How integrated data approaches can bridge institutional silos and deepen relations among youth-serving organizations.

# data use and inquiry in research-practice partnerships: four case examples



John W. Gardner Center for Youth and Their Communities

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There is growing support for education researchers to work more closely with communities to develop and carry out relevant research. Traditional research models, where academics alone determine the questions, define the methods, and interpret the outcomes, often fall short in addressing the needs of many youth-serving practitioners. As a result, more collaborative approaches to research — such as research-practice partnerships — are being encouraged, as evidenced in grant initiatives by the federal Institute for Education Sciences as well as numerous philanthropic organizations.

Coburn and colleagues (2013)<sup>1</sup> define a research-practice partnership as a long-term, mutualistic collaboration organized to investigate problems of practice. Unlike standard research arrangements, members of research-practice partnerships work together for years on a range of projects, and their relationship persists despite obstacles such as staff turnover and funding challenges. Decision-making in research-practice partnerships is often shared, iterative, and interactive. The long-term nature of these collaborations engenders a culture of trust and mutual respect, which is critical as joint ventures typically involve multiple stakeholders — from teachers to administrators to other youth-serving professionals. By joining forces to address issues rooted in the community, research-practice partnerships seek to yield meaningful findings that can be acted upon to effect locally driven solutions.

The four case examples presented in this brief are drawn from the Gardner Center's substantial experience conducting rigorous research in research-practice partnerships. The first case describes a partnership approach that enhances a school district's capacity to use integrated, longitudinal data to tackle persistent problems of practice and monitor students' development. The second case exemplifies how an equitable research model, grounded in mutualism (Coburn et al., 2013) and sensitive to cultural nuances, can be leveraged to elevate the experience of marginalized communities. The third case furthers knowledge about the implementation process and partnership dynamics within a Promise Neighborhood initiative, specifically as stakeholders negotiate accountability demands with the need for more actionable information. The final case highlights strategies that foster partnership within a national professional learning network that is working to build out-of-school time systems using data to improve programming for underserved youth. Together, these four cases provide rich examples of collaborative research-practice partnerships, grounded in participatory methods and practices. By sharing our experience, we hope to enrich the field with nuanced evidence and draw attention to essential principles that facilitate and sustain productive research-practice partnerships.

1 Coburn, C. E., Penuel, W. R., & Geil, K. E. (2013). Research-practice partnerships: A strategy for leveraging research for educational improvement in school districts (pp. 1–25). New York, NY.



# Creating Partnerships

Manuelito Biag, PhD

A long-term relationship between researchers and community practitioners establishes the groundwork for a strong alliance that creates more effective intervention strategies in community schools

"By joining forces to address issues rooted in the community, research-practice partnerships can yield information to inform locally driven solutions."

The Redwood City School District established a number of community schools to provide greater supports for its diverse student population. These schools integrate academics, health and social services, youth development, family involvement, and community partnerships to improve student learning. But what strategies work best? How can research help? And how can researchers and school practitioners best collaborate to benefit students?

When education researchers work closely with communities to develop and carry out relevant research, it promotes

shared ownership, raises the likelihood that the research captures community nuances, and helps ensure that partners view the findings as meaningful and appropriate. By joining forces to address issues rooted in the community, research-practice partnerships generate key information that shapes locally driven solutions. Though these partnerships serve as an important community development strategy, there is much to learn about the theoretical underpinnings, dynamics, and complexities inherent in these types of collaborations.

This case looks at an alliance between a full-service community school district and university researchers to:

- Highlight research practices that build trust and enhance working relations
- Identify factors that shape how data and research are used to change local practice and policy
- Demonstrate how integrated data approaches can bridge institutions and enhance relations among different organizations

## Background

Using public schools as hubs, full-service community schools integrate educational practices with a wide range of in-house health and social services to ensure that children are physically, emotionally, and socially prepared to learn. They provide coordinated on-site services that include early learning supports, primary health care, and extended learning programs designed to prepare students for college and/or career. There are about 5,000 community schools across the United States. The Redwood City School District comprises 17 schools that serve about 9,200 students in kindergarten through eighth grade. There are six community schools in the district serving a predominantly low-income, Latino/a, and Spanish-speaking student population. Many live in households where at least one parent lacks a high school education.

The Gardner Center's Youth Data Archive is an integrated data system that links information from multiple sources, including school districts, county education offices, county health departments, city agencies, and community organizations. This shared information contains academic transcripts, enrollment statistics, enrichment program participation, mental health records, and other data as a resource to develop common goals, streamline activities, and evaluate the efficacy of cooperative efforts.

# The Study

Researchers from the Gardner Center began to utilize the Youth Data Archive in 2007 to investigate the influence of Redwood City community school programs on students. Working in close alliance with district partners, including the superintendent and the community school director, researchers conducted annual studies of students' program participation and administrative records.

The Redwood City School District offers close to 100 programs to students and their families through its community schools. These programs include communitybased organizations such as the Boys and Girls Club, Citizen Schools, and Linking Immigrants to Benefits, Resources, and Education (LIBRE), and are characterized under three strategies: family engagement; extended learning; and social support services.

Parent and student participation was recorded by service providers, district employees, and other professionals through an online system called CitySpan. At the end of each school year, these records were extracted and organized for analysis. At the same time, researchers also received students' administrative records for that year, which included grades and demographic information. These data were linked and uploaded into the Youth Data Archive using a unique student-level identifier that allows researchers to track an individual's participation over time.

After conducting preliminary analyses, an internal factsheet that summarizes initial findings was shared in briefings with district leaders, which helped to align early results with practitioners' understanding of the data. The briefings also gave district leaders the chance to process the potential implications of the research — an important step since practitioners are more likely to experience community criticism when studies yield less than positive results.

After reviewing preliminary trends in the data, the partners collaborated on a set of research questions specific to local concerns. Past analyses have been based on such inquiries as, What are the demographic characteristics of students who participate and do not participate in community school programs? and, How does taking part in a single program or combination of programs influence students' outcomes in school? Researchers then generated a more comprehensive report known as an Issue Brief: a 10-15 page document accompanied by figures and tables. The collaborators met again to discuss the results and provide feedback that was used to revise the brief and prepared the document for wider distribution.

Once administrators, teachers, and others had the opportunity to go over these documents, a series of Data Talks were held to present key findings, provide handouts, and pose questions (known as Considerations for Practice) to spark dialogue about how the research findings might be applied to practice. Creating a forum for community members to discuss the implications of the research helped build the local knowledge base and understanding of district and school efforts.

#### What We Learned

The "scientific" or research-based knowledge that stems from studying the data is balanced by the experience of the community partners who contribute first-hand knowledge of students, families, and their environment. This interaction establishes a partnership that balances rigor with relevance, ensuring that knowledge is attuned to the needs of the community. A community knowledge framework outlines the process between the Gardner



Center and Redwood City's community schools, which involves reviewing early findings with educators, producing internal Factsheets for discussion and feedback, and creating opportunities to explore the implications of the research before any reports are made public. Linked data provide a more complete view of students in the community schools, especially since many of them take part in interventions and programs that have the potential to shape their outcomes — both within and outside of school. Longitudinal and integrated data allow researchers to track students' progress in different domains and across settings, target resources, and identify areas for reform and innovation. Integrated data strategies such as the Youth Data Archive enhance community knowledge, break down institutional silos, and point to new understanding.

Applying research to practice is a multifaceted, interactive, and social process. The Redwood City School District used Gardner Center research to enhance family partnerships by introducing professional development training for community school coordinators. But the process of change takes place over years of sustained interaction and accumulated research evidence.

Practitioners' knowledge and experience, including their beliefs and expectations about the data, can influence how research information is used to guide reforms. Gardner Center researchers interact primarily with the district's community school director and superintendent, with limited exchange with teachers, program providers, parents, and students. These representatives act as important gatekeepers who can guide school principals and teachers on how to use data and research to inform their work with students. Their data literacy can influence how research is utilized to promote learning and continuous improvement.

#### Conclusion

Integrated data has great potential to connect the research community with community practitioners seeking to improve outcomes for children and youth. As researchpractice partnerships grow in education, more detailed understanding of how knowledge is applied will be key to creating more effective intervention strategies.

In this case, data were not systematically collected to understand the diversity of partners' experiences; future studies can investigate how differences in partners' experiences affect the productivity of their collaboration. Additional research could also look at the conditions and supports that help build the data literacy of school leaders, practitioners, and community providers, and establish a culture of data inquiry at the school, district, and community levels.



# **Engaging Families**

Kendra C. Fehrer, PhD

## A partnership with multiple communities helps schools and organizations design effective and systemic family engagement initiatives

"Research that is attentive to social context, attuned to inequities, and engages stakeholders in the process has the potential to produce more relevant and equitable results."

Strategies to bolster parent involvement have become increasingly utilized in low-income and immigrant communities, where high dropout rates, suspensions, low attendance, and low test scores remain pervasive. There can be a great social, cultural, economic, and linguistic divide between immigrant families with young children and the educators and providers that serve them. Parents are often perceived by school staff as less involved in their children's education, despite evidence to the contrary. Limited language ability, lack of familiarity with the U.S. school system, and incomplete education in their home-countries limit many immigrant parents' ability to engage with school staff. Further, school and community practitioners seldom receive



training on how to engage families effectively and, frequently, there is little collaboration between child- and family-serving organizations in the same community, resulting in missed opportunities for sustained and systemic support to families.

By grounding research questions in "persistent problems of practice," attending to the nuance of local contexts, and engaging community actors in the research process itself, research-practice partnerships are well positioned to facilitate more rich and meaningful research on the complex circumstances faced by organizations attempting to serve immigrant children and their families.

This example looks at a research-practice partnership between university researchers and six local organizations serving low-income immigrant families to:

- Highlight the potential of rigorous research to inform program design and planning
- Underscore the importance of research that is culturally informed and locally grounded
- Encourage the potential of partner collaboration to bolster the research process itself

#### Background

This research-practice partnership emerged when the Gardner Center was engaged as research partner to a privately funded initiative, the Family Engagement Impact Project (FEIP). The FEIP provided six community agencies—including community-based organizations and school districts—across San Mateo and Santa Clara counties with resources to expand and deepen low income, immigrant families' engagement in their young children's learning and development. During the first year of the initiative, the Gardner Center supported each of the six communities in conducting a needs assessment study to inform program design and planning.

Following the needs assessment, each of the communities would design a community-wide initiative that spanned traditional institutional silos. Given the focus on young children, ages 0-8, stakeholders included infant care institutions (e.g., community clinics, Early Head Start), preschool providers, elementary schools, and an array of community-based organizations. Each community was charged with building a collaborative "working group" to sustain the initiative, choosing an evidence-based core strategy, and planning "dual capacity" training for both parents and organizational staff and providers.

All communities had a primarily Spanish-speaking, low-income, immigrant population.

#### **The Study**

The study was designed to provide information regarding the landscape of family engagement services and needs across the six communities, with the goal of informing each community's program design and planning. Drawing upon the literature on family engagement best practices, we designed two survey tools-one for providers, one for parents-to assess services offered and those needed. The family survey provided information on local demographics, family needs, parenting practices, perceptions of family engagement, and family experiences related to pre-K and kindergarten transitions. The focus of the provider survey was on family engagement practices, coordination and transitions, and what programs and services are already offered. These two surveys, taken together, allowed us to capture diverse stakeholder perspectives, assess the alignment and disjunctures between provider offerings and families' needs, as well as elevate families' own experiences engaging with their children's learning institutions.

While administering the provider survey was fairly straightforward—we used an online survey instrument to reach 124 providers across the communities—reaching families was more challenging. Language and literacy barriers were paramount, as was the logistical question of capacity and reach as a small research team. Ultimately, we enlisted the support of our community partners. Together, we designed a decentralized administration plan in which the lead community agencies become principal administrators of the family survey. The family survey was made available in three languages—English, Spanish, and Vietnamese and the Gardner Center team provided an introduction, administration guidelines, and, in some cases, in-person trainings to local staff who were then empowered to support families to complete the survey. We also provided modest gift card incentives. A total of 795 family participants completed the survey.

#### What We Learned

Despite the acknowledged evidence basis for the importance of family engagement to improved student outcomes, there is still very little understanding about the diverse circumstances and populations in which they hold true. Many of the recognized evidence-based programs meant to engage parents in their children's learning and improve student outcomes, based on RCTs or other statistical studies, were conducted in large urban school districts on the East Coast or in the Midwest. Within the research-informed scholarship in family engagement, there is a dearth of evidence-based programs tried, tested, and found to be effective for many of California's or other Western states' vulnerable populations, which are largely low-income, Spanish-speaking, immigrant, and a mix of urban and rural.

Through foregrounding the cultural and economic contextual nuances, the needs assessment study was able to shine light on important underlying considerations to inform program planning. In their essay, Relevance as a Criterion of Rigor, Gutierrez and Penuel (2014)<sup>2</sup> call on researchers to put attention into the process by which the research is conducted, problems are deliberated, the focus is negotiated, and the interventions themselves are conducted. As Engestrom (2011)<sup>3</sup> relates, interventions take place in complex and multilayered systems rife with recurring problems. Interventions are "contested spaces," filled with tensions and resistance from a range of stakeholders (Gutierrez & Penuel, 2014). Supporting more diverse stakeholder engagement in defining the focus of research and development requires researchers and reviewers to recognize the multidimensional and ambiguous nature of education interventions.

In the case of FEIP, researchers took on the roles of program consultant and critical participant-observer. The research team provided timely information to help lead



agencies with program design, and were critical thought partners for reflection on the broader meaning and nature of family engagement. Additionally, engaging partners as co-creators of the research ultimately allowed the research team to access a huge amount of fairly reliable data from a traditionally "hard to reach" population. Partners became not only consumers of data, but also producers, as they learned about survey administration and thought critically with the Gardner Center about the implications for their data collection strategies and the findings of the research.

#### Conclusion

The findings presented in this study, strengthened by the broader literature, suggest a frequent disjuncture between the experiences of families and the providers who serve them. Furthermore, they suggest that by paying attention to the cultural and social context, thinking through the implications of interventions for culturally and economically diverse populations, and engaging in dynamic iterative processes with stakeholders, research-practice partnerships hold the potential to result in more relevant and equitable research.

Gutiérrez, K. D., & Penuel, W. R. (2014). Relevance to Practice as a Criterion for Rigor. Educational Researcher, 43(1), 19-23. doi: 10.3102/0013189x13520289
Engestrom, Y. (2011). From design experiments to formative intervention. Theory & Psychology, 21(5), 598-628.



# Integrating Goals

Monika Sanchez, MS Laurel Sipes, MPP

# A multi-organization youth sector initiative expands the university-community partnership framework to discuss important differences, challenges, and opportunities

"Research-practice partnerships have the potential to support holistic strategies in education that involve collaborative bodies taking an ecological view of children and youth."

There is a growing movement in education advocating for place-based initiatives to improve quality of life in high-need communities, pointing to an increased need for understanding the development and implementation of these complex, cross-sector collaborations. As the number of collaborative neighborhood initiatives continue to grow, data, research, and evaluation play an important role in unified strategies to shape local work with children and families.

Established in 2010 and based on the Harlem Children's Zone, the federal Promise Neighborhood Initiative is a

place-based, five-year effort designed to build holistic, long-term support for youth and families in disadvantaged communities. This example looks at a research-practice partnership in a complex cross-sector collaboration to establish a Promise Neighborhood to:

- Describe the challenges of a multilateral university community partnership
- Utilize data to strengthen community collaborations
- Address the dynamics and processes during the project's early phases
- Support holistic strategies in education that involve collaborative bodies taking an ecological view of children and youth

# Background

The City of San Francisco comprises a number of distinct neighborhoods with high concentrations of ethnic minorities and varied socio-economic statuses. The Mission District is a very diverse community of approximately 57,300 people, and home to a large immigrant population from Mexico and Central and South America.

Though considered a distressed community, increasing housing costs in the Mission neighborhood have been a problem since the "dot-com" boom in the 1990s, with increasing gentrification from a more recent wave of technology workers. Still, in the 2010 U.S. Census, the Mission remained home to the highest concentration of Latino residents in San Francisco. Latino families with children were more than twice as likely to live in poverty in the Mission as elsewhere in the city and were seven times more likely to be living in poverty than White families in the neighborhood.

In December 2012, the Mission Economic Development Agency was awarded a five-year grant of \$30 million to establish the Mission Promise Neighborhood (MPN). The goal is to unite local nonprofits and public and private partners to empower the community, break cycles of poverty, and allow each child to reach his or her full potential. The initiative comprises more than 25 partner organizations.

The Mission Promise Neighborhood proposed the development of a shared, integrated system and high quality, evidence-based programming to provide an infrastructure for academic and economic success for students and families. The process involves a data system and ongoing evaluation, along with organizational capacity building and accountability. The relationship among the key players involved using data to conduct analyses that would answer co-developed, practical questions about families and services; jointly interpreting findings; and using findings to support improvement of services. This approach provides a structure for Mission Promise Neighborhood partners to have iterative conversations about research and data use.

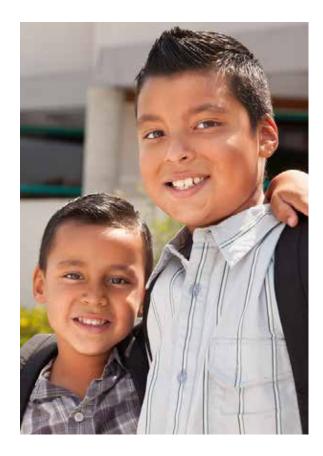
## **The Study**

One of the first tasks in implementing the Mission Promise Neighborhood was to establish formal agreements with partners and outline data use agreements. Partners met to discuss data needs, parameters for data use, and priorities for inquiry, as well as reiterate expectations for data collection and interpretation in a cycle of continuous improvement. The university research institution was not merely an investigator but an active partner and participant. Data use agreements also helped outline how research-practice partnerships operate and support partners in their role as data collectors, data users, and context experts.

Immediately following the Mission Promise Neighborhood's contracts and data use agreements, the Gardner Center began an analysis co-developed with MEDA, the lead agency, and the San Francisco Unified School District focused on student residence and enrollment patterns. The Gardner Center conducted quantitative analysis with school district administrative data and met with the partners to discuss the findings in early 2014; the data were used to address service delivery and how youth from other parts of the city were being exposed to the initiative.

Using a research-practice partnership approach to produce original analyses relevant to practice allowed the MPN initiative to conduct research that was critical to local implementation. Another co-developed study looked at how the initiative was perceived and implemented at the four focus schools through a series of interviews with school staff and other stakeholders about the first year's successes and challenges in communication, alignment, and roles. The information was applied to refine strategies in enhancing outreach and communication.

Conducting these first analyses with data from the school district began a conversation among the other MPN service provider partners about the potential of their own data.



For example, the school district uses a strategic planning tool called a Balanced Scorecard to track academic achievement, learning climate, college and career readiness, and parent-school-community ties. MPN may align research in the Promise Neighborhood with these four priority areas.

#### **What We Learned**

The notion of accountability is complex when so many diverse agencies and stakeholders are involved. While the initiative itself is financially accountable to its federal funders and the local community, MPN is equally accountable to its network of partners who provide services and coordinate support in the neighborhood. The project's implementation proposal outlined a cycle of continuous improvement to inform partners about decisions, organized around service providers and institutional partners collaborating to use data to advance capacity and policy reach.

Compliance to federal accountability expectations limited the time and resources for research that directly informs the day-to-day implementation of the initiative. Some conflicts arose when evaluation activities and data collection focused on accountability measures which MPN providers did not see as relevant to their work with families, and struggled to connect the measures with their daily work.



Organizers are determining how to leverage the work being done for the creation of the Restricted Use Data File required by the Department of Education to address practitioners' need for information relevant to implementation. For example, partners could provide researchers with information about all of the people they serve, in addition to the consented information for the RUDF, to conduct relevant analyses such as the number and combination of services being accessed by families in the neighborhood.

#### Conclusion

The Mission Promise Neighborhood represents a multilateral partnership where the funder and intermediary organization have strongly influenced the nature of the data and evaluation work that the initiative has been able to conduct in its first two years. The research-practice partnership is complex since it includes funders, intermediary organizations, and multiple organizations engaged in the daily work of collaborative implementation. Outside funders may play an influential role in shaping the research agenda. Both the researchers and practitioners have spent a great deal of time and resources responding to the funder's priorities rather than jointly generating research activities that are locally relevant and responsive. It is not yet clear that compliance work can assist practitioners in a cycle of continuous improvement while grant funds are available to make course corrections.

Differential accountability requirements create a challenge in how to balance compliance activities with the desire to conduct research that yields context-specific, presentday information focused on distinct problems of practice. The research-practice partnership is used to balance accountability requirements with the desire to engage in research that produces information that can be used to shape implementation.

# Promoting Collaborations

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A national effort to build city-wide afterschool systems presents an opportunity to analyze and assess multiple factors involved in a large-scale collaboration

"Multilateral partnerships hold great promise as a process through which communities can coalesce around data to inform their work with youth and families."

Cross-sector collaborative efforts — also referred to as collective impact strategies — have been described as a way for a community to come together to improve outcomes for youth. Through common goals and aligned metrics, these partnerships advance a youth sector perspective that brings together disparate organizations to promote improved outcomes for at-risk youth. Many promising reform strategies are targeted to youth and families outside traditional school-time boundaries, such as urban collaborations for afterschool systems, Promise Neighborhoods focused on eradicating poverty, and programs to increase postsecondary school completion.

This example looks at a research-practice partnership in a national effort to build city-wide afterschool systems to:

- Describe differences, challenges, and opportunities in using data to advance a system's goals
- *Highlight the developmental phases of a national multisector, multi-site research-practice partnership*
- Demonstrate a capacity-building approach

# Background

The Wallace Foundation is a national philanthropy that seeks to improve learning and enrichment for disadvantaged children by supporting the out-of-school time or afterschool space. Rather than funding specific programs, the foundation works on the premise that children benefit from frequent participation in quality programs sustained by multiple organizations such as city agencies, schools, and community groups. The foundation launched the Next Generation After School System Building Initiative in February 2012 for nine cities that requested additional resources to strengthen existing afterschool programs.

The Gardner Center partnered with the Wallace Foundation and the nine cities in research and data use for continuous improvement of programs and practice, providing focused technical support to a national network of city-systems. The initiative required cities to build capacity around the use of data in cross-sector community collaborations, to strengthen its overall efforts, and to use data more effectively to achieve its goals. In 2012, at the start of this initiative, few of the member cities had experience working across institutional barriers and many considered data as critical compliance indicators. Strategic inquiry was key to encourage the use of data for multiple purposes — learning and improvement, informing policy, illuminating opportunities for fundraising, and engaging in accountability.

# The Study

Technical assistance to support the nine cities around data use evolved into a wide array of activities and formats to meet changing needs. The Gardner Center team applied capacity-building activities such as:

- Convenings: All city teams, key foundation staff, and technical assistance partners met twice a year for two-day sessions to address communications, data use, leadership, fundraising, and other issues.
- Consultations: Individual consultations were conducted in biweekly phone calls focused on a clear set of concerns and questions.
- Site Visits: Site visits provided on-the-spot support based on each city's needs, ranging from large-group workshops to small groups session to clarify a theory of change or logic model.
- Role Group Calls: Monthly phone calls featured agendas designed to answer specific questions for all of the data leads in the cities.
- Tool Development: Tools intended to support the growth and learning of the city teams included a data-planning guide, a System Strategy Map template, and a sustainability workbook.

## **What We Learned**

Over three years of providing technical assistance to the nine cities on the use of data and building data systems,



the Gardner Center observed a progression through a developmental continuum, or series of phases. These phases were not distinct nor did the cities progress in a linear fashion.

#### Phase I: Uncoupling data from compliance

In this first phase, cities engaged in work with data and information systems largely for compliance purposes mandated by an external body. The drive to collect data was for accountability, not improvement. No specific questions were guiding the data collection or use, and data generally were not reported widely. The cities may still be in the early stages of development, especially in terms of data sharing or linking.

In Phase I, cities sought technical assistance about fundamental data use. Questions included: What data should we collect? Can you help us with our data use infrastructure? How long will it take to build a data system? Cities sought confirmation on indicators they might have already selected and clarification on specifics.

The Gardner Center typically responded with questions to clarify specific purposes and context, such as, How will you use these data? What do you want to learn? This dialogue began the capacity building and redirected the issue toward



building understanding about the role of data (improve programs, understand how well goals were achieved, accountability, etc.). Data use technical assistance centered on clarifying objectives and goals of the system.

#### Phase II: Connecting data to strategy

In Phase II, cities may have begun collecting data but not yet in a manner that was systematically tied to the goals and strategies of their afterschool systems. Instead, they used data to demonstrate accountability. Program quality data were collected but not used in consequential ways.

In Phase II, cities typically asked very specific questions for technical assistance and data content as well as concerns

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Stanford Graduate School of Education 365 Lasuen Street, Third Floor Stanford, CA 94305-2068 Phone: (650) 723-3099 gardnercenter.stanford.edu about reporting formats. Interest in specific indicators came up, often without a clear tie to a strategy or a goal. For example, cities developed a strong interest in measuring social-emotional learning indicators but were unclear about how it related to their overall strategy and goals.

The Gardner Center worked with teams to refocus on the learning goals — what they hoped to accomplish and how data might facilitate that goal. Learning how to use data required a clear logic model and an understanding of the purpose for the data.

#### Phase III: Using data for learning and improvement

By Phase III, the data work was clearly connected to the city's articulated goals, strategies, and outcomes. Data infrastructure had been developed, or was developing, and a partnership with an outside firm might have been in place to further support the development and use of data. Cities asked more sophisticated and nuanced questions, often around implementation. Data use questions typically involved engaging partners in their use of the data.

At this point, the Gardner Center's role shifted toward sustainable data capabilities, raising questions about long-term capacity for data analysis, infrastructure, and use. This phase involved helping partners understand the logic and value of systematic collective inquiry using data — testing and modeling locally generated routines for data inquiry and incorporating more cycles of inquiry around their implementation. Several of the cities in this phase had established relationships with third-party data/research partners to support long-term strategic planning and capacity building.

## Conclusion

There is growing support for education scholars to work with communities to develop and conduct meaningful research in problems of practice and solutions for improving district outcomes. Traditional research methods that require program fidelity fail to assume constant change and social adaptation as institutional norms. As new fields develop, norms take time to root and legitimacy grows through rigorous study.

The concept of research-practice partnerships can be enlarged to include multilateral partnerships, in particular accounting for the role of funders and intermediary organizations. The opportunities and challenges argue for an expansive and critical view of research-practice partnerships by practitioners, funders, and researchers.