



THE PROMISE OF PARTNERSHIPS

RESEARCHERS JOIN FORCES WITH EDUCATORS TO SOLVE PROBLEMS OF PRACTICE

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Some of the valuable learning that practicing educators gain about how to do their jobs better comes neither from intentionally designed professional learning nor daily on-the-job experience and reflection. An auxiliary and potentially powerful source of practitioners' knowledge, skills, and dispositions can come from participation in research-practice partnerships. Research-practice partnerships link researchers, usually faculty at institutions of higher education, with practitioners working in schools, district central offices,

county offices, or state departments of education.

Though professional learning and research-practice partnerships share the goals of impacting student learning and ultimately increasing achievement and can have a number of features in common, they differ in one fundamental way: While intentionally designed professional learning focuses on enhancing educators' awareness, understanding, and instructional skills, research-practice partnerships focus on the creation, transfer, and use of knowledge to solve problems of practice.

There are several reasons for professional learning leaders to take a closer look at research-practice partnerships. Funders, policymakers, and a growing number of educa-

tion professionals increasingly expect the use of evidence-based practices to improve student results. Given these expectations, practitioners often seek to identify high-impact activities that do not impose further demands on their busy schedules and that are feasible to implement given the limits of their budget. Research-practice partnerships are a potentially cost-effective vehicle for accomplishing this task because they are focused on the specific needs and circumstances of the education agency.

Although attention to the promise of research-practice partnerships has varied over the past 15 years, they are now seen as central to the improvement of the educational system. Federal providers of technical assistance like the regional educational laboratories increasingly rely on these types of partnerships for determining and delivering their services, and other major funders like the Carnegie Foundation for the Advancement of Teaching, the Spencer Foundation, and the William T. Grant Foundation champion implementation of research-practice partnerships.

To help professional learning leaders understand how research-practice partnerships may be a vehicle for high-quality professional learning, we offer below answers to common questions about the forms these partnerships may take, the role of Learning Forward's Standards for Professional Learning (Learning Forward, 2011), and how professional learning leaders can maximize the quality and quantity of learning for practitioners.

WHAT ARE THE TYPES OF RESEARCH-PRACTICE PARTNERSHIPS?

Building on the work of Coburn, Penuel, and Geil (2013) and others, we have identified five types of research-practice partnerships that we will discuss here: communities of practice, study councils, research alliances, design research collaborations, and networked improvement communities.

Communities of practice are groups of individual practitioners, sometimes including experts, who come together around a shared concern or interest to exchange relevant information, ideas, and experiences. They occasionally undertake a joint project such as creating a tool that responds to a common need among members.

Typically self-selecting, members may represent a variety of similar entities, different parts of a single organization,

or, less commonly, cross-field or cross-sector entities. For the most part, members are loosely connected: They engage as little or as much as needed and remain members for as long as they feel a community of practice meets their needs.

Communities of practice may be leaderless; alternatively an inner core of members may take on planning and facilitating roles (Wenger-Trayner & Wenger-Trayner, 2015). A few studies from education and other fields suggest that communities of practice can contribute to generating new knowledge, building new capabilities, and bridging the knowing-doing gap (U.S. Department of Education, Office of Educational Technology, 2014).

Study councils involve partnerships between one or more universities and one or more school districts for the collaborative study of common educational problems (National School Development Council, 2015). Practitioner members are usually school or district leaders. Though a few study councils undertake or commission original research, most offer courses and workshops in which job-alike practitioners review available research-based information to address specific problems of practice with input from university-affiliated or other experts. Practitioner members commit to participate in discrete learning experiences that may last up to a year. Study council membership is usually fee-based. Members' continuing subscriptions suggest that they find them valuable.

Research alliances are long-term partnerships between districts and independent research entities — often universities but sometimes other education support organizations — to provide the technical analysis pertaining to pressing policy and practice issues. Large districts like Chicago and Baltimore tend to establish research alliances dedicated solely to their interests. Many research alliances manage (or at least can access) standard school data files from which they generate routine or special reports for members.

Researchers and practitioners often collaborate on identifying problems to study. Researchers conduct the research and funnel findings back to practitioners, but determination of how to apply the findings for solving local problems of practice is up to practitioners (Coburn et al., 2013, p. 8). Some big-city research alliances cite accomplishments that include successful implementation of multiple reforms (Roderick, Easton, & Sebring, 2009),

improved communication about reform (Connolly, Plank, & Rone, 2012), and provision of data for decision making (Farley, 2014).

Design research refers to long-term collaborations that link researchers from one or more universities to one or more schools or districts for simultaneously building and studying solutions to problems of practice. Often used to develop and test curricula or new instructional approaches, design research includes a focus on implementation from the outset. It values diverse perspectives, seeking out practitioners' declarative and tacit knowledge as well as expert input from a variety of relevant disciplines or fields.

Design research relies on practitioners to co-design research and execute it via rapid and repeated cycles of design, testing, redesign, and retesting of innovations. A major design research group reports accomplishments that include the adoption of new policies and the development of field-proven new products in science, adolescent literacy, and English language learning (Daro, 2014), while another reports success in building relationships and joint agendas (Bevan, 2015).

Networked improvement communities are consortia of schools or districts working with a hub — a university or an education support organization — to develop innovations robust enough for effective implementation and results in diverse settings. Networked improvement communities use rapid cycles to test facets of an innovation as it is being developed, then systematically increase the number and variety of settings in subsequent testing cycles. The idea is “to spread effective practices sooner and faster” (Bryk, Gomez, Grunow, & LeMahieu, 2015, p.2).

In networked improvement communities, practitioners do the on-the-ground work of data collection and analysis in small-scale tests with facilitation by researchers who guide the overall improvement process (Coburn et al., 2013). Several studies report positive impacts on student results from networked improvement communities' work (Bryk et al., 2015; Lewis, 2015).

The five types fit roughly along a continuum from low to high intensity in terms of the demand that the partnership places on practitioners individually and institutionally. Demand encompasses time, labor (both the number of tasks and how much they deviate from the familiar and the routine), communication, and accountability (the degree of responsibility practitioners must shoulder for the work to get done).

In our analysis, communities of practice and study councils impose relatively low demand on practitioners; research alliances, moderate demand; and design research and networked improvement communities, high demand. Assuming that the study topics undertaken by the partnership are of high value to practitioners, the higher the investment required of practitioners, the greater the potential payoff in terms of professional learning and student results.

WHERE ARE THE PROFESSIONAL LEARNING OPPORTUNITIES IN THE VARIOUS FORMS OF RESEARCH-PRACTICE PARTNERSHIPS?

Research-practice partnerships provide all participants with learning opportunities, arising from the nature of partnerships themselves. The more intensive types of partnerships generally require more active engagement from practitioners and expose practitioners to more novel tasks and material than less intensive types. Practitioners who also apply research findings — presumably even more than those who help conduct research — are more likely to “revise their internal representations of the world in light of new information” (Tseng & Nutley, 2014, p. 166). In other words, they gain deeper knowledge.

Experts and veterans of effective partnerships have come to appreciate that the development, transfer, and use of research-based knowledge in education are “not a simple process whereby research ‘facts’ are passed from researcher to research users and then applied in a linear decision-making process” (Tseng & Nutley, 2014, p. 165). Far from it.

The process is complex, conditional, and recursive because it entails “people individually and collectively engaging with research over time, bringing their own and their organizations' goals, motivations, routines, and political contexts with them” (Tseng & Nutley, 2014, p. 165). At a minimum, this process requires participants to build trust and establish norms and collaborative processes that pass into what Coburn and colleagues (2013) label “mutualism.” In this regard, research-practice partners have learning needs like those of new school-based professional learning communities and other kinds of partnerships (Killion, 2011).

However, research-practice partnerships may necessitate additional learning in order for researchers and practitioners with highly diverse professional preparation, methodologies, reward systems, and possibly reciprocal traditions of mutual mistrust to work together productively. Those learning needs grow when partners from other sectors, such as intermediaries, funders, and others, enter the mix.

Practitioners in productive partnerships can learn not only technical research language and methods, but also the value of researchers' perspectives, insights, and time frames. Moreover, practitioners in design research and networked improvement communities can also learn how to go forward with admittedly provisional knowledge as they do the on-the-ground work of repeated cycles of implementation, testing, and adjustment to refine an innovation. Researchers have much to learn from practitioners in these collaborations as well, including understanding the realities of the inner workings of schools and districts and how they cope with competing demands from federal and state policies, district and community expectations, and the like.

The more intensive types of research-practice partnerships — in which all participants take on new roles — potentially position participants for even greater learning. “All involved

are now improvers seeking to generate strong evidence about how to achieve better outcomes more reliably,” according to one set of experts who advocate for networked improvement communities (Bryk et al., 2015, p. 2). These partnerships confront researchers with the need to learn how to collaborate with practitioners and with researchers in disciplines not their own, as well as how to adhere to school-paced time frames.

Practitioners who are expected to co-design research plans or materials may also need to learn how to step into more formal research roles as data collectors, data analysts, reviewers (if not contributing authors) of research reports, co-developers of tools related to an innovation, and as research disseminators. Practitioners may also serve as data sources, perhaps contributing their explicit and tacit knowledge through unfamiliar research activities such as the creation of personas or scenarios. Researchers and practitioners alike may also find the need to exercise new levels of patience with partnership colleagues and themselves as all work toward developing competence and confidence in their new roles.

The new roles that participants assume sometimes grow into more permanent new professional identities. Especially in long-term mid- and high-intensity partnerships like research alliances and networked improvement communities, participants may engage with an improvement project and with a series of projects that span multiple years.

HOW DO RESEARCH-PRACTICE PARTNERSHIPS MAP ONTO THE STANDARDS FOR PROFESSIONAL LEARNING?

Despite the variation within and across the five types, we can sketch out how the professional learning embedded in research-practice partnerships maps onto Learning Forward’s Standards for Professional Learning (2011).

Learning Communities

Research-practice partnerships are forms of learning communities. Long-term communities of practice and study councils may meet the standard’s criteria of collective collaboration, analysis, reflection, and inquiry. Research alliances, design research, and networked improvement communities — the more intensive partnerships — by definition provide “an ongoing system of support for continuous improvement and implementation of school and systemwide initiatives” (Learning Forward, 2011).

Networked improvement communities in particular surpass this standard’s stringent description of cross-community communication. When it comes to working “within and across both internal and external systems to support student learning,” though, all types of partnerships meet the criterion (Learning Forward, 2011). And, as noted earlier, all effective partnerships “strive to refine their collaboration, communication, and relationship skills” and “develop norms of collaboration and relational trust” (Learning Forward, 2011), just like other effective learning communities.

Leadership

This standard’s inclusive definition of leaders encompasses an array of individuals who may well provide leadership for professional learning within research-practice partnerships. On the one hand, the less intensive types of partnership (communities of practice, study councils, and some research alliances) focus more fully on setting a professional learning agenda that aligns with classroom, school, and system goals than do more intensive types.

On the other hand, opportunities for practitioners to share leadership may be more pronounced in the more intensive types of partnership (some research alliances, design research collaborations, and networked improvement communities) because they expect practitioners — as all participants — to take on new roles and contribute to all phases of the work, which could include the leadership tasks that the standard delineates.

Resources

Resources for professional learning may raise issues for practitioners’ participation in research-practice partnerships. While partnerships may have access to funds or in-kind support for their activities, three resource issues often arise with the types that demand a greater commitment of practitioners’ time and effort: how practitioners will fit the additional tasks of their partnership involvement into their existing workloads; the extent to which practitioners control the partnership’s resources; and the availability of adequate fiscal, cultural, and technical resources to implement learnings from the partnership in local settings.

Data

A commitment to data-based or evidence-based practice underlies all types of research-practice partnerships, but they vary in their use of “multiple sources . . . of student, educator, and system performance” (Learning Forward, 2011) to determine professional learning needs. Most partnership types consult performance indicators to identify prospective topics for study or innovations needed.

Communities of practice and study councils may or may not include the identification of professional learning needs in the research or study they undertake. The research partners in some of these less intensive partnerships consider the identification of professional learning needs to be outside their purview once they produce their technical analysis. They let policymakers interpret and apply their findings and determine professional learning needs associated with implementation. Research alliances can fall somewhere in between and are generally concerned with application of findings and the identification of professional learning needs.

Design research and networked improvement communities are centrally concerned with successful implementation of an innovation in diverse settings. These partnerships are highly

COMMUNITY OF PRACTICE STEM Ecosystems

<http://stemecosystems.org>

The STEM Ecosystems Initiative is built on over a decade of research into successful STEM collaborations and seeks to nurture and scale effective science, technology, engineering, and math learning opportunities for all young people.

This initiative encompasses 27 communities of practice selected from across the United States to form the initial cohort of a national community of practice. Each participating community demonstrated cross-sector collaborations to deliver rigorous, effective pre-K-16 instruction in STEM learning. These collaborations happen in schools and beyond the classroom — in after-school and summer programs, at home, in science centers, libraries, and other places both virtual and physical.

To support the design

EXAMPLES OF RESEARCH-PARTNERSHIP TYPES

and implementation of STEM Learning Ecosystems across the country, a team of STEM and cross-sector collaboration experts provides technical assistance tailored to each community. The initiative matches each site with a consultant based on the site's specific needs.

The consultant supports the development and implementation of each STEM Learning Ecosystem. However, the focus is on establishing and maintaining a peer-to-peer professional learning network for communities to share information and expertise. This initiative was recently recognized as innovative by the U.S. Department of Education (<http://innovation.ed.gov/2015/11/19/communities-come-together-to-support-stem-education>).

STUDY COUNCIL

New Jersey School Development Council
<http://njsdc.gse.rutgers.edu/Home>

Headquartered in the Graduate School of Education at Rutgers University, the New Jersey School Development Council is a cooperative, not-for-profit network of educational agencies and school districts that explores emerging issues relevant to leadership in education.

The council provides educational leadership in New Jersey through conferences on topics of emerging concern, a leadership institute on strategies for school improvement, and other activities. In addition, the council offers professional development strands in specific areas in conjunction with

faculty and staff from Rutgers Graduate School of Education, local school district personnel, and national consultants. Topics for each year's program are chosen from an annual needs assessment of the membership conducted in the spring.

RESEARCH ALLIANCE

University of Chicago Consortium on Chicago School Research
<https://consortium.uchicago.edu>

Since its establishment in 1990, the University of Chicago Consortium on Chicago School Research has had the dual goals of conducting research that Chicago Public Schools can use to improve student achievement and that simultaneously contributes to the school reform field.

The consortium provides a research-based framework and technical analysis — evidence that tests theories and hypotheses, but does not

likely to attend to professional learning needs for implementation, based on data from the many trials they conduct during design and development of the innovation.

Learning Designs

Research-practice partnerships as a group arguably represent job-embedded learning as defined in the Learning Designs standard. On the low-intensity end of the research-practice partnership continuum, communities of practice and study councils look a lot like study groups. The more intensive types of partnership — research alliances, design research, and networked improvement communities — may incorporate qualities of study groups in addition to action research, inquiry into practice, and problem-based learning.

Research-practice partnerships also develop a collaborative culture and support for the transfer of learning to practice, as the standard prescribes. The more intense forms of research-practice partnership join peer accountability to collaboration and “facilitate ongoing communication about learning” (Learning Forward, 2011).

Some research-practice partnerships also fit within the stan-

dard's select learning designs in that they entail application and a more complete understanding of theoretical as well as practical components of an innovation (Learning Forward, 2011). Again, it is the more intensive types of partnership that also promote the kind of active engagement of practitioners in “inquiry... [and] co-construction of knowledge” that the standard lays out (Learning Forward, 2011).

The qualifier in this standard for job-embedded learning to take place during the workday (Learning Forward, 2011) may apply to teachers only for some activities associated with some research-practice partnerships. This part of the standard applies more readily to administrators and other nonclassroom staff in these partnerships due to the presumed greater elasticity of their workday.

Implementation

The more intensive types of partnership conform most uniformly to the Implementation standard's expectation that learning will be applied. It is important to remember, however, that professional learning is not necessarily the key objective for these partnerships: They focus on design and development

provide answers — for the use of educators and the larger education community. Its research agenda over the past five years, for example, centered on rigor and readiness in high schools, middle schools and the transition to high school, human capital and professional capacity, and schools as organizations.

In addition, the consortium researches high-priority topics that the Chicago Public Schools and other constituents in the area's education community identify. The consortium develops indicators and analyses of trends in Chicago Public Schools, along with confidential reports for individual schools on aspects of their conditions, operations, and outcomes. The consortium also helps enhance educators' capacity to use data effectively.

DESIGN RESEARCH Strategic Education Research Partnership Institute

www.serpinstitute.org

The institute grew out of work at the National Academy of Sciences in 2003 to provide the infrastructure for the research, development, and implementation of solutions to the critical problems of practice in individual districts. In design research partnerships, the institute reaches into multiple universities and disciplines for the expertise to respond to each district's selected problems of practice, while the institute's national headquarters staff takes care of overall management functions that include quality control, communication, finance, and long-term planning.

During a district's engagement with the institute, envisioned as a long-term relationship, district personnel join institute staff and experts

on three tiers of teams: a core group of leaders for executive oversight; an ideas team with direct knowledge of the focal problem for more precise framing, imagining of solutions, and review of the work done by the research, development, and implementation teams; and teams for carrying out the design and testing cycles.

NETWORKED IMPROVEMENT COMMUNITIES

**Building A Teacher
Effectiveness Network**
www.carnegiefoundation.org/in-action/bten

Building a Teacher Effectiveness Network is a relatively recent initiative to develop and retain teachers during their first three years in the profession. The Carnegie Foundation for the Advancement of Teaching serves as its hub by providing overall guidance and facilitation. The network's

school district members between 2011 and 2015 were the Austin Independent School District with 19 participating schools and Baltimore City Schools, along with the American Federation of Teachers, New Visions for Public Schools, and the Institute for Healthcare Improvement.

Key tools include a driver diagram and adoption of Plan, Do, Study, Act cycles. Once the network narrowed its focus to the quality of feedback new teachers receive on their teaching and the support they perceive from their principals, the network engaged experts, teachers, principals, and other school-based staff in developing a new protocol for feedback and support that was then subjected to small-scale cycles of testing and refinement in both districts. The network is currently developing strategies and tools to improve district systems of support for new teachers.

to ready an innovation for implementation on a broad scale.

The rapid, repeated cycles of implementation, testing, and refinement of a particular product that are the hallmark of design research and networked improvement communities tend not to occur over time (even if the partnership extends over time) and not to provide the ongoing support that this standard envisions. The standard's time frame of three to five years for broad, sustained implementation may be in the overall picture for these partnerships, but is not their immediate objective.

Outcomes

Research-practice partnerships and the standards agree on student results as the ultimate outcome. Ideally, all partnership types target problems of practice that both aim for this outcome and are salient for practitioners.

Study councils and research alliances frame their work around problems of practice that practitioners identify or that practitioners and researchers collaboratively identify. Design research and networked improvement communities tend to focus on outcomes of mutual interest in the form of practical solutions.

HOW CAN PROFESSIONAL LEARNING LEADERS MAXIMIZE THE QUALITY AND QUANTITY OF LEARNING FOR THE PRACTITIONERS IN RESEARCH-PRACTICE PARTNERSHIPS?

Research-practice partnerships give professional learning leaders a venue for professional learning that complements other means of increasing educator effectiveness and results for all students. Though the five types of research-practice partnerships discussed here vary a great deal in where and which kinds of professional learning opportunities they embed, professional learning leaders can maximize the quality and quantity of professional learning opportunities in research-practice partnerships. Here are some ways that they might do so:

- Make decision makers aware of the professional learning opportunities embedded in various types of research-practice partnerships.
- Help policymakers vet potential research-practice partnerships by analyzing the advantages and disadvantages, and the costs and benefits, in terms of professional learning opportunities.
- Contribute to shaping the research and learning agenda of research-practice partnerships by providing input on prac-

titioners' learning needs and best practices in professional learning.

- Seek out research-practice partnerships that align well with the professional learning needs of educators as well as the needs of students and the system.
- Ensure that participating practitioners and researchers are aware of the professional learning opportunities embedded in research-practice partnerships and the importance of ensuring that they meet Learning Forward's Standards for Professional Learning to the extent possible.
- Offer ideas on how professional learning opportunities within research-practice partnerships can be more effective in supporting practitioners who participate and in reaching a greater number of practitioners by using more powerful learning designs.
- Inform the evaluation of research-practice partnerships by ensuring that evaluation measures reflect the Standards for Professional Learning and ensuring the variables measured are sufficiently varied to capture potential impacts across different realms, by joining evaluation teams, and by giving feedback on evaluation efforts.

MAKING THE MOST OF PROFESSIONAL LEARNING IN RESEARCH-PARTNERSHIPS

The five types of research-practice partnerships discussed here engage researchers, practitioners, and sometimes others in the consumption or the creation of evidence-based solutions to problems of practice. Ranging from the less intensive communities of practice and study councils, to moderately intensive research alliances, to highly intensive design research and networked improvement communities, these partnerships differ in the extent to which their embedded learning opportunities meet Learning Forward's Standards for Professional Learning.

Yet all five types of partnerships have in common the potential to generate effective professional learning for participating practitioners. The challenge for professional learning leaders is to ensure that practitioners are involved with partnerships best suited to their goals, time frame, and expectations, and then that they get the most and best learning out of the partnership. The strategies offered here give professional learning leaders a place to start on claiming research-practice partnerships as a high-impact venue for professional learning.

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