlier in the YDA initiative. The YDA team had to establish itself as trustworthy and committed to mutually beneficial exchanges as well as coach the community with regard to crafting researchable and actionable questions. Until the community trusted that the YDA team would offer it what it needed and saw the value of having the YDA team as a partner, agencies would not fold YDA team members into their collaborations. Thus although many early university–community partnerships using the YDA did not lead to action, they were vital to reinventing the role of the university researcher, building and deepening relationships, and creating the conditions that would make future collaborations possible.

Discussion

This analysis of the evolution of the YDA during its first 3 years highlights the importance of practices and structures critical to building mutually beneficial university–community research partnerships. Our results echo those from prior studies, finding that the YDA team had to establish itself as thoroughly committed to two-way exchange and ongoing communication and that mutually agreed-upon and explicit goals for all parties gave a solid foundation to collaborations. Trust building at all levels of agency hierarchies was essential, particularly with data managers.

In addition, our findings extend prior research by examining how multiagency collaborations are structured and whether they generate community-driven action. We find that trusting relationships between the university and community as well as among collaborating agencies are critical to creating the conditions for analyses to generate action. Findings were more likely to lead to action, and consequently were relevant to larger framing discussions in the field, when agencies became accustomed to working together, identified data as a tool for addressing problems, and structured their collaborations to facilitate action from the outset.

When the YDA team was invited to contribute to community-organized working groups, the research findings became more actionable. We attribute this to three factors: Community partners framed the collaborative and the research agenda from the start, partners played leadership roles throughout the process and were positioned to spearhead action, and action was prioritized from the beginning so all relevant agencies were invited to join. After the YDA team established its commitment to mutually beneficial exchange, data-driven action emerged when community agencies assumed ownership and prioritized action throughout the process but relied on the data-linking and research expertise offered by the university team.

The YDA case stands apart from other types of university–community partnerships. Because it uses confidential data sharing as a platform for collaboration, it is high stakes for both the community and university. At the same time, both the university and community stand to benefit from the partnership. The community benefits from the interagency data repository because leaders can ask research questions that draw on data from multiple sources without having to negotiate the logistics of merging, storing, and protecting sensitive data. These analyses not only facilitate interagency collaboration but also make possible

data-driven action. Communities also benefit from the YDA team's coaching on how to ask researchable and actionable questions, assistance in interpreting findings, and production of reports that agencies can use with funders and constituents. The university benefits not only by having access to a longitudinal interagency data set, but because community agencies drive the research questions, YDA team members produce relevant and cutting-edge analyses (e.g., London & Castrechini, 2011; London, Gurantz, & Norman, 2011). The benefits are possible only if the high-stakes issues of data confidentiality, data use and ownership, and release of findings are addressed up front to the mutual satisfaction of university and community partners.

Due to the extended nature of the relationship-building processes that enable analyses to lead to action and the infrastructure necessary to support a linked data system, such partnerships are inherently long-term initiatives. University-based researchers are not simply coaching to build capacity; they are also housing large data files that include sensitive data, such as receipt records from foster care and mental health services. The salience of both contractual trust (i.e., legal documents) and relational trust (i.e., interpersonal interactions) cannot be understated. In addition, because data-linking partnerships are relatively new, the YDA team spent considerable time capacity building with agency staff members regarding what the possibilities of such a project could be. As the age of big data continues, this may become less necessary.

The YDA was built on the notion of putting the community first. Due to the risks to community agencies involved in sharing sensitive data, and the power of the university researchers housing and analyzing those data, YDA team members had to repeatedly reaffirm their willingness to listen to and act upon the needs and desires of community agencies. Although this commitment paid off in the form of sustained relationships and a growing data archive, it also has costs. Given the incentive structure of research universities that prizes peer-reviewed academic publications, the costs to academics of sustaining such a partnership may be prohibitive. The potential for peer-reviewed publication can be limited due the nature of the analyses or relevance of the questions posed by partners to the broader field. Still, the YDA experience suggests that although relationships take time to establish, the yield is worth the investment. Researchers not only gain exclusive access to rich and varied data; they also have the benefit of conducting work that drives community improvement. University partners can learn invaluable lessons from the community that ultimately contribute to the strength of their scholarship.

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