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A Descriptive Study of the IES Research–Practitioner Partnerships in Education Research Program

Interim Report

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Executive Summary

This report presents the results of a descriptive study of the Researcher–Practitioner Partnerships in Education Research program, a two-year grant program funded by the Institute of Education Sciences at the U.S. Department of Education that supports exploratory research within a partnership context. In these partnerships, researchers collaborate with practitioners from at least one state or local education agency on a research project to investigate a problem of practice and to identify strategies to address the key issues. The National Center for Research in Policy and Practice (NCRPP), a center funded by the Institute of Education Sciences, conducted the study. The study analyzed the goals, activities, and perceived progress of funded partnerships as well as participants’ perceptions of the program.

The study focused on the first three cohorts of researcher–practitioner partnerships (RPPs) using a mixed-method, cross-case design. It relied on three sources of data: surveys, interviews, and original grant applications. NCRPP researchers developed two survey instruments—one for researchers and one for practitioners. Surveys included five previously tested scales of items from NCRPP’s national survey of educational leaders’ research use as well as new items that were tested and revised through a cognitive piloting process. The study team also developed and pilot-tested interview protocols for each group, as well as conducted a systematic document review of grant applications. The reporting here focuses on broad themes and patterns that emerged across partnerships, rather than on reports of individual partnerships.

Participants in the Partnerships

The population consisted of key researchers and practitioners who were involved in the 28 RPPs initially funded by IES between 2013 and 2015. We created a sample from this population for our study by first approaching the principal investigators (PIs) of all grants and inviting them to participate in the study. We presented each of them with the names of all researchers and practitioners that appeared in the study abstract. We asked them to verify their current participation and to nominate other active members of the partnership. The 160 individuals confirmed or named by PIs constituted our initial sample roster.

A total of 106 participants from 27 of the 28 funded RPPs completed the survey, the interview, or both. We collected data from at least one researcher and one practitioner in 25 of the RPPs. We received survey responses from 104 participants (response rate = 65%) and conducted interviews with 98 participants (response rate = 61%). Eight participants completed the survey but not the interview; two participants completed the interview but not the survey.

Researchers and practitioners were both experienced in their roles and held advanced degrees. On average, researchers had served almost 11 years and practitioners had served over eight years in their current roles. Almost all of the researchers (92%) and almost half of the practitioners (44%) held doctoral degrees.

The 61 participating researchers held the following positions in their own institutions: thirty-four (56%) were professors; 19 (31%) were researchers with titles like research scientist; and equal numbers (4 researchers each) were center directors (7%) or doctoral students (7%).

Over half (59%) of the researchers held senior-level positions as associate or full professors, senior researchers, or center directors.

The 45 participating practitioners represented the following areas of practice: Nineteen (42%) were in P–20 research, assessment, and accountability; eight (18%) worked in postsecondary policy and practice; equal numbers (five practitioners each) worked in K–12 special education (11%), K–12 federal programs (11%), or early childhood policy and practice (11%); two (4%) were in K–12 educator evaluation; and one practitioner (2%) worked as a K–12 deputy superintendent or chief officer. Over two-thirds (67%) of practitioners were serving in senior-level positions (e.g., director of an organization or department).

Chi-square tests indicated that the proportions of rostered RPP participants in each position were similar to proportions among participating researchers ($p = 0.796$) and participating practitioners ($p = 0.525$). Likewise, the proportions of participating researchers and practitioners in senior-level positions mirrored those in the full roster ($p = 0.922$ and 0.998 , respectively).

Participants in each of the RPPs had worked together in some capacity prior to the IES grant beyond planning for their grant application, and 10 of the RPPs had a formal partnership beforehand.

Goals of the Partnerships

The most commonly reported goals of the RPPs were ones emphasized within the request for applications (RFA) for the program: conducting and using research, and impacting local improvement efforts. RPPs also pursued the goals of cultivating partnership relationships, increasing the capacity of researchers and practitioners to engage in partnership work, and informing the work of others through the sharing of strategies and tools with people outside the partnership.

Partnerships reported the greatest progress in their initial work toward building relationships and refining their understandings of problems the partnership could address. They reported somewhat less progress for longer-term goals such as improving organizational policies and processes in the educational organization and impacting student outcomes.

Conducting and Using Research in the Partnerships

Research questions, methods, and data sources. As outlined in their proposals, the majority of partnerships focused on descriptive or exploratory questions, although some focused on investigating causal relationships or validating measures or constructs. Most proposed to use mixed methods and to draw on both existing and new data sources. To carry out these research plans, partnerships created multi-sector datasets, engaged in secondary analyses of student-, teacher-, and school-level data, conducted interviews and focus groups, created case study reports, and more.

Educational leaders' use of research. Overall, RPP practitioners reported using research in multiple ways, including to make decisions (instrumental use), to inform how they thought about issues (conceptual use), and to persuade others of a particular point of view (symbolic use). In the

survey, of those practitioners who participated in directing resources to a program or redesigning a program, over three-quarters reported using research instrumentally in those activities. Over three-quarters of RPP participants also reported that research had frequently or all of the time “expanded (their) understanding of an issue,” a conceptual use of research. Almost two-thirds of participants reported using research to “mobilize support for an important issue” frequently or all of the time, a form of symbolic use.

Activities of the Partnerships

All partnerships were engaged in problem refinement and analysis of data, and nearly half were doing some design work together that involved developing programs and practices that they were testing or planning to test. More than one-third were revising interventions they had developed together, an activity that might be expected in an IES Development and Innovation grant.

Communication Within the Partnerships

Participants in the RPPs maintained regular and frequent communication across partners, with most members engaging in weekly emails or phone calls.

Challenges Within the Partnerships

Roughly half of the partnerships identified organizational turnover and difficulty obtaining usable data as key challenges to their work together. Other leading challenges were synchronizing schedules of researchers and practitioners and accommodating different timelines for getting work done.

Perceptions the Partnerships

Researchers and practitioners alike highly valued their participation in partnership work, with 100% of those surveyed either agreeing or strongly agreeing that they would participate in another RPP in the future. Practitioners named several benefits, including helping to shift organizational culture for research use and increasing access to resources and expertise aimed at understanding and addressing specific problems of practice. Both researchers and practitioners also felt that the quality and applicability of research increased as a result of the partnership.

Planned Future Activities of the Partnerships

Five RPPs indicated plans to apply for new grants, 10 were in the midst of applying, and five had secured additional funding at the time of the interview. In spite of shared interest in continuing, a number of participants noted that the future of their partnerships was contingent upon securing additional funding.

Guidance for IES

Half of participants believed that a two-year time frame was adequate for RPPs to achieve their goals. Many suggested that new RPPs could benefit from a three-year grant period to accomplish their aims; however, a longer grant period would require a proportionate increase in funding. Participants were similarly concerned about the sustainability of their partnerships. One common suggestion was to create a supplemental funding opportunity that would support an additional year or two of project work for partnerships that had been successful in meeting their initial goals.

Researchers and practitioners requested opportunities to connect with other IES-funded RPPs, especially if the meetings focused on common challenges of working in partnerships. They also encouraged a wide range of dissemination or communications activities beyond peer-reviewed journal articles. Finally, some participants suggested a quicker turnaround for application review to better align with practitioners' pace of work.

Introduction

There is growing interest in research-practice partnerships (RPPs)—collaborations between researchers and practitioners formed to investigate problems of practice and solutions for improving educational outcomes.¹ Advocates argue that such partnerships enable greater research use in decision making² and address persistent issues in education.³ Funders share enthusiasm for the approach and are investing considerable resources to develop new RPPs, including the Institute for Education Sciences, the National Science Foundation, and the Spencer Foundation. Research in fields outside of education (e.g., public health, mental health, criminology) provides evidence of the promise of RPPs in improving individual outcomes.⁴

Despite large investments from funders to develop and support RPPs in education, there has been little systematic research on them.⁵ Available literature consists mainly of retrospective, first-person accounts from researchers, focused on challenges they experienced creating and sustaining partnerships.⁶ Further, the small body of existing empirical research consists primarily of single case studies.⁷ We do not yet have a good sense of the range of ways researchers and practitioners structure their work together, the challenges that emerge, the value of such approaches, or the degree to which participation in partnerships fosters research use among educational decision makers. There is a need especially for comparative studies of RPPs to better understand how partnerships vary in their goals and activities.

To address this need, this report presents initial findings from the first phase of a study of researchers and practitioners engaged in RPPs funded by the Institute of Education Sciences (IES) at the U.S. Department of Education. The study was conducted by the IES-funded National Center for Research in Policy and Practice (NCRPP), a research and development center focused on the study of research use among educational leaders in the United States.

In 2013, IES launched the Researcher–Practitioner Partnerships in Education Research program, which we refer to in this report as the RPP program. Under the leadership of then-IES director John Easton, this program was part of a focus on partnerships as a strategy to support rigorous, relevant research that meets the needs of local communities and builds local capacity. The two-year grant program supports exploratory research within a partnership context. Researchers and practitioners collaborate on a research project to explore a problem of practice, identify strategies to address the key issues, and engage in preliminary design work related to the problem of practice. The formal requirement for an RPP grant is, at a minimum, a partnership between a research institution and a state or local education agency. The purpose of this program was described in the IES request for applications (RFA) for awards beginning in fiscal year 2017:

The Researcher–Practitioner Partnerships in Education Research (Research Partnerships) topic supports partnerships composed of research institutions and state or local education agencies that have identified an education issue or problem of high priority for the education agency that has important implications for improving student education outcomes. These partnerships are to carry out initial research and develop a plan for future research on that education issue. Through this joint research, the

education agency's capacity for taking part in research and using results is expected to increase. The ultimate goal of the partnerships supported under this topic is to conduct and promote research during and after the grant that has direct implications for improving programs, processes, practices, assessments, or policies that will result in improved student education outcomes.

The Research Partnerships topic provides funds to develop new partnerships and to support the expansion of existing partnerships into new areas of research. Partnerships are expected to complete initial research to help understand their education issues and develop a plan for future research. To this end, partnerships may analyze secondary data and/or collect primary data and analyze it. (p. 13)

To develop an understanding of RPPs funded under the program, we surveyed and interviewed researchers and practitioners who were actively involved in the partnerships and analyzed their original grant applications. In this interim report, we present the results of the first phase of our study with regard to the following questions:

Goals of the RPPs

- What are the partnerships' goals, and what progress have they made toward these goals?
- Relative to partnerships' other goals, how important is promoting research use?

Conducting and Using Research in Partnerships

- In what kinds of research projects are partnerships engaged?
- What are practitioners' patterns of research use?
- Have researchers changed how they do research as a result of their partnerships?

Activities of Partnerships

- What types of activities have partnerships pursued to attain their goals?

Communication Within Partnerships

- How and how often do partners communicate with each other?

Challenges to Working in Partnerships

- What are common challenges to sustaining a partnership?

Perceptions of the Partnerships

- Do researchers and practitioners value long-term partnerships with each other?

Planned Future Activities of Partnerships

- What, if any, are the participants' plans for continuing their partnerships beyond the end of the grant?

Guidance for IES

- What feedback do RPP participants have for IES related to amount of funding, length of time of grant, level and type of monitoring, and opportunities for RPPs to meet to discuss work?
- How might IES alter their RPP grant program to help future partnerships meet their goals?

We first describe our instrument development process, sampling strategy, and key constructs. We then offer preliminary analysis related to the questions above. The findings of this study can not only inform the IES RPP program but also contribute to knowledge about the processes, successes, and challenges of RPPs in education. This work also provides information about the reported value of these collaborative efforts for researchers and practitioners interested in developing partnerships.

Conceptual Framework

A set of key interlocking ideas guided the design of this study. We applied Weiss and Bucuvalas's typology of research use⁸ to address the question of how well the projects are meeting a core goal of the IES RPP program: building the capacity of educational organizations to use research. To inform the design of survey and interview questions related to goals and activities, we drew on the framework recently developed by Henrick and colleagues⁹ for characterizing the outcomes of RPPs as well as on a typology of research–practice partnerships.

Types of Research Use

In designing queries about leaders' research use, we employed the categories Weiss and Bucuvalas¹⁰ first identified to capture the multifaceted nature of research use and that have been applied more recently in studies of educational leaders' research use.¹¹ This typology includes three types of use:¹²

- *Instrumental use*: Research is applied to guide or inform a specific decision.
- *Conceptual use*: Research induces changes in the way a person views either a problem or the possible solution space for a problem.
- *Symbolic/political use*: Research is used to validate a decision or legitimate a decision already made.

Of these three, instrumental use is emphasized in contemporary education policies that are intended to promote research use. However, past research,¹³ as well as a recent study of research use among school and district leaders conducted by NCRPP,¹⁴ indicate that conceptual and symbolic uses are also common. Conceptual and symbolic uses can influence decision making indirectly by focusing attention on issues that were previously unknown to decision makers,¹⁵ by helping to identify opportunities for improving current programs and policies,¹⁶ or by building political support for local initiatives.¹⁷

Research–practice partnerships are hypothesized to promote use of all types because they provide opportunities for sustained interactions between researchers and practitioners around evidence.¹⁸ Sustained interaction is important to fostering research use because it involves the interactive processes of deliberation, persuasion, negotiation, and sensemaking.¹⁹ RPPs frequently involve structured activities to develop research and evaluation questions together and to make sense of results of studies of policies and programs.²⁰ Such processes may not only help practitioners to make sense of evidence, they may also be occasions for researchers to “give sense”²¹ to the meaning of the evidence in light of how particular findings fit in with other research studies.

Characterizing the Goals of IES Researcher–Practitioner Partnerships

Promoting research use is not the only goal of RPPs, nor is it the only goal of the IES grant program. For example, many partnerships aim to design and test interventions together that can improve learning outcomes and be implemented at scale.²² To characterize the goals of RPPs in this study, we draw on a recent effort by Henrick and colleagues funded by the William T. Grant Foundation.²³

That effort, which used an iterative, participatory process of soliciting input and feedback from multiple RPPs across the country, yielded a typology of five categories of outcomes that the RPPs in the sample agreed were important to them to varying degrees. Though this framework encompasses some aims that might go beyond those explicitly promoted in the IES RPP program, we employed it here to capture the types of goals that the partnerships pursued. The five categories from the framework are described below.

Cultivate partnership relationships. RPPs aim to cultivate partnership relationships and build trust among researchers and practitioners. Productive working relationships are both the foundation for joint work and a consequence of working successfully together. Similarly, trust is a necessary ingredient in all partnerships,²⁴ and it develops as people make commitments to one another and follow through on their commitments.

Increase capacity of researchers and practitioners to conduct partnership work. Another goal that RPPs pursue is to develop the skills and dispositions of people to conduct work in partnerships. For researchers, this includes identifying problems of practice to study that could address gaps in foundational knowledge about learning or education. It also includes cultivating dispositions to listen to practitioners and seek out their expertise in diagnosing problems and designing solutions to them. For educators, it means cultivating an appetite for research evidence and developing skills necessary to participate in different aspects of the research process, from defining questions to providing feedback on instruments to making judgments about how best to apply findings in particular decision-making contexts.

Conduct and use rigorous research. Just as researchers who engage in other forms of research and development do, researchers in RPPs aim to conduct studies that meet the highest standard of quality. When evaluating programs, for example, they seek to use the best designs available for estimating causal impact, including experiments.²⁵ What distinguishes RPPs from other forms of research is that they are focused sharply on problems of practice of their local partners. To that end, partnerships often produce descriptive studies that explore the relationships among malleable factors in educational environments,²⁶ as is one aim of the IES RPP program. Partnerships are also consumers of research. Sometimes, education leaders take up findings and use them to adjust policies and programs.²⁷ On other occasions, design teams composed of both researchers and practitioners make use of research analyses to refine their solutions to educational problems.²⁸ The capacity of educational organizations to conduct or use research may be further developed as part of this goal.

Impact local improvement efforts. RPPs support educational organizations in making progress toward their local improvement goals. That is, the research they do is in service of larger aims for improving teaching and learning outcomes, not just to develop an understanding of problems. Sometimes, partnerships work together to identify and test strategies for addressing focal problems. Partnerships may also engage in continuous improvement research in which they develop, test, and refine particular strategies and use research evidence to refine or adjust those strategies.²⁹ Researchers in partnerships may develop systems of indicators to help their education partners track progress toward their program goals.³⁰

Inform the work of others. Although RPPs attend to local problems of practice, most also aim to inform the work of others outside those partnerships. Research conducted by RPPs can also contribute to new knowledge and theory that furthers our understanding of what it takes to support educational improvement across different educational settings.³¹ When given the opportunity, educators readily share knowledge, tools, and practices they have developed with other educators inside and outside their own organizations.³²

Describing the Activities of IES Researcher–Practitioner Partnerships

It is typical for RPPs to engage in a broad range of activities, given the breadth and ambitions of their aims. Although the IES program is intended to support certain kinds of activities, such as descriptive research to refine an understanding of a focal problem, it is possible that some partnerships may be engaged in a broader range of activities.

Different types of partnerships can be distinguished by the kinds of work researchers and educators do together and separately. A typology developed by Coburn and colleagues³³ depicts three broad types of partnerships. In *research alliance* models, RPPs engage in analyses of the implementation and outcomes of district policies and programs. Researchers share findings with educational decision makers and work with them to develop solutions (e.g., the University of Chicago Consortium on School Research). In *design research* partnerships, researchers and educational leaders co-develop and test strategies or tools for improving teaching and learning systemwide. They use an approach adapted from the learning sciences for conducting research on interventions in classroom, school, or district contexts. Still other RPPs organize as *networked improvement communities* (NICs) and engage in continuous improvement research to work on problems of practice. NICs are networks of people and organizations that can span multiple jurisdictions (e.g., districts, universities) and that are organized to achieve common improvement aims.

As noted in the RFA, IES does not endorse a specific model of research partnerships. In the current study, we did not assume that each RPP would neatly fit into one of these three types. Instead, we hypothesized that a partnership may engage in a configuration of different activities based on the goals of their work together. For instance, a partnership could engage in activities that are more typical of research alliances, like integrating multiple datasets or performing independent analyses of district administrative data. The same group could also be involved in design work as they co-design and test strategies or tools for addressing identified needs. For this study, however, the typology helped to define the range of partnership activities we explored with respondents.

Study Design

This study focused on describing the goals, activities, and perceived progress of participants in the IES RPP program as well as on their perceptions of the program. As a descriptive study, no inferences about the program's impact can be made, nor was that the intent. This report shares descriptive findings from the first phase of a two-phase study. Below, we describe our population and sample, study methods, instruments, and the procedures for data collection and analysis.

Population and Sample

We studied the first three cohorts of RPPs funded by IES between 2013 and 2015. The population included a total of 28 RPPs and the active researchers and practitioners in those partnerships. By active members, we mean people with some responsibility for carrying out the work of the partnership. Researchers include principal investigators (PIs) and RPP members from universities and research organizations; this group does not include practitioners who were in research positions in practitioner organizations (e.g., a director of research in a school district). Practitioners include co-principal investigators (co-PIs) and all RPP members from practitioner organizations (e.g., school districts, departments of education, social service agencies).

In order to identify the population of participants for the study, we began with the publicly available abstracts of the 28 RPPs. We aimed to include three to four active participants per RPP, with equal researcher and practitioner representation. Because only one-third of abstracts included information on three or more RPP members, and because it was possible that some turnover had occurred since the time of award, we pursued a snowball sampling approach to identify the currently active members of the RPPs.³⁴ We emailed the PIs of the 28 RPPs, asking them to share their original grant proposals with us, to confirm the active status of RPP members we had identified from the abstracts, and to name other key researchers and practitioners most involved in their partnerships.

Original roster. Twenty-seven of the 28 PIs responded to our request. The PIs confirmed or named 82 active researchers (including the 27 PIs) and 78 active practitioners (including 25 lead co-PIs). In the case of four RPPs where the PI named more than one co-PI, we asked them to identify a lead practitioner co-PI. For each of the responding 27 RPPs, our roster included the PI, the lead co-PI, an average of two other researchers, and an average of two other practitioners. We determined all rostered individuals' professional positions via an online search and confirmed these positions during interviews when possible. Finally, we determined whether a rostered individual was in a senior-level position based on professional title and the structure of the research or practice organization.

As shown in Table 1 below, the full roster consisted of 82 researchers, including 28 PIs and 54 other researchers. The majority of PIs were professors (19; 68%), followed by researchers (6; 21%) and center directors (3; 11%). Many of the other researchers on the roster were professors (22; 48%) or researchers with titles like research scientist (21; 41%), followed by doctoral students (7; 13%) and center directors (4; 7%). Over three-quarters of PIs (22; 79%) were in senior-level positions, such as associate or full professor, senior researcher, or director of a research organization.

Although more junior than the PIs overall, almost half of the other researchers were also in senior-level positions (26; 48%).

Table 1. Rostered Researchers, by Position and Role in Partnership

	# (%) of PIs	# (%) of other researchers	# (%) of all researchers
Professor	19 (68%)	22 (41%)	41 (50%)
Researcher	6 (21%)	21 (39%)	27 (33%)
Center director	3 (11%)	4 (7%)	7 (9%)
Doctoral student	0 (0%)	7 (13%)	7 (9%)
Senior-level position	22 (79%)	26 (48%)	48 (59%)
Total	28	54	82

As seen in Table 2 below, our roster included 78 active practitioners, which included 25 co-PIs and 53 other practitioners. The largest share of the co-PIs worked in positions related to P-20 research, assessment, and accountability (12; 48%), followed by postsecondary policy and practice (3; 12%). Less than 10% of co-PIs represented each of the remaining areas of practice.

The other rostered practitioners were somewhat more evenly divided, with most working in P-20 research, assessment, and accountability (14; 26%), followed by early childhood policy and practice (10; 19%); postsecondary policy and practice (9; 17%); and K-12 special education (6; 11%). Less than 10% were in each of the remaining K-12 areas of practice. Four-fifths of the co-PIs (20; 80%) were in senior-level positions, such as directors of departments or organizations, cabinet-level leaders in school districts, or heads of educational agencies. Although more junior than the co-PIs overall, over half of the other practitioners were also in senior-level positions (30; 57%).

Table 2. Rostered Practitioners, by Area of Practice and Role in Partnership

	# (%) of co-PIs	# (%) of other practitioners	# (%) of all practitioners
P-20 research, assessment, and accountability	12 (48%)	14 (26%)	26 (33%)
Postsecondary policy and practice	3 (12%)	9 (17%)	12 (15%)
Early childhood policy and practice	2 (8%)	10 (19%)	12 (15%)
K-12 special education	1 (4%)	6 (11%)	7 (9%)
K-12 federal programs	2 (8%)	5 (4%)	7 (5%)
K-12 educator evaluation	2 (8%)	3 (6%)	5 (6%)
K-12 curriculum and instruction	1 (4%)	4 (8%)	5 (6%)
K-12 deputy superintendents and chief officers	2 (8%)	2 (4%)	4 (5%)
Senior-level position	20 (80%)	30 (57%)	50 (65%)
Total	25	53	78

Participants

We gathered survey or interview data from 27 of the 28 IES-funded RPPs, for a partnership response rate of 96%. On average, there were four participants per RPP. Data for 25 of 27 participating RPPs included at least one researcher and one practitioner.

Overall response rates for rostered participants. Table 3 below details the response rates of the 160 rostered individuals. A total of 106 participants completed the survey, the interview, or both, for an overall response rate of 66%. We received survey responses from 104 participants (response rate = 65%) and conducted interviews with 98 participants (response rate = 61%). Eight participants completed the survey but not the interview. Two participants completed the interview but not the survey; these two individuals started but did not fully complete the survey items, so they received an automatic invitation to schedule an interview.

Overall, response rates were higher for researchers than for practitioners. Of the 82 rostered researchers, 61 (74%) completed the survey, the interview, or both, while 45 (58%) of the 78 rostered practitioners did so. Among researchers and practitioners, participation was high for PIs (26; 93%) and for co-PIs (21; 84%), and lower for other researchers (35; 65%) and other practitioners (24; 45%).

Table 3. Response Rates for PIs, Other Researchers, Co-PIs, and Other Practitioners

	Rostered	# of participants (response rate)		
		Survey	Interview	Survey, interview, or both
All	160	104 (65%)	98 (61%)	106 (66%)
Researchers	82	61 (74%)	56 (68%)	61 (74%)
PIs	28	26 (93%)	24 (86%)	26 (93%)
Other researchers	54	35 (65%)	32 (59%)	35 (65%)
Practitioners	78	43 (55%)	42 (54%)	45 (58%)
Co-PIs	25	20 (80%)	19 (76%)	21 (84%)
Other practitioners	53	23 (43%)	23 (43%)	24 (45%)

Response rates by position and senior level. The 61 researchers who completed the survey, interview, or both served in a range of positions. Thirty-four (56%) were professors, and 19 (31%) were researchers with titles like research scientist. Fewer of the participating researchers (4 each) were center directors (7%) or doctoral students (7%). A chi-square test indicated that the proportions of respondents in each position relative to all responding researchers was not significantly different from proportions of each position in the original roster ($X^2[3, n = 61] = 1.016, p = 0.798$). That is, the proportions of participating researchers by position mirrored the proportions of all researchers in the original roster. (See Appendix A for detailed proportions of respondents and non-respondents by position and partnership role.)

The 45 responding practitioners represented the following areas of practice: Nineteen (42%) were in P–20 research, assessment and accountability; eight (18%) worked in postsecondary policy and practice; equal numbers (5 practitioners each) worked in either K–12 special education (11%), K–12 federal programs (11%), or early childhood policy and practice (11%); two (4%) worked in K–12 educator evaluation; and one (2%) worked as a K–12 deputy superintendent or chief officer; none held a position in K–12 curriculum and instruction.

Although some areas of practice had lower response rates than others (e.g., K–12 deputy superintendents and chief officers; K–12 curriculum and instruction), it is important to keep in mind the low numbers of individuals rostered for each position. A chi-square test indicated that the proportions of respondents in each position relative to all responding practitioners were not significantly different from the proportions of each position in the original roster ($X^2[7, n = 45] = 6.114, p = 0.527$).

As they did among researchers, then, the proportions of participating practitioners by area of practice mirrored the proportions of all practitioners in the roster. (See Appendix A for detailed proportions of respondents and non-respondents by position and partnership role.)

Finally, of the 48 senior-level researchers in our original roster, 36 (75%) completed a survey, interview, or both. Of the 50 senior-level practitioners in the original roster, 30 (60%) completed the survey, interview, or both. Chi-square tests indicated that the proportions of participating researchers and practitioners in senior-level positions mirrored those in the full roster ($X^2[2, n = 45] = 0.377, p = 0.828$) and ($X^2[6, n = 45] = 0.417, p = 0.999$), respectively. The response rates of those in senior-level positions generally mirrored those of all participants in those positions. (See Appendix B for more details on response rates by position, area of practice, and senior-level designation.)

In sum, while some response rates were higher than others for different groups, the fact that the proportions of positions mirrored the overall roster along these different lines (i.e., positions or areas of practice, senior-level roles) increases our confidence that the sample is a fair representation of the rostered population.

Survey participant demographics. Table 4 shows the demographic information collected for the 104 survey respondents. Both researchers and practitioners were experienced in their positions and held advanced degrees. On average, PIs had served almost 15 years in their positions, compared to eight years served by other researchers. Co-PIs and other practitioners had served over eight years on average in their positions. Almost all PIs (96%) and other researchers (89%) held doctoral degrees. Notably, half of co-PIs (50%) and 39% of other practitioners also held doctoral degrees. Across all groups, participants largely identified as female (66%) and White or European American (83%).

Table 4. Demographics of Survey Respondents

	Researchers			Practitioners	
	All (n = 104)	PIs (n = 26)	Other researchers (n = 35)	Co-PIs (n = 20)	Other practitioners (n = 23)
Average years in current role	9.9	14.8	8.0	8.5	8.3
Highest degree held					
Doctorate	72%	96%	89%	50%	39%
Master's	25%	4%	9%	45%	57%
Bachelor's	3%	0%	3%	5%	4%
Gender identity					
Female	66%	58%	66%	55%	87%
Male	34%	42%	34%	45%	13%
Racial or ethnic identity					
White or European American	83%	81%	89%	85%	74%
Latino(a)/Hispanic	6%	4%	0%	15%	9%
Black, African American, or Afro-Caribbean	5%	4%	9%	0%	0%
Asian American or Pacific Islander	4%	4%	9%	0%	0%
Multiracial	2%	4%	3%	0%	13%
Arab American or Indian American	1%	4%	0%	0%	0%
American Indian or Alaskan Native	0%	0%	0%	0%	0%

Note. Gender identity was asked as an open-ended question; racial or ethnic identity options correspond to those on the U.S. Census; because demographic data were gathered on the survey, the table does not include information for two participants who completed the interview but not the survey.

Sources of Data

There were three sources of data for the study: grant applications, surveys, and interviews.

Grant applications. Each partnership submitted a grant application in order to be considered for IES funding. We used these applications as a source of data regarding each partnership's history, as well as its research questions, methods, and data sources. In the application, the team described the strengths of each partner organization, the overall strength of the partnership, and their plans for developing the relationship over time. Each applicant outlined the partnership's research aims, the education issue to be addressed, the importance of the issue for all parties involved, and details about their research plans. Applicants were asked to explain their plans for activities aimed at supporting/increasing the research capacity of the practitioner organization(s) as well as plans for the partnership's future work together.

Survey. We developed two survey instruments, one for researchers and one for practitioners. Surveys included five previously tested scales of items from NCRPP’s national survey of educational leaders’ research use and attitudes,³⁵ including instrumental, conceptual, and symbolic uses of research, as well as new items specific to this study. New items were tested and revised through a cognitive piloting process with two practitioners and two researchers. We also solicited expert feedback from advisors. We then made revisions to items on the basis of team discussions that took into account the pilot results and expert feedback. The constructs listed below are those included in this report; other constructs on the survey (e.g., organizational culture) will be included in future reports.

Definition of research in the survey. Each page of the survey that included items related to research provided respondents with a definition of research as “an activity in which people employ systematic, empirical methods to answer a specific question.” The first page of the survey provided the following elaboration:

Research bases its conclusions in investigations involving statistical data, interviews, observations, and case studies, or a combination of these. Research can appear in books, academic journal articles, practitioner-oriented journals, and analyses of program implementation developed by researchers external to the district. It can also appear in policy and evaluation reports or presentations developed by researchers within a district.

For this study, we differentiate between research, which involves systematic inquiry to answer a specific question, and the practice of looking at data from the district, school, or classroom, which is more open-ended and seldom addresses specific research questions. For instance, looking at state standardized test results to identify students who need extra support in the classroom would not be research. However, asking the question, “What is the relationship between fourth-grade state standardized test results and high school graduation?” would be research.

NCRPP scale: Instrumental research use. Instrumental use occurs when research is applied to guide or inform a specific decision. To elicit practitioners’ instrumental use of research, we provided a list of six decisions common to educational organizations, including curriculum adoption, scaling up a pilot program, designing professional development, and other activities. We first asked participants if they had been involved in each type of decision. Because this study surveyed practitioners in a range of educational organizations (not only school districts), for the instrumental use scale we omitted one item that asked about involvement in adopting curriculum materials. We also condensed two items on designing professional development for administrators and teachers to one item on designing professional development. Respondents who indicated they were involved in an activity were then asked how often they had used research as part of that activity. This scale was adopted from the NCRPP research use survey where it demonstrated excellent reliability ($\alpha = .93$). We also asked practitioners whether the partnership was consulted or involved in that activity. Item response choices were: Never (1), Sometimes (2), Frequently (3), All of the time (4). This item bank only appeared on the practitioner version of the survey.

NCRPP scale: Conceptual research use. Conceptual use refers to research that is applied to induce changes in the way a person views a problem or space of possible solutions. In our survey, we sought to elicit the extent to which research informs practitioners' ways of looking at problems or their approaches to solving district problems. The six-item scale included questions such as, "How often have you encountered research that changed the way you look at problems facing your school/district?" and "How often have you encountered research that suggested alternative solutions to a district problem?" As with the instrumental use scale, item response options were: Never (1), Sometimes (2), Frequently (3), All of the time (4). This scale was adopted from the NCRPP research use survey, where it demonstrated good reliability ($\alpha = .88$). This item bank only appeared on the practitioner version of the survey.

NCRPP scale: Symbolic research use. Symbolic use, sometimes referred to as political use of research, occurs when research is leveraged to influence a decision or to legitimate a decision that has already been made. The four-item scale asked respondents to report their engagement in activities such as using research to mobilize support for important issues or selectively using research to support decisions. Item response choices were: Never (1), Sometimes (2), Frequently (3), All of the time (4). This scale was adopted from the NCRPP research use survey, where it demonstrated good reliability ($\alpha = .81$). This item bank only appeared on the practitioner version of the survey.

Goals. Partnerships may have multiple aims that drive their joint efforts. To elicit respondents' reports of partnership goals, we first provided a list of 14 potential goals, based on prior research and preliminary analysis of the grant applications. Goals included plans to identify a specific strategy for improvement, improve students' academic outcomes, or build a foundation or infrastructure for future work together. We asked whether this was a current goal of the partnership, was a goal at the start of the partnership, or was not a goal. If a respondent indicated this was or had been a goal, we subsequently asked what progress the partnership had made towards that goal. Item response choices were: No progress (1), A little progress (2), Some progress (3), Accomplished (4), or Exceeded (5). This set of items was included on both researcher and practitioner surveys.

Partnership activities. Participants of RPPs can interact with each other for a range of purposes. We developed a list of 18 potential activities of partnerships, drawing on our conceptual framework and a preliminary analysis of project abstracts. Example activities included: develop a set of conjectures or hypotheses about features of programs that are needed to address a problem; build a data archive or database that combines multiple data sets; or create a networked improvement community of people or other organizations interested in testing solutions to a problem. Item response choices were: Not part of this grant (1); Has done as part of grant (2); Plans to do as part of grant (3); Plans to do after grant concludes (4). This set of items was included on both researcher and practitioner surveys.

Communication strategies. We asked participants to report how frequently they communicated with their partners. Modes of communication included email, phone, or text; working on shared documents or an online platform; in-person meetings; teleconference or video meetings; and other. Item response choices were: Never, Yearly, Bi-monthly, Monthly, Weekly, or Daily. This item bank was included on both researcher and practitioner surveys.

Attitude items related to the value of partnership. We included six items with respect to the value of the partnership and plans for future work. These items included statements like, “I would participate in a researcher–practitioner partnership in the future” or negatively phrased statements such as, “I would not recommend to a colleague that they join or form a researcher–practitioner partnership.” We asked respondents to indicate to what extent they agreed or disagreed with each statement, using these item responses: Strongly disagree (1); Disagree (2); Agree (3); Strongly agree (4). This set of items appeared on both researcher and practitioner surveys.

Challenges. These are the set of barriers that partnerships can face in their work together. We asked respondents to indicate the degree to which they experienced different barriers identified in the literature on research–practice partnerships. There were eight items in all. Topics included difficulties in communicating across boundaries of research and practice, asynchrony in timing of joint work, difficulty navigating unfamiliar roles, and turnover and change in leadership in a partner organization. We asked respondents to assess the extent to which they agreed or disagreed with each statement, using these response choices: Strongly disagree (1); Disagree (2); Agree (3); Strongly agree (4). This bank was included on both researcher and practitioner surveys.

Guidance to IES. The RPP program has current design features that could be revised in the future. This set of four items asked about RPP members’ perceptions of the level of funding, the length of time of the grant, and opportunities to interact with other partnerships. We asked respondents to assess the extent to which they agreed or disagreed with each statement, using these response choices: Strongly disagree (1); Disagree (2); Agree (3); Strongly agree (4).

Demographic information. Finally, we asked participants to report their own demographic characteristics related to years of experience, educational degrees earned, gender, and race or ethnicity.

Interview protocols for researchers and practitioners. We developed two semi-structured interview protocols, one for researchers and one for practitioners, both of which we piloted before beginning interviews. Each protocol included 22 questions related to the individual’s role in the partnership, the partnership’s goals and progress made toward those goals, how the partnership compared to previous experiences of interacting with researchers or practitioners, challenges to sustaining the partnership, and guidance to IES about the program.

Data Collection Procedures

We administered the survey via Qualtrics, an online survey administration platform, with an eight-week completion window for each respondent. In June 2016, IES leadership sent an email to all PIs, introducing the study. We then sent an email to each contact on the roster with an invitation to participate in the study and a link to the appropriate survey on Qualtrics. We sent three reminder emails over three weeks and followed up with one to two phone calls to survey non-respondents. In some cases, we delayed the reminder if we learned that the respondent was unavailable for periods of time over the summer.

Surveys took 15 to 20 minutes to complete. Once they started the survey, participants automatically received an email with a link to schedule a phone interview. Interview scheduling involved the same pattern of three emails at weekly intervals and one to two phone call reminders. All but eight of the 104 survey respondents scheduled interviews with one of the members of the research team, which lasted 45 minutes on average. Therefore, unless a person directly declined to participate, he or she could receive up to eight emails and four phone calls over the 10-week period to invite their participation in the survey and interview. At that point, we determined that no response was a signal for non-participation.

We aimed to have both researcher and practitioner perspectives represented in as many RPPs as possible. For 25 of the 27 participating RPPs, we secured a minimum desired response of at least one researcher and one practitioner for each RPP, for both the survey and interviews. The other two RPPs had only researcher participation.

Issues of Confidentiality and Anonymity

In this report, we do not identify any individual partnerships, and we have changed all names to pseudonyms. We have avoided using any identifiable language related to the individuals or the partnerships. Our reporting here focuses on broad themes and patterns that emerged across partnerships, not on reports of individual partnerships.

Approach to Analysis

To answer our research questions, we first looked at each source of data separately, producing descriptive statistics from our analysis of proposals and surveys and coding summaries of interview data. We considered carefully what each data source was well-suited to help us describe concerning the partnerships. For instance, the proposals have the most information about research design. We also considered where data sources might complement one another and where we could triangulate our initial conclusions. For example, proposals and interviews together were a good source of information regarding partnership history. We discussed analyses in weekly team meetings and developed a preliminary set of claims that we iteratively refined with the help of evidence matrices organized around those claims.³⁶ Below, we describe the initial set of analyses of proposals, surveys, and interview transcripts.

Analysis of proposals. Three research team members designed a systematic grant review process, which began with a review of six applications to identify common components. Team members then agreed upon low-inference codes that corresponded to major components of the IES grant applications, and developed a coding guide with a detailed definition and at least one example for

each code. The key codes included the following: prior experiences of working together, goals of the partnership, topic of the focal problem of practice, type of research question, sources of data, research methods employed, and planned activities.

Using Dedoose, a data management and analysis program for mixed-methods research, two team members separately coded two applications and then compared and reconciled their use of codes. Following this calibration, the 25 remaining applications were divided among researchers, with each researcher independently coding 12–13 additional applications. The team met regularly to discuss any issues that arose during grant application coding in order to ensure consistency.

Survey analysis. After survey data cleaning, one research team member calculated descriptive statistics for reported survey constructs. In order to investigate agreement between groups within partnerships, we compared responses among PIs, co-PIs, other researchers, other practitioners, all researchers, and all practitioners. To investigate similarities and differences across RPPs, we determined whether at least 50% of each RPP's participants gave consistent responses for items or banks of items.

Interview analysis. Interviews lasted 45 minutes on average and were recorded and transcribed. Research team members reviewed interview transcripts for accuracy, replaced individuals' names with pseudonyms, and uploaded cleaned transcripts to Dedoose. Team members tagged each transcript with descriptors for the data collection time period (summer 2016); participant type (practitioner, researcher, PI); and RPP (by number) so as to be able to track individuals and partnerships.

We proceeded in an iterative fashion to analyze the qualitative interview data.³⁷ First, we engaged in low-inference coding. The goal of this initial stage of coding was to index interviews by key constructs like “Guidance to IES” or “Goals.” Lead researchers created a coding guide with major constructs, definitions, relevant interview questions, examples, and non-examples for each code. This coding guide was revised as the team coded transcripts, first together and then independently once they had reached a shared understanding of codes. A team of five team members engaged in this initial coding. Lead team members periodically checked coding to ensure integrity to the coding guide, and the team met regularly to discuss any issues that arose.

Next, for each specific line of analysis, lead team members conducted a more refined analysis of coded data to identify themes. Starting with the relevant coded excerpts, two team members began with an a priori, deductive coding list based on the current literature base. They added codes inductively based on themes that emerged from the data. For instance, for the “Guidance to IES” category, a priori codes included funding, grant length, monitoring, and opportunities to engage with other partnerships. Within the funding code emerged subcodes about “enough funding,” “requests more funding,” or “need for continuation grants.” A third coder reviewed all coding for consistency. We analyzed patterns from interview coding within matrices, considering patterns by individual, role group, or partnership.

Because of time constraints, interview analysis for this interim report focused on patterns from the most active representatives of the partnerships. Here, we draw on 54 interviews from 28

researchers and 26 practitioners across the 27 RPPs in our sample. For 23 of the 27 RPPs, this analysis included the PI and the most active practitioner partner (most often the lead co-PI). For two RPPs where we determined from the interviews that the PI played an advisory role, we included a second researcher who was centrally involved in project management and leadership. There was one partnership where we could only include the PI interview and a second partnership where we could only include a practitioner interview.

Study Limitations

One limitation to the study is that we rely on retrospective self-reports from surveys and interviews. Self-reports of socially desirable behaviors, like research use, are always subject to bias. Further, the fact that they are retrospective makes them subject to accounts that gloss over challenges, dilemmas, and uncertainties in decision making. Research use and the role for partnerships are interactive phenomena that are best understood using multiple methods, including observations of partners' work together and the role of research therein.

Second, there are some caveats to our sample. We identified three to four individuals who were key participants in each partnership through a focused snowball sampling technique with the PIs and the publicly available abstracts. However, the perspectives of members who may be more peripheral may be different, and they are not currently included here. Further, likely because of the summer data collection window, we had lower response rates for practitioners. Finally, these findings on IES's 27 partnerships may not be generalizable to all other research–practice partnerships, although they can contribute to theory building related to this field of work.

Description of the IES Research–Practitioner Partnerships

Based on our analysis of grant applications, the 27 RPPs varied in terms of their start dates, prior relationships, organizational configurations, central educational issues, and focus of their joint research projects.

The RPPs that participated in our study had been awarded two-year grants in the first three years of the IES RPP program, with six RPPs beginning in 2013, 13 in 2014, and eight in 2015. Due to no-cost extensions granted to some RPPs, at the time of this report, 11 were due to end in 2016, and 16 were due to end in 2017.

Even though the program does not specify that partnerships should have prior experience working together, all 27 had done so in some capacity prior to receiving funding from IES, whether as part of individual projects or through informal or traditional data-sharing arrangements (see Table 5 below).

Table 5. Examples of Prior and Formal Relationships in RPP Grant Applications

<i>All partnerships had previous relationships through...</i>	<i>Examples from grant applications</i>
Prior work on individual projects	“In summary, several members of the partnership have worked together on past projects related to [policy area]. However, most of this work has been done on a volunteer basis in addition to the often considerable job duties and responsibilities of the partners. The funding provided by the proposed grant would allow the partners more time to focus on the dual goals of building a formalized, sustainable partnership and conducting preliminary research to guide future research and intervention efforts.”
Informal or traditional data sharing arrangements	“The researcher practitioner project proposed here follows several years of a more traditional relationship between these PIs, mainly one where the [university] researchers had access to [educational agency] data for research purposes, but had minimal contact with those at the [educational agency] providing the data.”
<i>Ten partnerships had formal arrangements marked by:</i>	
A formal data-sharing agreement	“Over the last two years this partnership has demonstrated its ability to align the interests of practitioners and researchers to work together around a shared set of interests to build an analytic database and employ that database for a preliminary analysis of [policy area]....Over the last two years we have signed a data memorandum of agreement that led to data sharing and the continuing development of an analytic database.”
A long-term, mutualistic arrangement between agencies	“[Educational agency] and [research agency] would expand upon a successful and mutualistic research partnership. This unprecedented investment comes on the heels of a long-term collaboration between [educational agency] and [research agency.] The Partnership stems from a 10-year relationship between [PI] and [educational agency], which was formalized through a 3-year IES Research–Practitioner Partnership Grant initiated in 2013.”

Ten RPPs described arrangements with formal data-sharing agreements or already formalized RPPs. In the second phase of this study, we plan to ask all participants when their joint work started, when they felt they became a “partnership,” and what the indicators of that are to them.

The partnerships funded by IES included a combination of research organizations and educational organizations. Research organizations included universities or other research agencies like the RAND Corporation or SRI International, while practitioner organizations included school districts, departments of education, higher education organizations, or other educational or social services agencies. Three-quarters (21) of the 27 RPPs included two organizations, while the remaining RPPs involved more than two. Close to two-thirds (18) of the RPPs included at least one university partner, while the same number had at least one school district partner.

Each RPP in our study intended to address a central educational issue (see Figure 1 below). The most frequently named issues—cited by 12 of the 27 RPPs—related to K–12 teaching and learning, with five focusing on improving curriculum and instruction, four on academic achievement, and three on social-emotional or non-cognitive skills and outcomes (e.g., social-emotional well-being, mindset, disproportionality in discipline). In addition, three RPPs addressed issues of K–12 teacher quality or evaluation, and two centered on K–12 school improvement. Four RPPs identified early childhood education as their main issue, five pursued postsecondary access and success, and one focused on coordination across state service providers and education agencies.

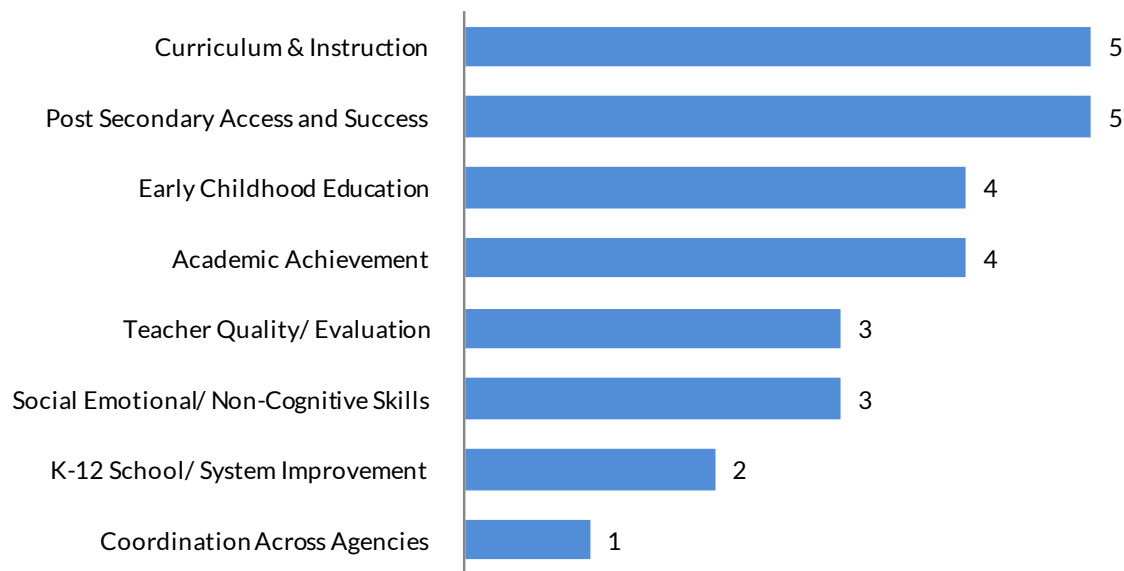


Figure 1. Central educational issues of partnerships, from awarded RPP grant proposals (n=27).

Goals of the Partnerships

Consistent with the purpose of the RPP program, nearly every application (24 of 27) stated goals related to developing practitioners' capabilities to conduct or use research or to exploring problems through rigorous research activities. These were not the only goals that partnerships pursued, however. In the surveys and interviews, we found strong evidence that the RPPs also had explicit goals to cultivate partnership relationships, to impact local improvement efforts, and to inform the work of others.

Key Findings:

- In the original grant applications, the most commonly reported goals were those emphasized within the RFA for the program: conducting and using research and impacting local improvement efforts.
- RPPs also had explicit goals to cultivate partnership relationships, to increase capacity of researchers and practitioners to engage in partnership work, and to inform the work of others.
- In surveys, participants reported making the most progress toward the goals of developing the foundation and capacity for partnership work, conducting and using research, and identifying and evaluating improvement strategies.
- In surveys, participants reported making somewhat less progress toward goals related to improving organizational policies and processes and improving student outcomes.

Conducting and Using Research

In the interviews, participants from all 27 RPPs described goals related to conducting and using research to address their focal problems. There was also agreement between researchers and practitioners around this goal within partnerships, with 18 RPPs having at least one researcher and one practitioner naming it in interviews. Survey results corroborated this finding, with at least half of the participants in every RPP reporting goals related to conducting and using research. (See Figure 2 below; for goals broken out by respondent group, see Appendix C.)

Partnerships pursued goals of conducting and using research by creating multi-sector datasets, conducting secondary analyses of student-, teacher-, and school-level data, conducting interviews and focus groups, creating case study reports, and more. As one practitioner described her partnership's work:

Essentially, we looked at over a decade of administrative data on students. We were able to determine their probabilities of meeting certain academic outcomes. Then, based on students who had been successful in the past of achieving those outcomes, we could look at current students based on their characteristics, and come up with the probability that they were going to meet those particular outcomes. We found one of the key lowest outcomes we had was for kids who were successfully achieving in math. That gave us the basis for designing this math intervention program this continuous improvement program, as we move forward.... We had hard data to really validate that this was one of the areas we should focus on.

In some cases, as described above, both researchers and practitioners worked together on data collection or analysis. In other instances, researchers took the lead on data analysis (e.g., when it involved advanced statistical methods), and practitioners were more involved in subsequent sense-making and determining next steps.

Participants sometimes described this aim of conducting and using research in terms of developing practitioners' abilities to engage with research. Rather than sharing highly technical statistical methods, this involved a goal for the educational organization to become more "evidence-based" in their work more generally. These aims sometimes also focused on practitioners becoming more "discriminate users[s] of research," as one practitioner noted. Another practitioner from a different partnership similarly suggested:

We don't necessarily have to build statisticians out of everybody. It's useful to be able to use research and to understand research, but it's not realistic or optimal to have everybody be able to actually create it. In terms of helping policymakers and practitioners use it, it's the guidance on, "Here's how to vet good research. Here's how you know to trust it."

Finally, with 42% in positions related to research, assessment, and accountability and 44% with doctoral degrees, practitioners often already had substantial knowledge of research methods. Rather than building individual capacity to use research, many participants explained that the goal of their work was to build the capacity of educational organizations to engage with research and to better integrate the work of researchers with other departments. One researcher, for instance, explained that the goal of the partnership was to help reestablish the role of research within the organization after years of budget cuts:

[The state] went through an extended period of either stagnating K–12 funding or falling K–12 funding. In this district, the size of the staff that was involved in research and policy evaluation dwindled sharply over time. There are still many people with quite sophisticated knowledge of social science research methods, but they just don't have the time and the wherewithal to do policy research. We're helping them answer questions they want answered and probably would've been in the position to answer 15 to 20 years ago, but due to cutbacks, just don't really have the time to do it. A lot of their time is spent working on mandatory evaluation reports for state, federal, and other funders. I don't think it's really changed them, but I think it's allowed them to sustain one of the things that got them into education policy in the first place, which was doing research.

Impacting Local Improvement Efforts

In addition to conducting and using research, all 27 RPPs had a member who, in interviews, identified impacting local improvement efforts as one of the most important goals of the partnership. Again, there were high levels of agreement within partnerships, as 21 partnerships had at least one researcher and practitioner who discussed their local improvement efforts. On the survey, all 27 partnerships had at least half of participants agreeing that "developing a deep understanding of the focal problem" was a goal of their work.

Often, participants began with data analysis to develop a better understanding of the problem of practice at hand. Within the areas of focus named above, partnerships' focal problems varied widely. Some focused on improving outcomes for specific groups of students, such as emerging bilingual learners (EBLs), students living in foster care, or students living in poverty. Others focused on improving policies and programs related to teacher effectiveness, postsecondary access and success, or early childhood education and kindergarten readiness.

Further, partnerships sought to impact local improvement efforts beyond developing a deeper understanding of their focal problems. That is, beyond just having a better sense of the issue at hand, 77% (20) of PIs who responded to the survey said that a goal of their partnership was to improve students' academic outcomes, and 69% (18) said they hoped their partnership would improve organizational processes in ways that would impact student outcomes.

Increasing Capacity to Conduct Partnership Work

In our interviews, at least one member of each of the 27 RPPs described increasing the capacity of researchers and practitioners to conduct partnership work as an important goal. There was less consistency of reporting across role groups, though; in only eight RPPs did at least one researcher and one practitioner both name the aim of increasing capacity to engage in partnership work.

Nearly all partnerships were focused on increasing practitioners' opportunities to use research, as noted above. However, interview data from 10 partnerships also revealed a focus on developing researchers' skills to work in partnership with practitioners in order to develop more relevant and impactful research. As one researcher put it:

It really is consistent with the mission of [the research organization] in training researchers to do rigorous research that makes a difference. It's very much a part of what I consider my job as a professor and my own personal goals about wanting to do policy research that makes a difference.

In this way, researchers and practitioners talked about learning new ways of engaging in partnership work together that would involve both developing new practices. As another researcher explained:

For me, it is a learning process. I'm enjoying learning more about how to collaborate with [practitioners]. Some of those lessons are probably generalized, but some of them may be specific to the specific people in [this city]. It isn't [that] I'm going up there and presenting results and, "Oh, look how smart I am." It's going up there and sharing some results, but also having them come back and say, "But that doesn't make sense to us because this is the way we understand that." We say, "Oh, wow, okay, let's go rethink that."...It's this openness of sharing ideas and trying to think about how best to address those ideas.

The ways in which RPPs thought about increasing capacity to conduct partnership work, then, took into account opportunities for practitioners to engage with research and for researchers to become collaborators around important problems of practice.

Cultivating Partnership Relationships

In their interviews, at least one member from over three-quarters of the RPPs (20 of 27) identified “cultivating partnership relationships” as a primary goal of the partnership. At least half of all survey respondents in each RPP—including all of the PIs—reported that building a foundation for work together was a goal of their partnership.

To do so, partnerships attended to foundational needs such as identifying individuals to play key roles in the partnerships, establishing data sharing agreements, dedicating staff to RPP efforts, and taking time to build trust and relationships. In addition, newer RPPs devoted time to learning about the issues that concerned partnership practitioners and the resources that might be brought to bear on the problems they faced. As one researcher explained:

The goal for this initial partnership was...to really develop a better understanding of how we would be of value to them and develop the relationship. To figure out, how do they want to consume results? What types of methods do we use that are of benefit to them? What types of data do they have, what types of issues are they concerned about that we might be able to look into? What types of funding resources might we be able to jointly pursue? It's about getting a better understanding of who our partner was and how we could be the best possible partners.

Just as this researcher described the familiarization needed for an “initial partnership,” overall, RPPs in which partners had less previous experience working together might be expected to put more effort into cultivating relationships than those with more experience working together. This is a conjecture we plan to explore in future analyses.

Informing the Work of Others

Partnerships were not just concerned with solving local problems. In 25 RPPs, at least half of the participants agreed that developing findings that apply to other organizations was a goal of their partnership. In the interviews, informing the work of others—both inside and outside of academia—was identified as a goal by at least one member of 19 RPP teams. This goal tended to be supported especially by researchers—in 19 RPPs a researcher raised it as a goal, while practitioners raised it in only seven of these partnerships.

Interview analysis suggests that partnerships sought to inform the work of others both through traditional publication venues and through efforts to reach practitioner audiences outside of the partnerships. One researcher noted that the partnership had succeeded in having some papers published in research journals, but that they were excited that their work was reaching a different audience because *Scholastic Magazine* reported the findings:

...and that led to a presentation at [a conference] that was full of school-system, human-resource type people. I feel like it's reaching a different kind of audience than the typical academic audience.

In addition to conference presentations, participants reported developing workshops, videos, assessment and survey instruments, and research briefs to share with broad audiences.

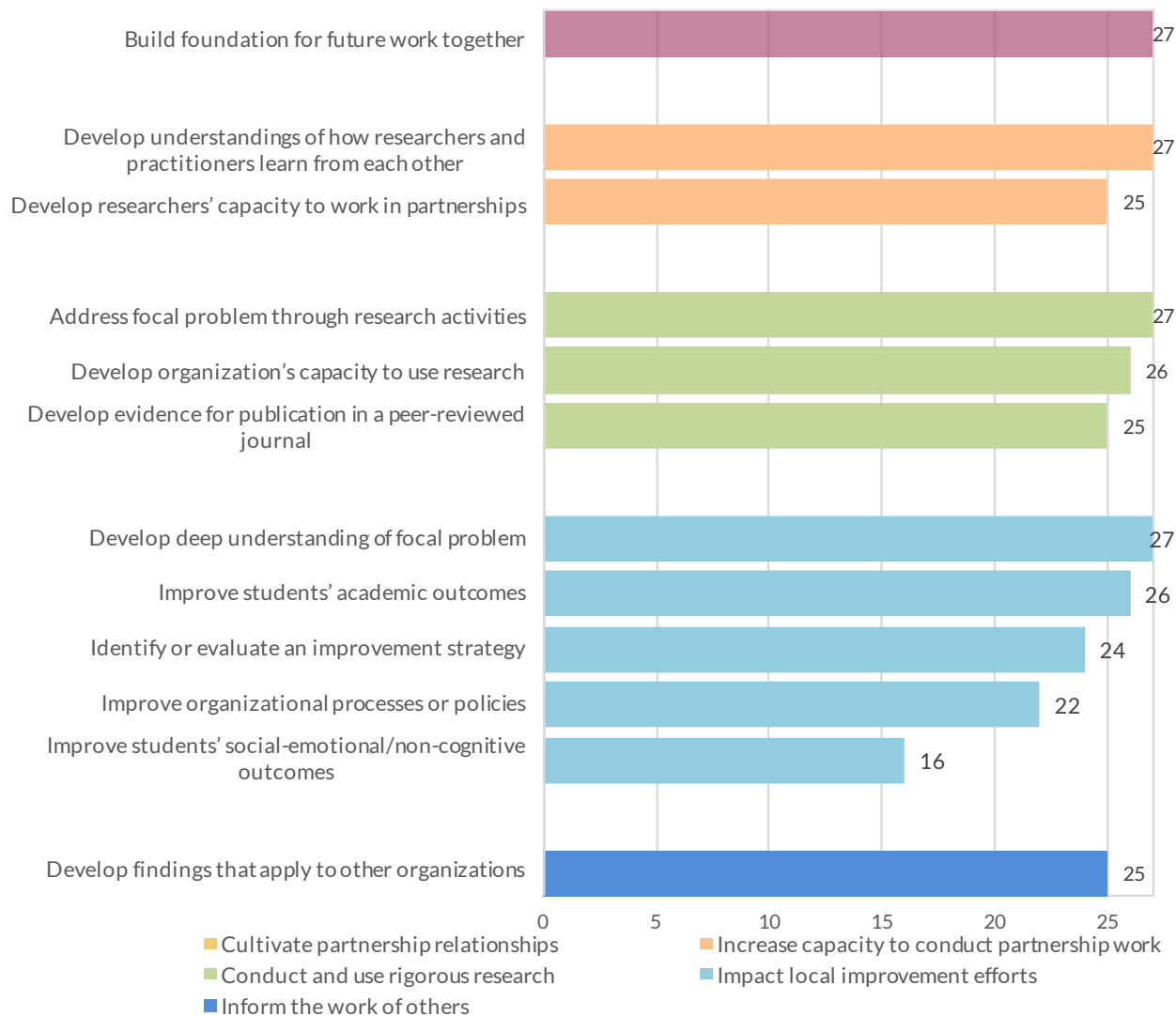


Figure 2. Goals reported by at least half of members of each RPP in survey, n=27 partnerships.

Progress Toward Goals

We asked partnership members about their progress toward the goals they had identified on the survey. Overall, the highest levels of progress reported by PIs related to building a foundation of work together, developing an understanding of the focal problem, addressing the focal problem through research activities, and developing evidence for publication in a peer-reviewed journal. Somewhat less progress was reported for goals related to improving organizational policies and processes and improving student outcomes.

Figure 3 shows the reports of average progress for each goal identified on the survey, in which a “4” represents a benchmark of having accomplished the goal. We show overall averages for all cohorts because, with only two exceptions related to outcomes for students, more recent partnerships did not differ from the first cohort with respect to reported progress.

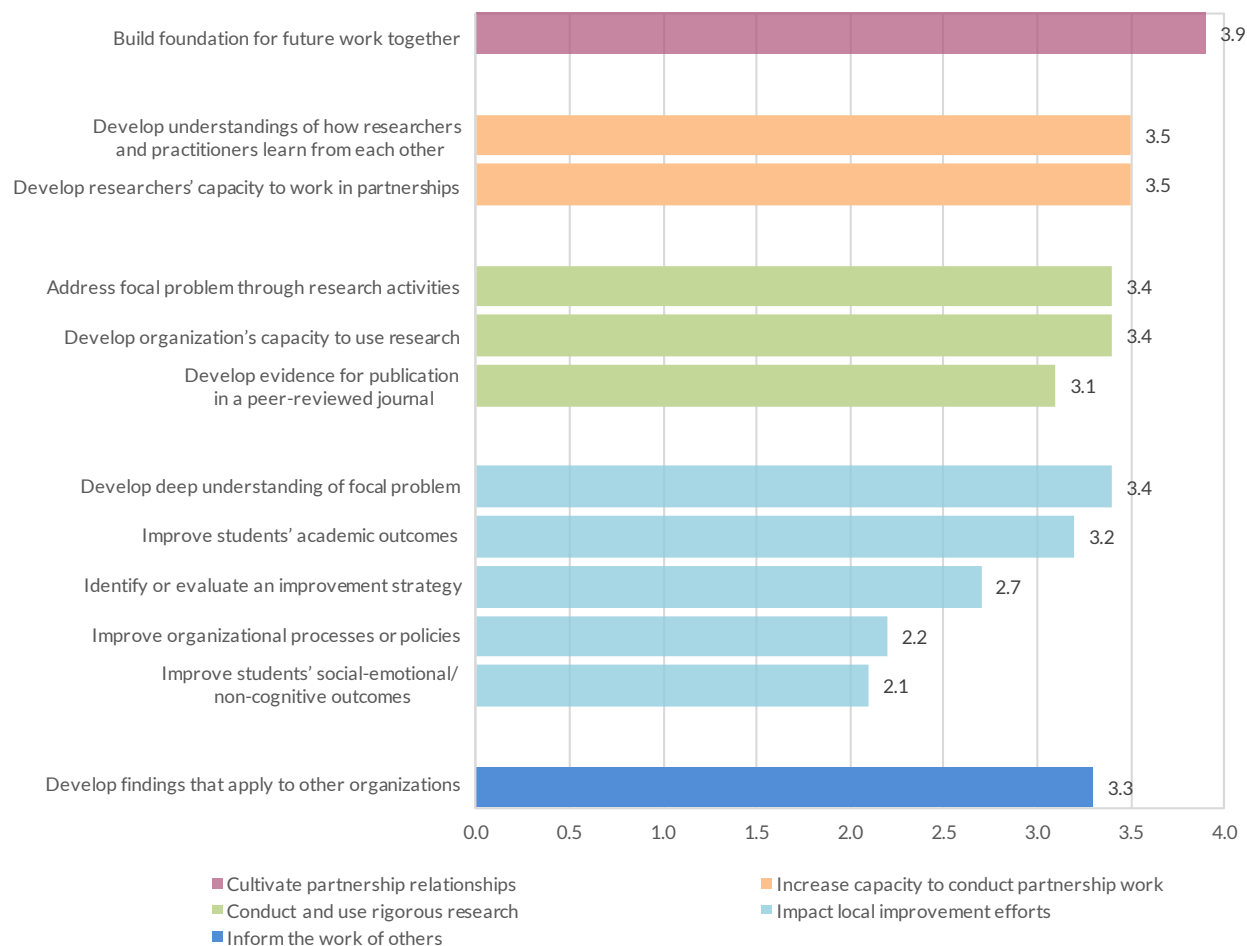


Figure 3. Progress towards partnership goals, in survey, n=104 survey respondents.
1=No progress; 2=A little progress; 3=Some progress; 4=Accomplished; 5=Exceeded

The progress reported in the survey is consistent with what we know about the development of partnerships.³⁸ Building trusting relationships enables partnerships to take on the work of deepening understanding of problems and engaging in joint work to impact policies and programs. Impacts on teaching and learning are important but they are lagging indicators that depend on new policies and programs. Though Figure 3 offers only a snapshot in time, the cross-sectional data are consistent with this developmental progression, in that we observe less progress toward lagging indicators and more progress toward building the foundations for partnership work.

Of note is that both surveys and interviews revealed that many practitioners began with a relatively high capacity to conduct research, a fact that might explain why progress on the goal of building capacity of practitioners is not at the top of Figure 3. Thus, as participants described to us, the partnership built on practitioners' existing understanding of research methods in addition to bringing their deep local knowledge to the work.

As one researcher put it, the partnership gave practitioners an opportunity to learn more advanced statistical approaches that could help them explore their measures more deeply. Another practitioner said that by addressing limitations in existing data, the partnership had helped expand the reach of educational services to subgroups of children in counties where the state had not known that such subgroups existed. Indeed, in at least one case, the partnership was initiated by the educational organization to recover lost internal capacity in its research department. This district knew what was possible to learn from research and wanted to expand its capacity to support the needs of the district through a partnership approach.

Conducting and Using Research in the Partnerships

Given that conducting and using research is a central goal for the RPPs, in this section we characterize the general approaches to research the partnerships have used as well as describe research use among the practitioners. First, we use our analysis of proposals to characterize the research questions, methods, and data sources. Next, we share RPP practitioners' reports of instrumental, conceptual, and symbolic research use.

Key Findings:

- The majority of research questions were descriptive or exploratory in nature, although some focused on causal relationships or validation of measures or constructs. Most intended to use mixed methods and to draw on both new and existing data sources.
- RPP practitioners reported frequently using research for instrumental, conceptual, and symbolic purposes.
- Directing resources to programs and redesigning programs were the most common instrumental uses of research.
- A majority of RPP participants reported that research had frequently or all of the time “expanded (their) understanding of an issue” or “provided a common language and set of ideas.”
- Over half of the RPP participants reported using research often to “mobilize support for an important issue,” whether frequently or all of the time—a form of symbolic use.

Research Questions, Methods, and Data Sources

Each RPP application generally included several research questions that the partnership wanted to pursue, for a total of 48 questions in the 27 grant applications we reviewed. Given the focus of grants, we expected most questions would be descriptive or relational—that is, they would focus on describing current patterns and trends in data related to a focal problem, or explore associations between malleable factors and outcomes. Indeed, more than half of the research questions we identified were descriptive or exploratory (26 of 48 questions; 54%), and another 8% (4 questions) were relational. For example, one partnership focused its work on the descriptive question, “What is the average number of annual school changes [transfers], regardless of reason, for students in foster care?” Another descriptive question focused on identifying teachers' different blended learning strategies and describing them. Correlational analyses, like exploring the relationship between high school performance and college outcomes, are in the category of relational questions.

Partnerships also asked evaluative questions (10; 21%), while some questions (4; 8%) were related to causal impact. One evaluative question focused research efforts on assessing the extent to which the district's new assessment system aligned with goals for instructional improvement. An example of a causal research question was, “Do performance bonuses improve the retention of teachers rated as ‘highly effective’?” Finally, some questions (4; 8%) focused on the validity of an instrument or construct. One partnership centered its work on creating and validating teacher and student self-report measures for social-emotional learning skills.

The majority of RPP applications (16 of 27) proposed mixed-methods studies that used both quantitative and qualitative approaches to investigate their questions. One partnership began with a quantitative analysis of EBLs' outcomes, followed by observations of classroom practices with these students. A second project planned to begin with quantitative analyses of administrative data sources to create models of student achievement and graduation and pair this work with qualitative data analyses of classroom observations, focus group interviews, and surveys to identify key leadership and teacher practices. The remaining 11 RPPs planned to use solely quantitative research methods. Several projects focused their work on regression analyses of variables in combined databases.

The majority of RPPs (16 of 27) planned to use a combination of new and existing data for their research analyses. Six focused on existing data only, and five gathered and analyzed new data only. Existing sources included student outcomes data, such as state assessment results; grade point averages; English language learner (ELL) proficiency rates; attendance, suspension, expulsion, dropout, and graduation data; course pathways data; SAT or ACT results; NAEP, PARCC, or Smarter Balanced results; and school mobility metrics. More rarely, existing data sources included non-academic outcomes such as measures of foster placement or criminal justice data (e.g., recidivism rates). Other data included student, teacher, parent, and school leader survey responses; teacher performance or evaluation data; teacher and student demographic data (e.g., gender, race/ethnicity, ELL status, free or reduced-price lunch status); and school or program characteristics. Newly gathered data often came from focus groups, interviews, instructional logs, classroom observations, or case studies.

Practitioners' Use of Research

Next, we consider practitioners' responses to the questions about research use in decision making.

Instrumental use. We first asked practitioners whether they were involved in educational decisions, such as selecting, designing, or scaling up programs or policies. Table 6 shows the percentage of all practitioners reporting involvement in each educational decision. Overall, practitioners responding to the survey were most likely to report being involved in designing professional development (29; 71%) and least likely to report being involved in purchasing an intervention program (18; 44%).

Table 6. Percentage of Participating Practitioners and Co-PIs Reporting Involvement in Educational Decisions

	All practitioners (n = 43)	All co-PIs (n = 20)	Co-PIs in P-20 research, assessment, and accountability (n = 10)	Co-PIs in all other areas (n = 10)
Designing professional development	71%	78%	50%	100%
Directing resources to a program	68%	83%	63%	100%
Redesigning a program	66%	78%	50%	100%
Eliminating a program or policy	63%	67%	50%	80%
Scaling up a pilot program	62%	74%	56%	90%
Purchasing an intervention program	44%	61%	50%	70%

One goal stated in IES's RFA is that lead co-PIs are in decision-making roles in their educational agencies. Indeed, co-PIs as a group reported greater involvement in these activities when compared to all practitioners. For instance, 83% of all co-PIs (15 of 18 responding to the item) reported being involved in directing resources to a program, compared with 68% of all practitioners (28 of 41 responding to the item). However, involvement by lead co-PIs differed by area of practice within their organization. The 10 lead co-PIs in P-20 research, assessment, and accountability offices reported less involvement in five of the six activities compared to all practitioners, while the 10 co-PIs in the other areas of practice had higher average involvement for all activities compared to all practitioners.

Figure 4 below shows the frequency with which survey respondents used research to make different types of decisions, for those involved in making those decisions. Approximately three-quarters reported using research frequently or all of the time for all but one of the activities listed. Practitioners were least likely to use research to eliminate a program or policy.

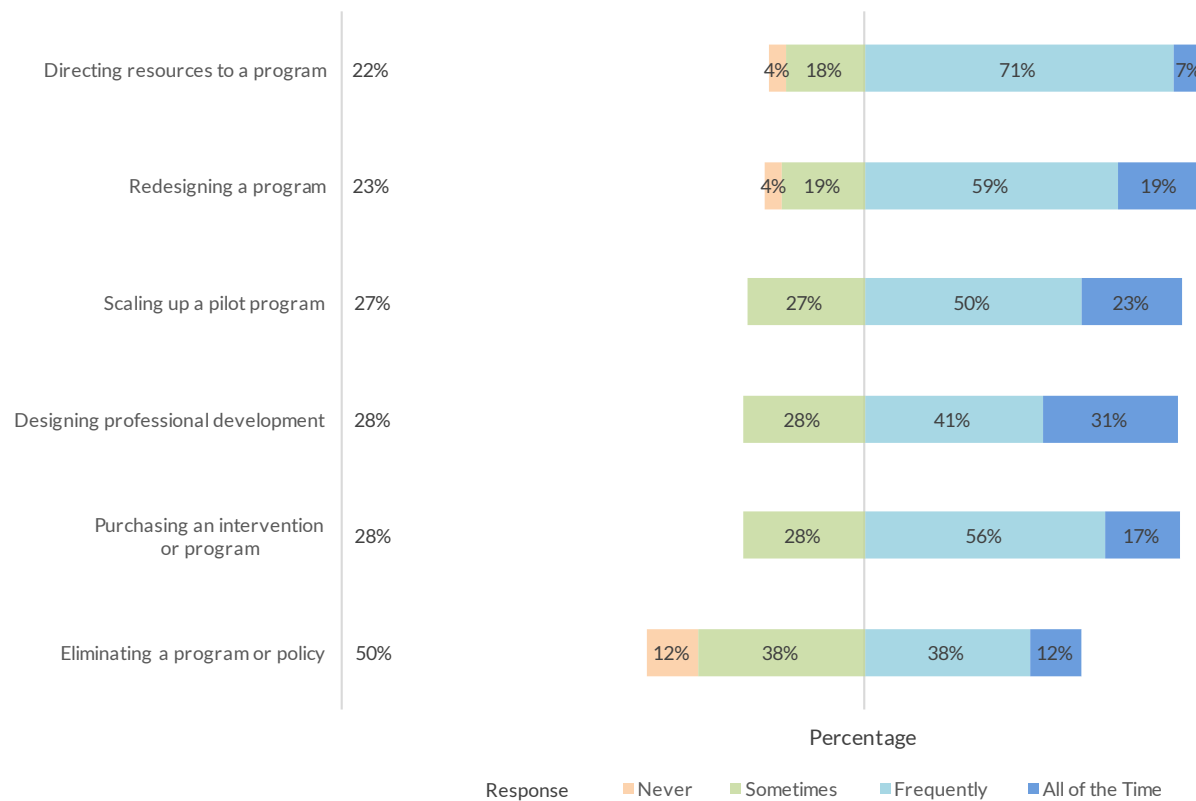


Figure 4. Frequency of instrumental use of research reported by those involved in decision making for each activity. 18 < n < 29 practitioners.

Conceptual use. The six items that reflected conceptual use asked participants how frequently they had encountered research that expanded their understanding of an issue, provided a new framework, or brought attention to a new issue (Figure 5). Reports of research serving conceptual purposes were fairly frequent, with the overall average falling between “sometimes” and “frequently” using research in this way. Over three-quarters of practitioners (32; 76%) reported that research had frequently or all of the time “expanded (their) understanding of an issue”; one-half (21; 50%) said it “provided a common language and set of ideas.”

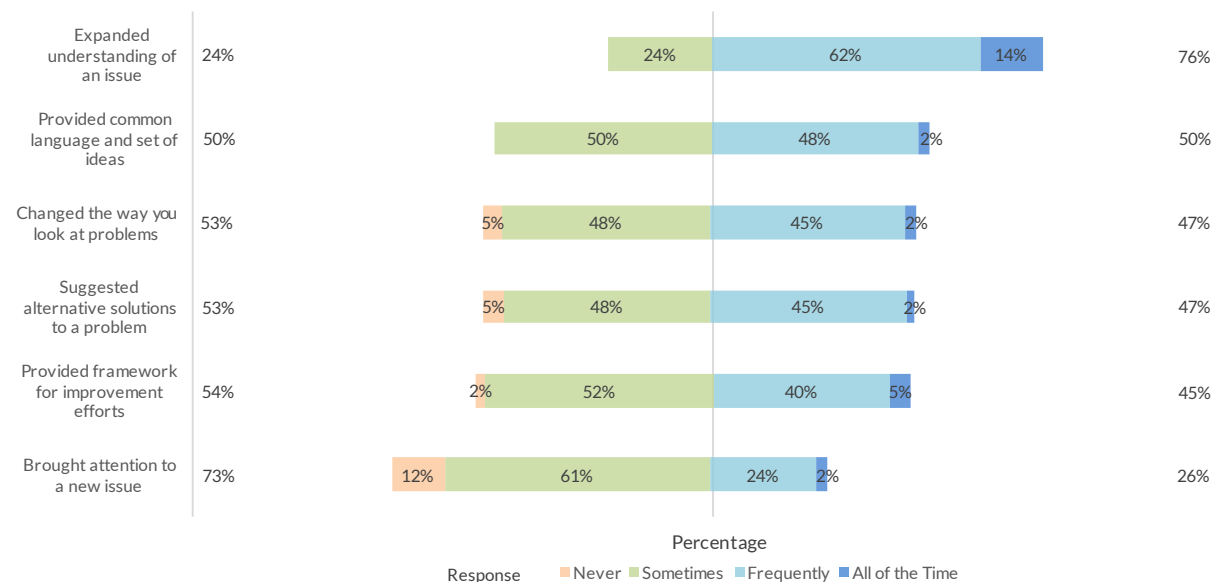


Figure 5. Frequency of conceptual uses of research reported by all practitioners. 40 < n < 42 practitioners.

Symbolic use. The four symbolic use items asked practitioners to report how often they used research to convince others or to mobilize support (Figure 6). Close to two-thirds of practitioners (26; 62%) reported that they used research frequently or all of the time to “mobilize support for an important issue,” with an equal number of practitioners claiming that they “selectively used research because it would support a decision.”

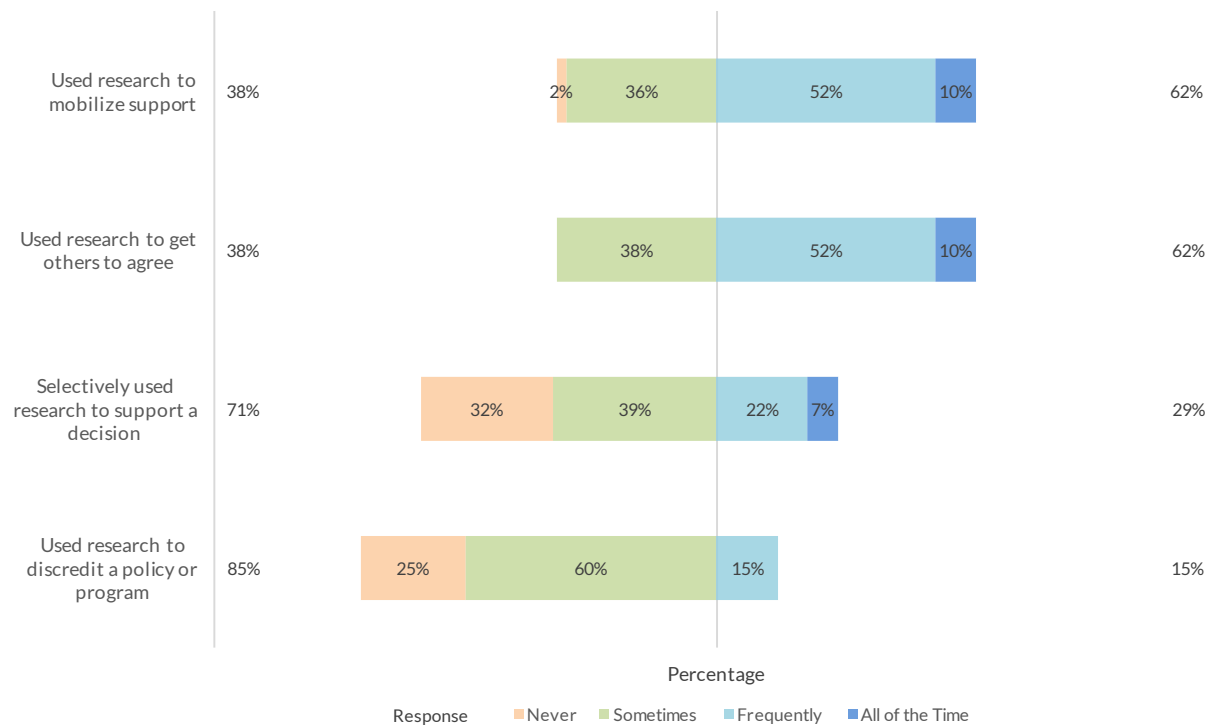


Figure 6. Frequency of symbolic uses of research reported by all practitioners. 41 < n < 42 practitioners.

Activities of the Partnerships

It is typical for RPPs to engage in a broad range of activities, given the breadth and ambitions of their goals. In this section, we describe survey findings related to the activities of partnerships during their work together.

Key Findings:

- All partnerships are engaged in problem refinement and analysis of data, and more than half are doing some design work together, as is common in design research partnerships and networked improvement communities.
- Many partnerships are analyzing outcomes of a policy or program in the partner organization, and many are also building large databases to facilitate multiple analyses.
- A small number of RPPs are engaged in Plan-Do-Study-Act cycles, as is typical of networked improvement communities. There are, however, large discrepancies between the numbers of researchers and practitioners who reported their partnership was involved in such activities.

All partnerships were engaged in activities focused on refining their understanding of the problems they were addressing through analysis and interpreting data. (See Figure 7 below; for breakdown by role group, see Appendix D.) Notably, data interpretation was an activity all of the partnerships reported doing together. Other activities common to all or nearly all partnerships were communicating findings to others in the organization (27 of 27), reaching out to other key stakeholders (26 of 27), and communicating findings to the public (26 of 27). Just over two-thirds of the RPPs (21 of 27) were examining relationships between “malleable factors” and outcomes, and over half (16 of 27) were engaged in activities to relate their findings to other contexts. For these two items, there was less agreement within partnerships; in nine partnerships either only researchers or practitioners, but not both, reported RPP engagement in these activities.

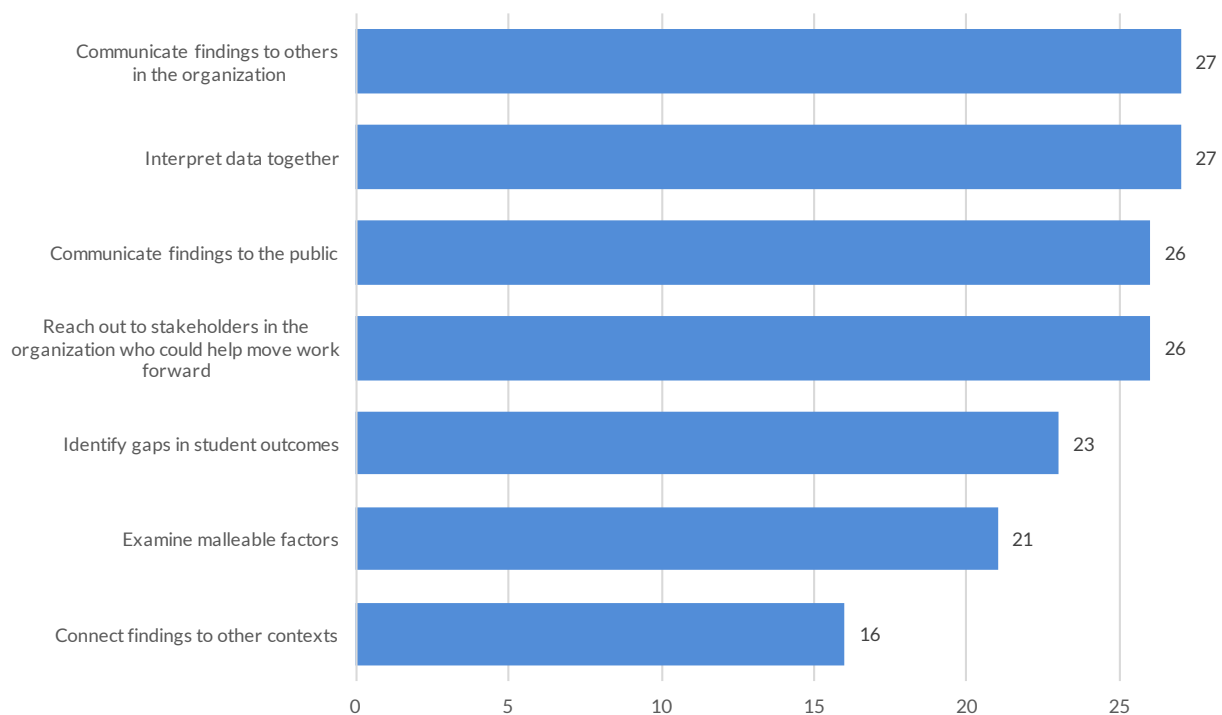


Figure 7. Number of RPPs reporting activities as part of current grant, as reported by at least half of participants in each RPP on the survey (n = 27).

Below, we describe the number of partnerships engaged in activities that are associated with different types of partnerships: research alliances, design research partnerships, and networked improvement communities (NICs). It is important to note that just because partnerships engaged in activities typical of a particular type of partnership, it does not mean they identified as one of these types of partnerships. Rather, we use this typology as a way to understand how they are more or less like partnerships that we and other researchers have described in the past.

Partnerships Engaged in Activities Typical of Research Alliances

Two types of activities that are common in research alliances are the analysis of policies and programs in educational organizations and the construction of data archives to facilitate ongoing research. Of the 27 partnerships that responded to the survey, 24 reported analyzing the outcomes of a policy or program in the organization, and 21 reported building a database that combined data sets (Figure 8). Just over half (16 of 27) reported that the partnership was analyzing the implementation of a policy or program.

Reporting rates were similar for researchers and practitioners as to whether these activities were occurring. There was less of a shared understanding about whether each partnership was analyzing the implementation of policies and programs: For 10 partnerships, either a researcher or a practitioner (but not both) said the partnership was involved in the activity.

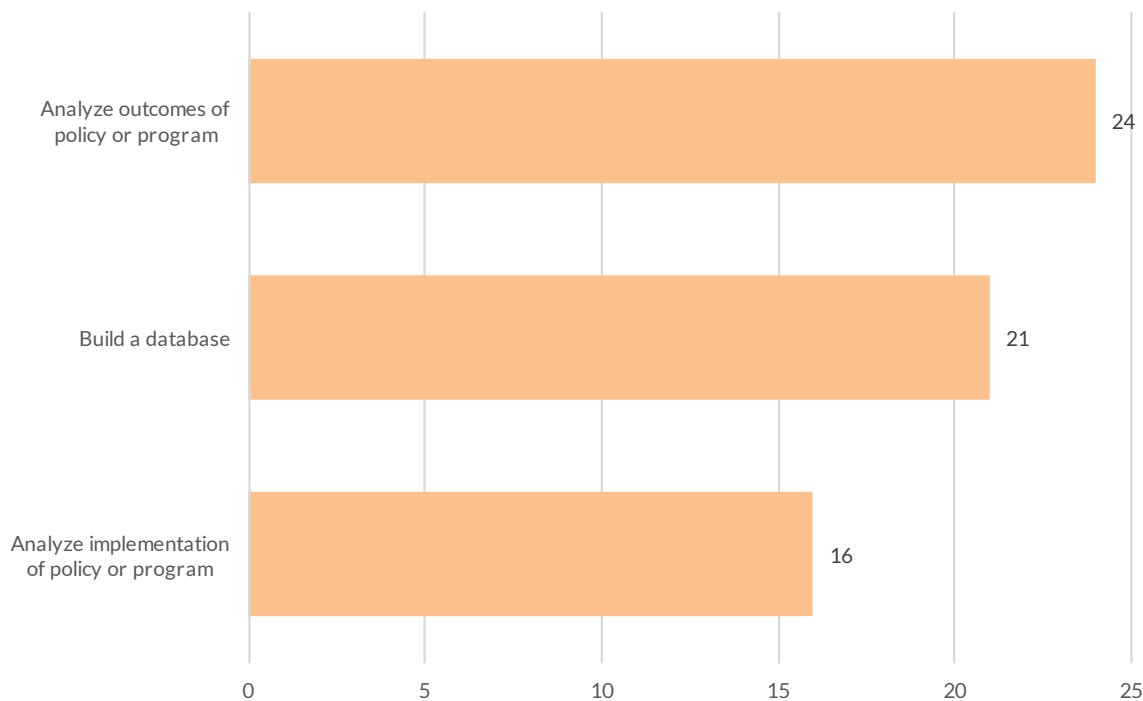


Figure 8. Number of RPPs reporting alliance-type activities as part of current grant, as reported by at least half of participants in each RPP on the survey (n=27).

Partnerships Engaged in Activities Typical of Design Research Partnerships

Surprisingly, nearly half of all RPPs were already engaged in some design work. For example, 15 partnerships reported that they had jointly designed a program or intervention that addresses a problem for the organization (Figure 9). Twelve RPPs reported testing a co-designed program or intervention, and another 12 said they had refined a co-designed program or intervention.

This finding requires triangulation with evidence from interviews in spring 2017 to interpret accurately. It may be that such design work is taking place because partners have been working together already and have had time through other grant opportunities to develop interventions together. If accurate, it represents the type of activity that the program may expect partnerships to be ready to undertake after the conclusion of the grant but not necessarily as a central focus of this grant period.

Nearly three-quarters of the partnerships (20 of 27) had developed conjectures or hypotheses about the features needed to address the problems, which might have been expected, given the encouragement to partnerships to use the grant funds to identify goals for design and development.

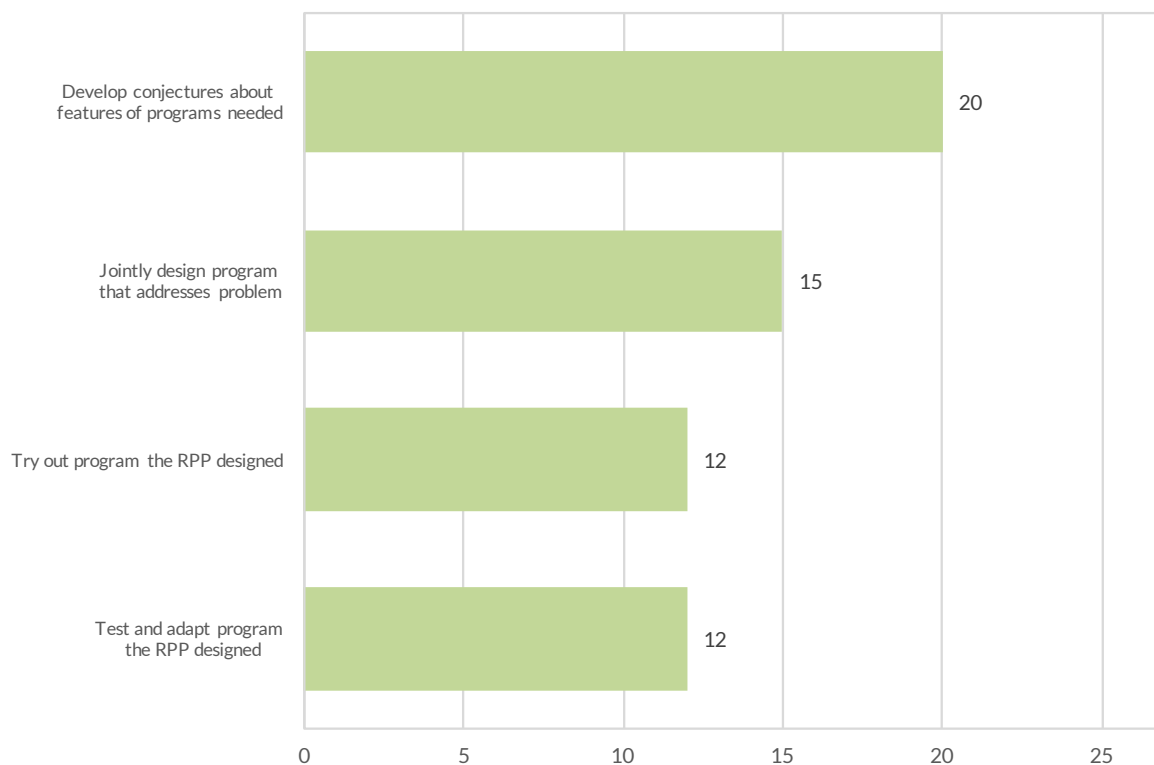


Figure 9. Number of RPPs engaged in design research-type activities as part of the current grant, as reported by at least half of participants in each RPP on the survey (n = 27).

Partnerships Engaged in Activities Typical of Networked Improvement Communities

Some partnerships were incorporating strategies related to NICs. For example, about one-third (10 of 27) reported engaging in a Plan-Do-Study-Act cycle (Figure 10). This set of activities had the greatest discrepancy between researchers and practitioners concerning whether or not the partnership was engaged. More practitioners than researchers reported engaging in activities related to continuous improvement, using tools from improvement science, and creating a NIC. We suspect that our survey questions signaled clearly to researchers—but perhaps not so clearly to practitioners—a set of signature methods of improvement science. Practitioners, familiar with the popular language of “continuous improvement,” may have over-reported these activities, so the lower reported levels from the PIs may be more accurate.

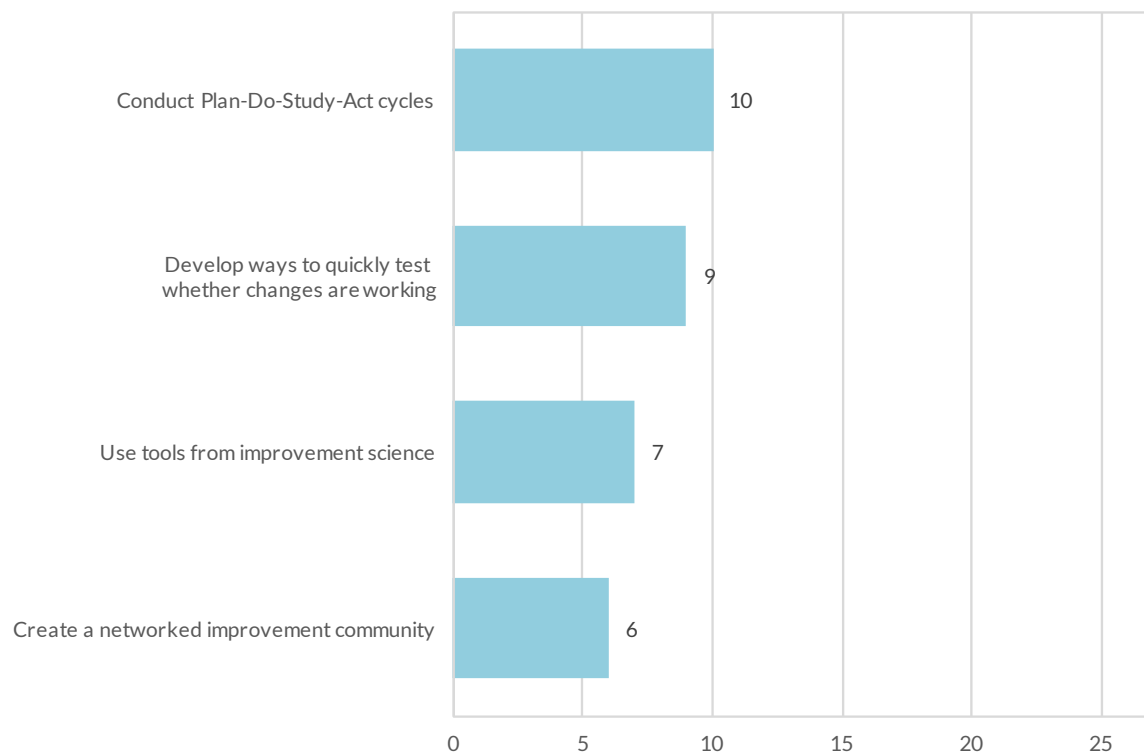


Figure 10. Number of RPPs engaged in NIC-type activities as part of the current grant, as reported by at least half of participants in each RPP on the survey (n = 27).

Communication within the Partnerships

Partnership work requires regular communication between researchers and practitioners. Here, we describe survey findings related to the communication strategies that researchers and practitioners described in their RPPs.

Key Findings:

- Participants reported regular and frequent communication with partners, with most members engaging in weekly emails or phone calls.
- Compared with other forms, videoconferences and video meetings were a less frequent means of communication.

Our survey data indicate that partners reported engaging in regular and frequent communication with one another (Table 7). Four-fifths (82; 80%) of participants reported talking over the phone or texting, either on a weekly or monthly basis. Nearly two-thirds (66; 64%) of participants reported exchanging emails on a weekly basis, and another tenth (11; 11%) reported daily emails. Members of RPPs also reported that, on at least a monthly or bi-monthly basis, they worked on shared documents or online platforms (81; 80%), met in-person (77; 75%), or engaged in video meetings (36; 36%).

Table 7. Percentage of Researchers and Practitioners Using Different Forms of Communication within RPPs, by Frequency of Use

	Frequency of Communication					
	Never	Yearly	Bi-monthly	Monthly	Weekly	Daily
Email	0%	0%	6%	19%	64%	11%
Phone or text	6%	2%	12%	45%	35%	0%
Work on shared documents or online platforms	11%	10%	21%	33%	22%	4%
In-person meetings	0%	25%	35%	29%	11%	0%
Teleconference or video meetings	55%	9%	12%	18%	6%	0%
Other	NA	5%	1%	2%	0%	0%

Note. “Other” types of communication primarily consisted of various types of meetings that RPP members attended together outside of those among RPP members only, such as advisory board meetings, meetings with other stakeholders, professional learning sessions, or professional conferences (100 < n < 103 researcher and practitioner survey respondents).

Challenges to the Partnerships

In this section, we describe findings from the surveys and interviews related to the challenges that researchers and practitioners said they faced as they worked together in RPPs.

Key Findings:

- Big challenges facing partnerships were organizational turnover and obtaining and creating data sets.
- Syncing up schedules of researchers and practitioners and different expectations regarding timelines for getting work done were leading challenges identified in the survey, although just one-third of interviewees mentioned this challenge.

Organizational Turnover

About half of the participants interviewed (26; 46%) raised the issue of organizational turnover within the practitioners' organizations as a particular challenge. This pattern was consistent across the interviewed researchers and practitioners. Further, about one-third (38; 37%) of all surveyed agreed or strongly agreed that organizational turnover in the educational organization was a substantial challenge to their work. (See Figure 11 below; for results by RPP role, see Appendix E.) As one participant explained:

We have had some new people step into some leadership positions. They don't fully understand the partnership. Once they understand and are brought on board and get a better understanding, we haven't had any long-standing issues. That newness of people, that occasionally interjects the need to go back and build relationships and understanding.

This turnover can directly impact a partnership if the people who left were important for the partnership's work. One researcher found that she had four different practitioner contacts one year, making basic coordination difficult. Another researcher explained that she tried to develop multiple relationships as a strategy: "I don't put all my eggs in one basket of a person there. I get to know others, and so when there's a departure, I'm not left out in the cold."

Data Accessibility

Obtaining and creating data sets for analysis also posed significant challenges, according to almost half (24; 44%) of participants interviewed. Some of these challenges were related to drafting data-sharing agreements between organizations. One researcher observed, "the data-sharing agreement has been the biggest challenge. It's been taking a really, really, really long time." This was particularly tricky when the team wanted to link identifiable data (e.g., student achievement data, teacher evaluation scores) with other variables. Practical challenges emerged as teams worked to identify, clean, transfer, and merge data from multiple institutions into one database.

Timing and Scheduling

Issues related to timing and scheduling were also frequently cited as challenges. In the survey, over half of all respondents (55; 54%) agreed or strongly agreed that differing timelines made it difficult to get work done, while almost half (46; 45%) agreed or strongly agreed that the schedules of researchers and practitioners were difficult to coordinate. Timing issues were also salient during one-third of our interviews (16; 30%). As one practitioner explained:

It's a pace thing. I keep a foot in the university world, and I have a foot in the district. The district, compared to the university, is so fast-paced. Well, a school is so much faster-paced than a district. The patience you need for research, it's not particularly satisfying for educators. It's not particularly satisfying for policymakers, either. They want results now, and they're not real patient.

A researcher from another partnership expressed a similar sentiment:

It is very discouraging to practitioners in general because that time frame is not suitable to the immediacy of the question they just posed. We knock on their door, "Let's get together, and come up with questions that are really, really pressing for you right now." Then we have to issue the caveat, "Well, sorry, but we won't be able to act upon that within the next couple, five, or six years." That defeats the purpose of addressing a question of immediate need.

This reflection on the slower pace of research and faster pace of practitioners' needs is well documented in the literature.³⁹ Members of RPPs tried to address this challenge by developing understandings of different timelines and adjusting practices for both researchers and practitioners.

Other Challenges

Other challenges documented in the research literature on RPPs emerged in our interviews as well, including differing priorities (22; 41%), bureaucratic obstacles (19; 35%), lack of practitioner understanding of research methods (15; 28%), and not enough time to meet RPP goals (15; 28%). Less common challenges were communication difficulties posed by working across the research-practice divide (13; 24%) or researchers being too theory-driven (5; 9%).

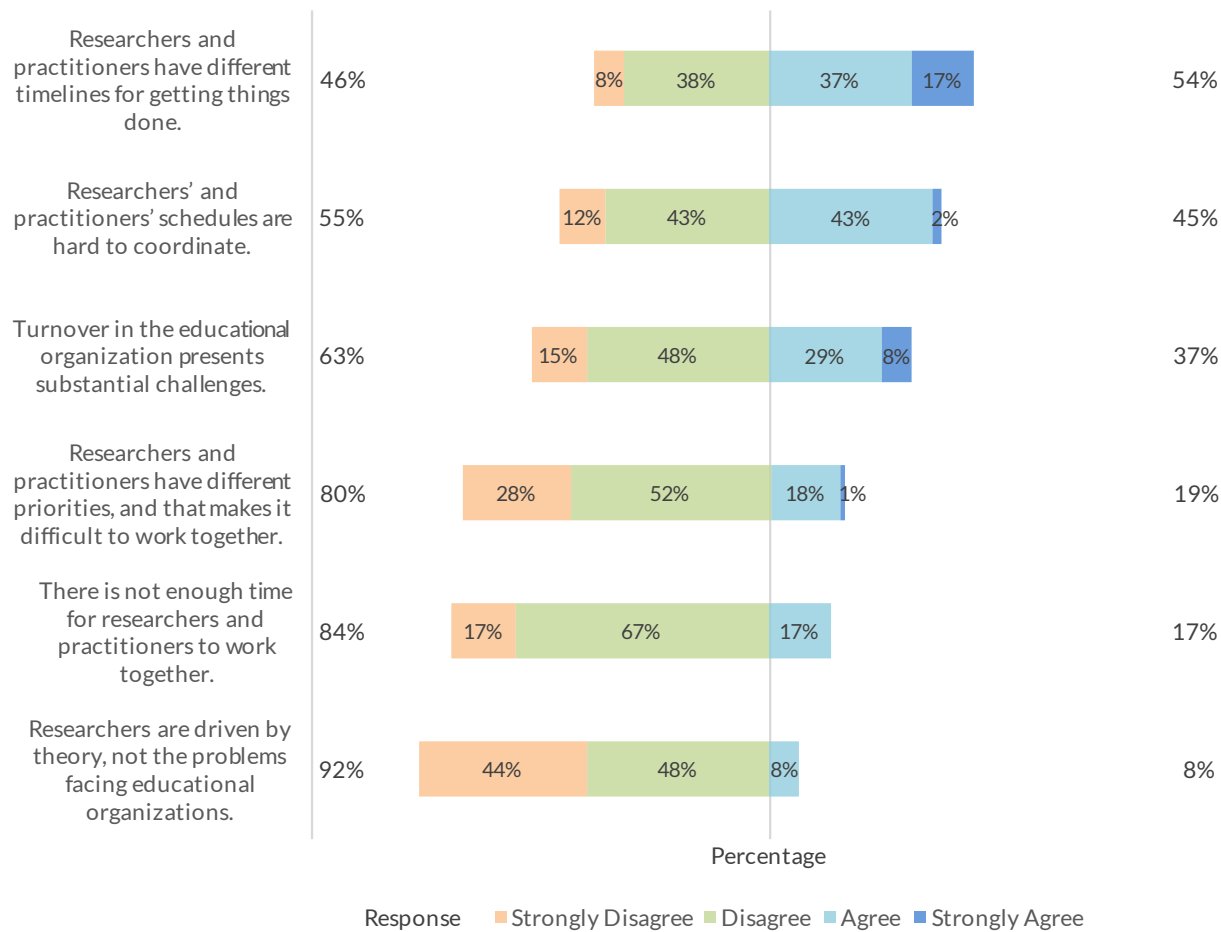


Figure 11. Participants' agreement that they have faced particular challenges in partnerships. Items are negatively worded, and therefore disagreement is an indication that the challenge is infrequent (101 < n < 103 researcher and practitioner survey respondents).

Perceptions of the Partnerships

As a descriptive rather than evaluative study, we cannot make inferences about the impact of the partnerships. Rather, in this section, we share participants' self-reported attitudes towards RPP work and the perceived benefits of working in these partnerships that interviewees named.

Key Findings:

- Participants highly valued working in their partnerships, with all survey participants agreeing or strongly agreeing that they would participate in another RPP in the future.
- Practitioners named several benefits of the work, including a shift in organizational culture for research use and increased access to resources and expertise aimed at understanding and addressing specific problems of practice. Both researchers and practitioners felt that the quality and applicability of research had increased as a result of the partnership.

Attitudes Toward the Partnerships

Participants overall had very positive attitudes toward their partnership experiences. As shown in Figure 12, all who responded to the survey either agreed or strongly agreed that they would participate in a RPP in the future. Nearly all (98; 96%) reported that RPPs are worth the investment from IES, and almost all (89; 87%) thought that researcher and practitioner participation was equally valued by members of the RPP. Almost everyone surveyed (97; 95%) disagreed that the RPP was not worth the time they invested. (For full results by RPP role, see Appendix F.)

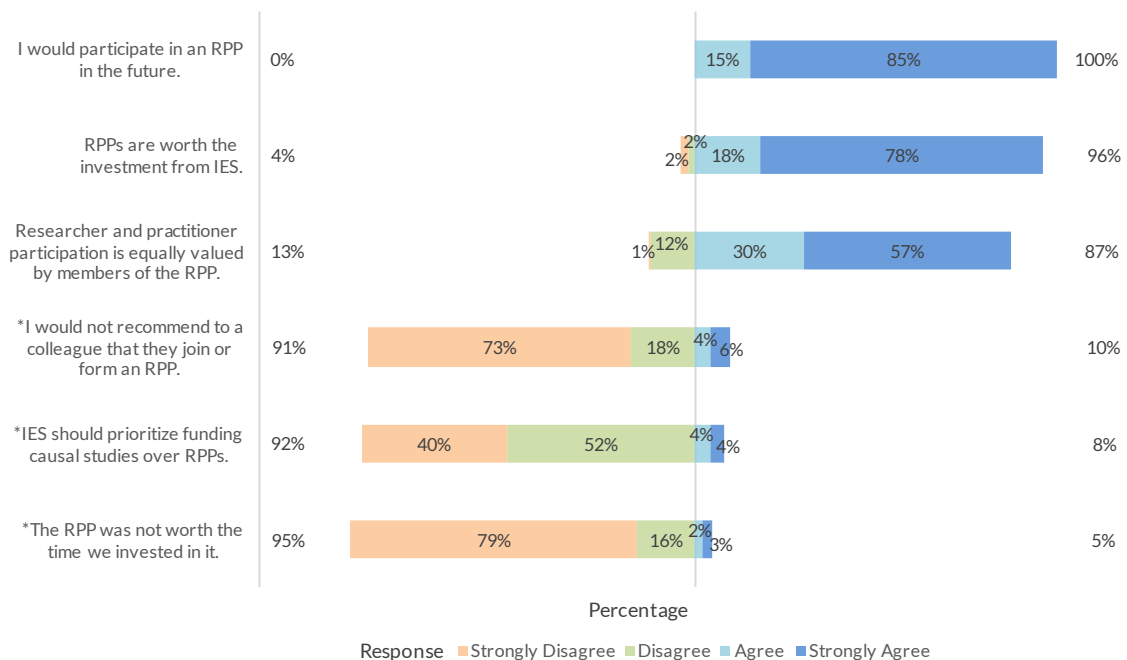


Figure 12. Participants' attitudes toward the partnership. Starred (*) items are negative statements (disagreement on these items indicates positive attitudes toward the partnership) (100 < n < 102 researcher and practitioner survey respondents).

Perceived Benefits of Working in Partnership

In interviews, representatives from 24 of the 27 partnerships noted that the work of the RPP differed from their previous experiences either conducting or participating in research studies. Both researchers and educators pointed to the benefits of working in an RPP and the need for more research to be conducted in this manner. Five themes emerged from this analysis. They described their work as beneficial because it was:

- Collaborative, where researchers and practitioners were mutually committed to investing significant amounts of time working together on shared goals;
- Focused on problems of practice that were priorities for practitioners;
- Useful to both local actors and the field, in that it was applicable to thinking about and solving local problems and could inform researchers and practitioners elsewhere;
- Guided by research, employing rigorous methods that incorporated the local knowledge and expertise of practitioners; and
- Helpful for other aspects of practitioners' and researchers' work.

Participants appreciated the *collaborative nature of work* in their RPPs. As noted above, this collaborative nature meant that the perspectives of both parties contributed to defining the work. This may have supported joint ownership of the project goals and mutual learning. Explained one practitioner:

As a large, urban district, we have many, many requests for research from outside entities on an annual basis.... We have some good relationships with other researchers, particularly a couple other local ones. But, it's not the same collaboration that we would see, certainly, with this partnership. Here, we come up with a common research agenda, we agree on the particular focus we're going to have, how we're going to conduct the research. That's been the real strength of the partnership.

For several researchers, the inclusion of practitioners' voices and their active participation improved the quality and applicability of the research. One researcher explained that the close involvement of the practice partners meant "a richer set of data than anticipated. It's been slow going because there is way more complexity than I expected.... They [the practice partners] are really digging down deep." For practitioners, researchers brought areas of expertise that helped with their own understanding of the issues that the partnership set out to address.

A second benefit named by participants was that the partnerships *focused on problems of practice* that were a priority for practitioners. As one researcher explained:

[Research studies are usually] a very researcher-driven kind of endeavor. We write the proposal. We do all the analytic work. The subsequent follow-up is on our side, where we disseminate it to the journals. The extent to which they [the practitioners]

implement the findings in practice is secondary to us. This grant really shifted that. It put the practitioner in the driver's seat, saying, "What is it that you need an answer to?"

This shift to starting with a practitioner need was something some educational leaders said contributed to the research being useful and applicable to their daily work. For example, one researcher shared his experience in developing a set of indicators to identify high school students who would benefit from a particular intervention. The district worked with the research team to appropriately identify students and provide them with the additional supports. The work was, in one researcher's words, "directly useful [because] it came from the district [saying], 'We have a need. Can you provide us data that can help us with something very specific in terms of an intervention?'"

Partnership activities were *useful both to local actors and the field*, according to the partners we interviewed. In addition to directly informing local work, participants mentioned that the scope and quality of the work they had done made it relevant to others outside the partnership, citing policymakers, stakeholders in their community, and audiences beyond their local context. As one PI stated, "We'll learn through this process...and gain buy-in from other institutions across the state, and gain champions for some of the innovations that we hope that the state can then scale through policy."

Another researcher commented that this mix of being applicable at a local level but also impactful to outside audiences was one of the reasons that partnership work was so rewarding:

You actually are making a difference, and you actually are doing something that you enjoy doing, but it's not just about doing it for the exercise of doing it. I think that is really, really valuable. If we want to try to have some change, some impact on practice and policy, it's the only way to go about doing it.

Another named benefit was that these partnerships are *guided by rigorous research that values and incorporates the local knowledge and expertise of practitioners*. Some participants found that practitioner organizations were making more extensive use of research—that is, they integrated it into their daily work—as a direct result of being part of the partnership. For example, one practitioner reported an increase in the perceived value of research on district programming. A researcher in a different partnership remarked that the questions that the practitioner partner was asking revealed an increasing reliance on research:

Her first questions are [now], "What data? Can you give me some articles? Where can I go to look to see how I should establish these cut scores?" I'm watching them use research on a daily basis now to make decisions. They did some of that before, but I'm really seeing it as a prevalent practice.

Finally, interviewees believed partnerships could *inform other aspects of practitioners' and researchers' work in positive ways*. Some researchers reported that their partnerships had improved the depth of their understanding of the key issues they study.

One explained that the work meant he had a “deeper understanding of the policy context, the demographics of students, better understanding of the teacher workforce,” which was better than “you could ever get doing things at arm’s length or using a national data set.” He believed that the partnership enabled him to ask better questions and understand the data better.

Practitioners also noticed the benefit of using research to inform decisions and how this transferred to other aspects of their daily work. As one practitioner explained:

Whether it’s a curriculum we’re planning, or a series of parenting classes, or professional development for staff, how important the research is behind that!... [The RPP] has really made me understand the value of having a database of research for the other work that I’m doing with other groups.

Planned Future Activities of the Partnerships

The current RFA for the IES grant program proposes that partnerships use the two years of grant funding to plan for future work together. In this section, we share information regarding the reported plans of the participating RPPs for their future partnership work.

Key Findings:

- Many RPPs indicated they had plans to apply or had already applied for future grants.
- In spite of shared interest in continuing their partnerships, some participants believed this was contingent upon securing additional funding.

Findings from Interviews

In their interviews, representatives from all RPPs indicated that they would like their researcher-practitioner relationships to continue beyond the life of the IES grant. The partnerships were pursuing different strategies for continuing their work together. Eight of the 27 with whom we spoke had secured no-cost extensions from IES to continue the work for a third year. Twenty of the partnerships had either already secured additional funding, were waiting to hear the status of grant applications, or were actively pursuing other grants or funding sources. Participants in six RPPs stated that even if additional funding was not secured, their partnerships would continue informally.

In a small number of RPPs (3 of 27), there was disagreement among practitioners and researchers regarding the certainty of the partnerships' futures. While the researchers were quite confident that they would continue in some capacity, a few practitioners expressed uncertainty. In one RPP, a practitioner noted that "it's pretty premature to have those conversations" since they were only one year into their grant. In the other two, issues of capacity and changing leadership outside the RPPs were identified as potential reasons the relationships might not endure.

Future Activities Reported by the PIs

Looking at the specific activities that participants reported were planned for the future, we see two noticeable patterns (Figure 13). First, the PIs on the whole had higher reports of future activities than practitioners or researchers overall. (See Appendix G for a breakdown of reported future activities by RPP role.) We conjecture that the PIs have more future plans in mind because these are researcher-led projects, and therefore they would be most attuned to the next steps for the work. Second, the reports for future activities from the PIs (as well as the other groups) were relatively low. From the responses, the largest number of PIs (7 of 27) indicated future plans to examine malleable factors and to test and adapt a program that the RPP designed, as might be expected of a next stage of partnership work.

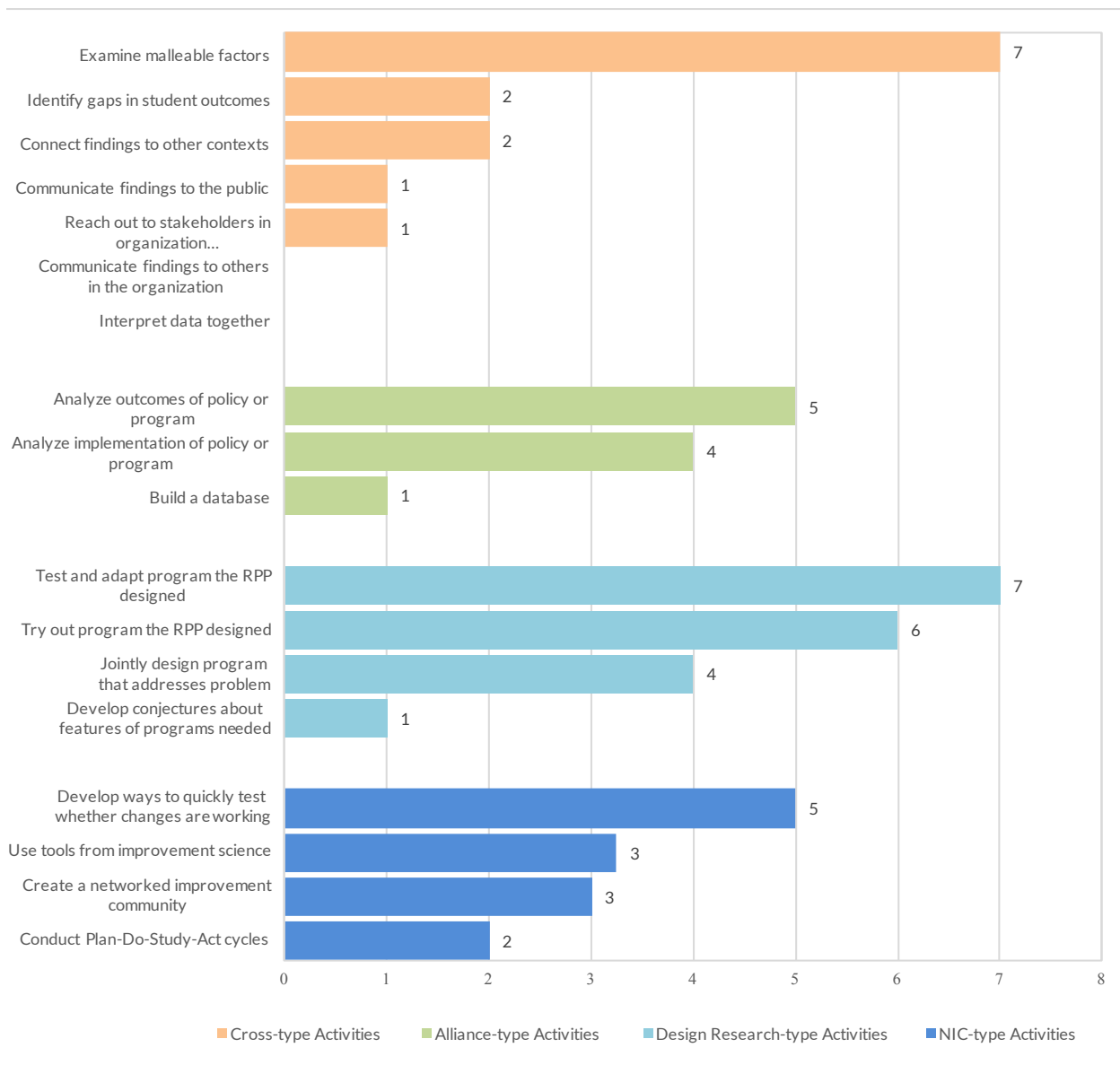


Figure 13. Number of PIs reporting activities planned for after grant concludes, from survey (n = 26).

Guidance for IES

In this section, we summarize practical suggestions for IES in response to a question about how the RPP program might be improved.

Key Findings:

- In the survey, only half of participants reported that a two-year time frame was adequate for RPPs to meet their goals, a finding confirmed in the interviews. Interviewees suggested that new RPPs may benefit from a three-year grant period to accomplish their aims.
- Partners believed additional funding would be necessary if grants were extended by one year. A longer grant period would require a proportionate increase in funding, participants noted.
- One popular suggestion from participants for addressing the sustainability of partnerships was supplementary funds for additional years of work for partnerships that had been successful meeting initial goals.
- Participants appreciated opportunities to connect with other IES-funded partnerships at standing meetings like the American Educational Research Association or the IES PI meeting. They thought that meetings where teams could engage with members of other RPPs would be useful, especially if they were focused on common challenges of working in partnerships.
- Two suggestions emerged related to the grant application process. The first was a quicker turnaround for application review in keeping with practitioners' pace of work. The second was for IES to encourage and value a wide range of dissemination or communications activities beyond peer-reviewed journal articles.

Length-of-Time Considerations

Only half of those surveyed (48; 51%) agreed or strongly agreed that two years was an adequate amount of time to meet their goals (Figure 14).

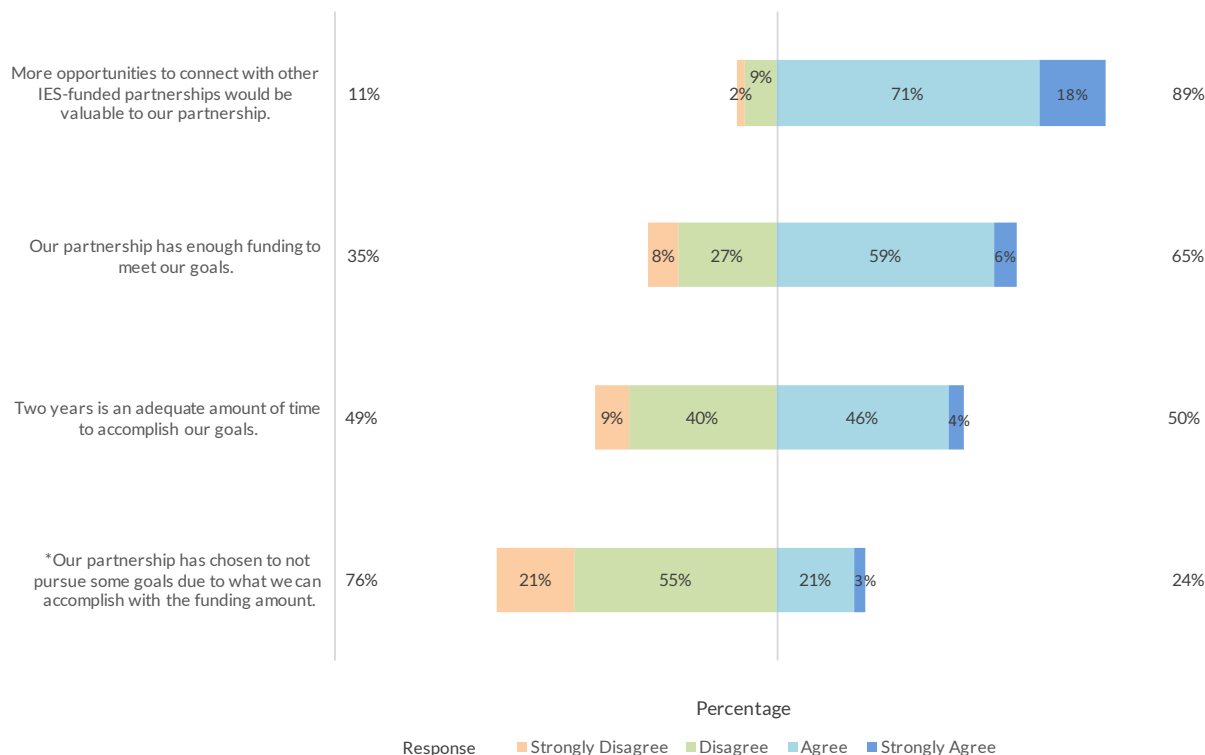


Figure 14. Participants' agreement with views regarding the structure of the IES grant program, from survey. Starred (*) items are negative statements, such that disagreement on these items indicates positive attitudes (95 < n < 100 researcher and practitioner survey respondents).

Similarly, 30 interviewees (56%) raised the issue of length of the grant, with the majority suggesting that current two-year cycle was too short. Several participants pointed out that this time frame was a challenge for newer partnerships where the work was just getting off the ground and for those with goals that were particularly ambitious. Two PIs explained:

It needs to be longer than two years. It's just too short, especially if you're a beginning partner, if it's just at the very beginning, and, for us, if it's on a broader scale. I know I've spoken with other folks that are doing similar things, especially in big, urban systems. It just takes time. It's a perfect mechanism to build relationships, but I don't think two years is long enough.

Two years is a great start for funding in terms of, "How do we get that partnership really started? Get the buy in from folks? Get our agenda set?" But, to start seeing the realization of that work, actually having an impact on the practice and the policy in the region? I think that that's obviously a more long-term goal.

Further, this two-year period was challenging because many participants only had one year of work together before they needed to write additional proposals to continue. One participant compared this to Congressional re-election, explaining:

It feels like being elected to Congress because it's a two-year term, and so at the end of your first year, you've got to be campaigning for your next election. Your attention is split between what you're doing and how you're going to continue the partnership.

Choosing to wait until the end of the second year to apply for additional funding was also tricky, as it created the possibility of a gap year without funding to support the work. One PI described this possible scenario:

You spent two years leading up to pressing questions. The assumption is you had some preliminary data, and you really have nailed it. You know exactly what the issue is. You have the local data available. There's something really pressing at hand. Then, you say, "Now we're going to take a hiatus for a year before we know whether we get funding or not. Then we may have to reapply. Hold your breath with me for one or two years, and then we'll continue our partnership." That doesn't work, especially if you spend two years building momentum, and then you hit the brakes.

Several participants noted that the possibility of no-cost extensions on the grants allowed them to continue the work past the official two-year mark, a reality that was important for meeting project goals. However, these extensions were not officially a part of the grant structure, and not all participants assumed they would be awarded.

The majority of participants suggested that a three-year grant period would be useful with (potentially) a fourth year if a no-cost extension was appropriate. Others offered different suggestions. One PI suggested a small planning grant in year one, followed by two to five years of funding for partnership work, depending on its scope. This is similar to the National Science Foundation (NSF) model:

Consider a similar structure that NSF has, where scaling years are contingent on the review that's ongoing within.... IES could implement the structure where the grant, the partnership grant could be five years. The first two are the initial stage of establishing the partnership. If that is accomplished, funding will continue as outlined in the proposals for years three, four, and five.

Funding Considerations

Funding was another salient issue for participants, and comments on this topic often accompanied discussions of grant timelines.

Current funding levels. Close to two-thirds (64; 65%) of all survey respondents agreed or strongly agreed that their partnerships had enough funding to meet their goals. Looking across role groups, however, differences emerge. Only half of the PIs (12; 48%) agreed or strongly agreed with this statement, compared to three-quarters of practitioners (31; 75%).

In the interviews, nine participants (17%) suggested that additional funding for their current scope of work would be beneficial. The issue of funding seemed most pressing for RPPs where several organizations were involved, such that the funding was split in multiple ways in order for each to have some “skin in the game.” One member of a multi-organizational partnership said, “There needs to be more attention given to the sustaining of the backbone for these efforts, especially when it’s a multi-partner collective impact model, rather than a one-to-one or a one-to-one-to-one kind of model.” In contrast, members of six RPPs reported that their funding levels were sufficient for their current plans of work. One grantee noted that the current funding was “an appropriate investment for these initial partnerships.”

If IES lengthened the grant time frame, as suggested above, participants recommended proportionate increases in the grant awards. Four representatives from four different partnerships explained that the current funding levels would not likely cover an additional year or two of work. According to one PI, “Extending that at least a year, if not two, and then proportionately increasing the budget, would be appropriate.”

Future funding. Another issue raised by close to one-third (16; 30%) of interviewees focused on funding opportunities to continue the work of the partnership. As noted above, the short time frame of the grant meant that partnerships needed to think about additional funding early on. As one PI explained:

It’s really the first year [when] you need to develop the foundation—develop joint goals, develop routines, have time to sit down and talk about big picture, what’s success for us? It’s the second year where people can really start moving in terms of data collection, analysis, getting out reports, insights, and papers. Then, it’s a two-year grant. By the end of two years, we already have to think about how to sustain it. That’s a big challenge.

Several participants encouraged IES to offer a continuation grant for RPPs who had met their goals or who had demonstrated promising results. A “Phase 2” grant would enable those partnerships that had made substantial progress to continue their work together and pursue necessary next steps to positively impact educational outcomes. This was generally envisioned as a new competitive grant program or as smaller discretionary funds distributed by program officers. One grantee offered this suggestion:

I could imagine a process whereby they gave you two years and then there was the opportunity to reapply....[It would be] a way to give program officers a little discretion and...access to a pool of money that would allow them to fund some subset of the RPPs when they were approaching the final year.

Others wanted more information about different funding opportunities for partnership work after the grant’s completion, including from organizations like the Spencer Foundation or NSF. There was also interest in understanding how the work of their RPPs could be further developed and supported by other IES grant programs. Several participants told us that they did not know how their partnership work could continue to be supported by IES, or, as one researcher said, if there

there was a “natural progression” to other IES-sponsored research projects. It also was not clear to all participants if and how the partnership context would be taken into account for future grant proposals submitted to IES (i.e., if the partnership context would mean they would receive additional points in applications for other kinds of projects).

Time to Meet with Other Partnerships

Most survey respondents (88; 89%) agreed or strongly agreed that “more opportunities to connect with other IES-funded partnerships would be valuable to our partnership.” This sentiment was echoed in the interviews. Close to one-third of those interviewed (16; 30%) said that opportunities to learn from other IES-funded RPPs were helpful for their work. Six interviewees reported that past efforts to bring together RPPs were useful. These events included a convening at AERA, attendance at the IES PI meeting, and webinars organized by IES. Said one practitioner, “I’ve attended a couple of the different national meetings for the principal investigators to get together, and those have always been very positive in my experience.” These opportunities reportedly gave participants an opportunity to network and learn about new research findings.

Another theme that emerged from the interviews was a request for dedicated time within the larger meetings or a standalone meeting for RPP grantees only. One practitioner explained:

We were hoping for a meeting of the research partnership grant recipients—our own meeting, and that never happened. If it was supposed to, we weren’t aware of it. We really thought we were gonna go [to the IES PI meeting] with some special attention paid to that, and we didn’t feel like that happened.

While the larger meetings were seen as useful for learning about new research findings, some participants wanted opportunities to problem-solve and learn from each other about the specific challenges that had arisen from working within a partnership setting. Interviewees wanted to “talk shop” with others about practical issues like disseminating findings to a range of different audiences, learning about other grant opportunities, or identifying strategies to navigate organizational turnover.

Grant Application and Dissemination

Participants also shared suggestions related to the grant application itself, as well as to the dissemination goals of the program.

Grant application timelines. About one-fifth of interviewees (11; 20%) offered suggestions related to the grant application and the application process. For example, they suggested that the application timeline and proposal itself could better reflect practitioners’ calendars and pace of work. One PI argued, “It takes so long for that IES grant to go through the pipeline,” while a different PI suggested there should be a “quicker turnaround” in the application submission, review, and question periods. The fact that there was close to a one-year delay between application submission and notification was a challenge for some, given that they wanted to focus on current, pressing problems of practice. Two practitioners from school districts also suggested that IES reconsider the grant application deadline. Early August coincides with the beginning of many school district and academic calendars, making it a busy time of year.

Dissemination and communication priorities. Finally, some interviewees (8, 15%) of those interviewed shared suggestions about dissemination and communication priorities for their grants. Most of them noted that peer-reviewed journal articles should not be the only or main goal for dissemination. Participants encouraged IES to include a broader set of dissemination products or strategies in the RFA as well as in determining overall grant success. One practitioner suggested that timely briefings of RPP findings to important stakeholder groups was a key avenue for dissemination:

Do you know how long it's been since I've read a journal article since I've been an administrator? The results of any of these projects, there's some key stakeholders that should be hearing about these results. That's how we base our general budgets. If you brought me something super valuable in the way of a program or curriculum through a research project, and it was successful, that will change the way we will target our funding for the coming year.

Other suggestions for communication included a social media strategy, one- to two-page summaries, and videos.

Other Suggestions

A few other recommendations for IES emerged from the interviews, named by one or two interviewees each. Two recommended that IES offer technical assistance for data-sharing issues. Two participants wanted to be able to connect partnerships with similar content areas, so that they could learn from one another. Two individuals requested that IES continue to publicly promote the RPP program; in some circles, they explained, the work of RPPs was not valued as much as other kinds of research, and IES's continued public support helped shift that mentality. One researcher suggested that IES create a mentor program for interested researchers to be matched up with researchers currently involved in partnership work, and a different researcher suggested that IES include in the review panels individuals who have engaged in partnership work, rather than just traditional researchers.

Key Conclusions and Open Questions

Overall, researchers and practitioners were both positive about the IES RPP program and their experiences with it. They reported making significant progress toward multiple objectives, and they appreciated the opportunities that the program provided them to build a foundation for ongoing joint work. Nearly all individuals who responded to the survey hoped to continue their partnership work in the future; many were developing concrete plans and proposals to do so. Participants in the study suggested that their projects had increased access to resources and expertise aimed at understanding and addressing specific problems of practice.

We suspect that there is some bias in these positive evaluations, as there is with any self-report. Two sources of potential bias are noteworthy because they relate directly to characteristics of the partnerships and the program itself. First, we suspect that participants may be overwhelmingly positive about their joint work because these were not new relationships between researchers and practitioners; all of the partnerships had at least some history of working together. Thus, a decision to apply to the program in the first place likely signaled a joint commitment to working together. Second, the partnerships are in a precarious position vis-à-vis external funding. It makes sense that partners would be quick to express gratitude to IES for the program, not only because they provided funding but also because they are a possible funding source in the future.

One robust conclusion is that the program is attracting partnerships with some history of working together. While the RFA notes that the program supports both new and established partnerships, there appears to be a tendency toward funding partnerships with some formal or informal prior relationship. To investigate that possibility further, it would be worthwhile to examine proposals that were not funded and to interview people who considered applying but did not, to assess whether this was a consideration. As such, the program may want to investigate the following questions:

Is the program intended to seed partnerships from the very beginning, or is some kind of prior relationship or history of work together beneficial and appropriate?

How might IES consider a partnership's history when considering the appropriateness of its goals and the length of time needed to meet them?

Our analysis also indicated that over three-quarters (79%) of the PIs were mid-career or senior scholars in education research. Because of tenure and promotion requirements, some institutions have strong disincentives in place for pre-tenure faculty to become involved in partnership work, as this time-consuming work may be viewed as service rather than research. It is difficult to build the capacity of the field for partnership activity without the involvement of early career scholars so that they can develop more robust and varied skills to carry out effective research in this area. Thus, an open question for the program is:

What support or encouragement might IES provide to early career scholars to develop their skills in forming and sustaining RPPs and in conducting rigorous research within them?

We also found that participants were pursuing a range of goals and activities that extended beyond those clearly articulated in the RFA. The partnerships had much larger ambitions to impact local policies and practices as well as student outcomes. They also intended to inform the work of others beyond their partnerships, including contributing to the knowledge base in education. To that end, they engaged in activities to design and test interventions, even in the short period of their partnership grants. (The RFA does state that partnerships may articulate a plan for future research that includes the development of interventions.) Open questions for the RPP program to consider are:

What range of short- and long-term goals might partnerships be expected to specify at the proposal stage?

What activities related to longer-term goals might be appropriate to encourage, as well?

As earlier research on RPPs has found, these types of partnerships struggle to achieve synchrony, that is, a state in which researchers and practitioners operate at the same time scale so as to coordinate activities effectively. It may be hard for researchers to keep up with the “speed of practice,” and researchers’ careful analysis proceeds more slowly than is useful to practitioners. The asynchrony—a challenge named in the literature for partnerships of all kinds—is exacerbated by the need for partnerships to start planning their next proposals when the work has just begun. An open question we hope the RPP program will take up is:

How might IES adapt grant application deadlines and funding time frames to enable RPPs to develop efficient patterns for coordinating work before they need to develop proposals for continued work?

Next Steps in the Study

Our study will continue over the coming year as we investigate the IES RPP program as part of our activities in the National Center for Research in Policy and Practice. Our next steps will begin with additional analyses of our Phase 1 data. From our full set of interviews, we will focus on the “origin stories” of the partnerships, understanding how and why they came to be. We will refine our analysis of partnership goals, determining how RPPs decided upon those goals, what informed their selection, and how research was involved. We plan to analyze the individual characteristics and organizational conditions that supported partnership development. We are also interested in understanding if there are different models for partnering across RPPs. For instance, there may be sets of activities that cluster together or different configurations of the practitioner–researcher teams.

According to our roster, almost half (48%) of the practitioners in co-PI roles worked in research, assessment, and evaluation offices, and we plan to explore this finding further. In some ways, the research office is a natural partner for external researchers. However, this may be a cause for concern if educational leaders with decision-making authority over particular policy areas are not centrally involved in partnerships. In fact, most co-PIs were involved in key decisions in which research could figure prominently, but this was less likely for co-PIs in research, assessment, and accountability positions. Our research has not yet documented well how research produced by RPPs might be taken up and whether those with authority for relevant decisions are regularly involved. Therefore, we need to understand better the kinds of decisions where application of research may be relevant as well as who is at the table for decision making in those contexts.

Phase 2 of this project will begin in spring 2017, and it will involve a second round of interviews and surveys with the same sample of partnerships. We plan to adapt our current instruments as needed, based on our preliminary findings and additional IES feedback. Our final report will focus on the work of the partnerships over time, considering any differences that emerge as they mature. This may include shifts in the roles of researchers and practitioners, the goals of partner work, and the perceived value of the partnerships. We will analyze items related to organizational culture for research use and the research use items to create a portrait of how the educational organizations’ capacity to use research has shifted (or not) based on their participation in RPPs. We will also assess if researchers have shifted how they do research as result of their partnership work.

Appendix A

Number and Percentage of Respondents and Non-Respondents, by Position and Role in RPP

	Responding				Not responding		
	Original roster	All researchers	PIs	Other researchers	All researchers	PIs	Other researchers
Professor	41 (50%)	34 (56%)	18 (69%)	16 (46%)	7 (33%)	1 (50%)	6 (32%)
Researcher	27 (33%)	19 (31%)	6 (23%)	13 (37%)	8 (38%)	0 (0%)	8 (42%)
Center director	7 (9%)	4 (7%)	2 (8%)	2 (6%)	3 (14%)	1 (50%)	2 (11%)
Doctoral student	7 (9%)	4 (7%)	0 (0%)	4 (11%)	3 (14%)	0 (0%)	3 (16%)
		All practitioners	Co-PIs	Other practitioners	All practitioners	Co-PIs	Other practitioners
P-20 research, assessment, and accountability	26 (33%)	19 (42%)	11 (52%)	8 (33%)	7 (21%)	1 (25%)	6 (21%)
Postsecondary policy and practice	12 (15%)	8 (18%)	2 (10%)	6 (25%)	4 (12%)	1 (25%)	3 (10%)
Early childhood policy and practice	12 (15%)	5 (11%)	2 (10%)	3 (13%)	7 (21%)	0 (0%)	7 (24%)
K-12 special education	7 (9%)	5 (11%)	1 (5%)	4 (17%)	2 (6%)	0 (0%)	2 (7%)
K-12 federal programs	7 (9%)	5 (11%)	2 (10%)	3 (13%)	2 (6%)	0 (0%)	2 (7%)
K-12 educator evaluation	5 (6%)	2 (4%)	2 (10%)	0 (0%)	3 (9%)	0 (0%)	3 (10%)
K-12 curriculum and instruction	5 (6%)	0 (0%)	0 (0%)	0 (0%)	5 (15%)	1 (25%)	4 (14%)
K-12 deputy superintendents and chief officers	4 (5%)	1 (2%)	1 (5%)	0 (0%)	3 (9%)	1 (25%)	2 (7%)

Appendix B

Sample Sizes and Response Rates by Position, Area of Practice, and Senior-Level Designation

	Rostered		Respondents		Non respondents	
	All	Senior-level (% of all)	All	Senior-level (response rate)	All	Senior-level (non-response rate)
Professor	41	28 (68%)	34 (83%)	22 (79%)	7 (17%)	16 (21%)
Researcher	27	14 (52%)	19 (70%)	10 (71%)	8 (30%)	4 (29%)
Center director	7	6 (86%)	4 (57%)	4 (67%)	3 (43%)	2 (33%)
Doctoral student	7	0 (0%)	4 (57%)	0 (NA)	3 (43%)	0 (NA)
Principal investigators	28	22 (79%)	26 (93%)	20 (91%)	2 (7%)	2 (9%)
Other researchers	54	26 (48%)	35 (65%)	16 (62%)	19 (35%)	10 (38%)
All researchers (including PIs)	82	48 (59%)	61 (74%)	36 (75%)	21 (26%)	12 (25%)
K-12 deputy superintendents and chief officers	4	4 (100%)	1 (25%)	1 (25%)	3 (75%)	3 (75%)
K-12 curriculum and instruction	5	2 (40%)	0 (0%)	0 (0%)	5 (100%)	2 (100%)
K-12 special education	7	4 (57%)	5 (71%)	2 (50%)	2 (29%)	2 (50%)
K-12 federal programs	7	4 (57%)	5 (71%)	3 (75%)	2 (29%)	1 (25%)
K-12 educator evaluation	5	4 (80%)	2 (40%)	2 (50%)	3 (60%)	2 (50%)
P-20 research, assessment, and accountability	26	16 (62%)	19 (73%)	13 (81%)	7 (27%)	3 (19%)
Early childhood policy and practice	12	7 (58%)	5 (42%)	3 (43%)	7 (58%)	4 (57%)
Postsecondary policy and practice	12	9 (75%)	8 (67%)	6 (67%)	4 (33%)	3 (33%)
Co-principal investigators	25	20 (80%)	21 (84%)	16 (80%)	4 (16%)	4 (20%)
Other practitioners	53	30 (57%)	24 (45%)	14 (47%)	29 (55%)	16 (53%)
All practitioners (including co-PIs)	78	50 (64%)	45 (58%)	30 (60%)	33 (42%)	20 (40%)
Overall	160	98 (61%)	106 (66%)	66 (67%)	54 (34%)	32 (33%)

Appendix C

Number of RPPs Reporting Specific Goals, by Role of Survey Respondent in RPP (Survey Data)

	Reported as goal of partnership					
	At least 50% of RPP participants	PI	Co-PI	At least one researcher and one practitioner	Researcher only	Practitioner only
<i>n</i> (RPPs)	27	26	21	25	25	25
Cultivate partnership relationships						
Build a foundation or infrastructure for future work together	27	26	18	23	2	0
Increase capacity of researchers and practitioners to conduct partnership work						
Develop the capacity of researchers to work in partnership with educational leaders	25	24	19	23	0	2
Develop shared understandings of how researchers and practitioners can learn from each other	27	26	18	25	0	0
Conduct and use rigorous research						
Develop the capacity of the organization/district to use research	26	24	17	22	2	1
Make progress toward addressing the focal problems through research activities (e.g., researching an existing intervention)	27	26	18	25	0	0
Develop research evidence that meets standards for publication in a peer-reviewed journal	25	19	14	19	3	2
Impact local improvement efforts						
Develop a deep understanding of the problem the partnership set out to investigate	27	26	18	24	1	0
Improve students' academic outcomes	26	20	16	18	4	3
Identify a specific strategy for improvement	24	16	17	18	2	4
Develop approaches to evaluate an improvement strategy	23	16	15	18	2	4
Improve organizational/district processes (e.g., changing how students are identified for interventions) in order to impact students' outcomes	22	18	13	17	5	3
Improve organizational/district policies (e.g., teacher evaluation) in order to impact students' outcomes	19	16	10	12	7	5
Improve students' social-emotional or non-cognitive outcomes	16	11	10	11	4	6
Inform the work of others						
Develop research findings that apply to other educational organizations or districts	25	24	15	21	3	1

Appendix D

Number of RPPs Reporting Specific Activities the Partnership Has Done or Plans to Do, by Role of Survey Respondent in RPP (Survey Data)

	Has done or plans to do as part of grant					
	At least 50% of RPP participants	PI	Co-PI	At least one researcher and one practitioner	Researcher only	Practitioner only
<i>n (RPPs)</i>	27	26	20	25	25	25
Cross-type activities						
Interpret data together	27	26	20	24	1	0
Communicate findings to others in the organization	27	25	19	22	3	0
Reach out to key stakeholders in the organization	26	24	18	22	2	1
Communicate findings to the public	26	24	19	20	3	2
Identify gaps in student outcomes	23	19	16	19	3	1
Examine relationships between things you can change and outcomes	21	14	12	15	5	4
Connect findings to other contexts	16	12	13	12	5	4
Alliance-type activities						
Analyze outcomes of a policy or program in the organization	24	19	13	16	6	2
Build database that combines data sets	21	18	14	18	2	1
Analyze implementation of a policy or program in the organization/district	16	12	10	12	5	5
NIC-type activities						
Conduct Plan-Do-Study-Act cycles to address a problem for the organization	10	8	6	4	5	5
Develop ways for practitioners to quickly test whether changes are working	9	5	11	7	1	6
Use tools from improvement science to represent understanding of a problem	7	4	9	3	5	10
Create a "networked improvement community" interested in testing solutions	6	5	10	5	4	8
Design-type activities						
Develop a set of conjectures or hypotheses about features of programs needed to address a problem	20	17	16	18	3	3
Jointly design a program or intervention that addresses a problem for the organization	15	14	10	12	3	1
Try out a program or intervention the partnership designed	12	8	12	9	0	7
Adapt or refine a program the partnership designed, based on testing it in the organization	12	8	8	7	3	5

Appendix E

Percentage of Researchers Reporting Challenges in RPPs, by RPP Role (Survey Data)

	PIs					Other researchers				
	n	SD	D	A	SA	n	SD	D	A	SA
Researchers have multiple ways of communicating research findings with practitioners.	25	0%	4%	68%	28%	35	3%	11%	54%	31%
Practitioners have a good understanding of research methods.	24	4%	8%	71%	17%	35	3%	34%	57%	6%
* Researchers and practitioners have different timelines for getting things done.	25	0%	24%	52%	24%	35	6%	37%	37%	20%
* Researchers' and practitioners' schedules are hard to coordinate.	25	16%	40%	44%	0%	35	6%	34%	54%	6%
* Turnover in the educational organization/district presents substantial challenges.	25	20%	40%	28%	12%	35	20%	43%	26%	11%
* Researchers and practitioners have different goals and priorities, and that makes it difficult for them to work together.	25	28%	56%	16%	0%	35	23%	60%	17%	0%
* There is not enough time for researchers and practitioners to work together to make progress.	25	20%	64%	16%	0%	35	14%	69%	17%	0%
* Researchers are driven by theory, not the problems facing educational organization/districts.	25	72%	24%	4%	0%	35	40%	54%	6%	0%

Note. Starred items are negative statements (disagreement on these items indicates that these were not strongly supported as challenges); SD = Strongly Disagree; D = Disagree; A = Agree; SA = Strongly Agree.

Percentage of Practitioners Reporting Challenges in RPPs, by RPP Role (Survey Data)

	Co-PIs					Other practitioners				
	n	SD	D	A	SA	n	SD	D	A	SA
Researchers have multiple ways of communicating research findings with practitioners.	19	0%	5%	84%	11%	23	0%	4%	78%	17%
Practitioners have a good understanding of research methods.	19	0%	21%	58%	21%	23	0%	39%	57%	4%
* Researchers and practitioners have different timelines for getting things done.	19	16%	42%	37%	5%	23	13%	52%	22%	13%
* Researchers' and practitioners' schedules are hard to coordinate.	19	16%	63%	21%	0%	23	13%	43%	43%	0%
* Turnover in the educational organization/district presents substantial challenges.	19	11%	47%	37%	5%	23	4%	65%	30%	0%
* Researchers and practitioners have different goals and priorities, and that makes it difficult for them to work together.	20	45%	40%	15%	0%	23	22%	48%	26%	4%
* There is not enough time for researchers and practitioners to work together to make progress.	19	16%	74%	11%	0%	23	17%	61%	22%	0%
* Researchers are driven by theory, not the problems facing educational organization/districts.	19	37%	53%	11%	0%	23	26%	61%	13%	0%

Note. Starred items are negative statements; disagreement on these items indicates that these were not strongly supported as challenges. SD = Strongly Disagree; D = Disagree; A = Agree; SA = Strongly Agree.

Appendix F

Attitudes Towards Partnership Reported by Researchers on Survey

	PIs					Other researchers				
	n	SD	D	A	SA	n	SD	D	A	SA
I would participate in a researcher–practitioner partnership in the future.	25	0%	0%	12%	88%	35	0%	0%	11%	89%
Researcher–practitioner partnerships are worth the investment from IES.	25	4%	0%	12%	84%	35	0%	3%	23%	74%
Researcher and practitioner participation is equally valued by members of the partnership.	25	0%	8%	32%	60%	35	0%	14%	31%	54%
* I would not recommend to a colleague that they join or form a researcher–practitioner partnership.	25	72%	20%	4%	4%	35	80%	14%	3%	3%
* IES should prioritize funding causal studies (e.g., randomized control trials) over researcher–practitioner partnerships.	25	40%	52%	4%	4%	35	49%	43%	6%	3%
* The researcher–practitioner partnership was not worth the time we invested in it.	25	88%	8%	0%	4%	35	83%	14%	3%	0%

Note. Starred items are negative statements; disagreement on these items indicates positive attitudes towards the partnership; SD = Strongly Disagree; D = Disagree; A = Agree; SA = Strongly Agree.

Practitioners' Agreement with Attitude Statements About Partnerships, by RPP Role (Survey Data)

	Co-PIs					Other practitioners				
	n	SD	D	A	SA	n	SD	D	A	SA
I would participate in a researcher–practitioner partnership in the future.	19	0%	0%	16%	84%	23	0%	0%	22%	78%
Researcher–practitioner partnerships are worth the investment from IES.	19	5%	0%	11%	84%	23	0%	4%	22%	74%
Researcher and practitioner participation is equally valued by members of the partnership.	19	5%	5%	32%	58%	23	0%	17%	26%	57%
* I would not recommend to a colleague that they join or form a researcher–practitioner partnership.	19	68%	16%	5%	11%	23	65%	22%	4%	9%
* IES should prioritize funding causal studies (e.g., randomized control trials) over researcher–practitioner partnerships.	19	21%	74%	0%	5%	21	43%	48%	5%	5%
* The researcher–practitioner partnership was not worth the time we invested in it.	19	79%	16%	5%	0%	23	65%	26%	0%	9%

Note. Starred items are negative statements; disagreement on these items indicates positive attitudes towards the partnership. SD = Strongly Disagree; D = Disagree; A = Agree; SA = Strongly Agree.

Appendix G

How Different Groups Reported Activities that the Partnership Plans to Do After the Grant on Survey, by Number of RPPs

	Plans to do after the grant					
	At least 50% of RPP participants	PI	Co-PI	At least one researcher and one practitioner	Researcher only	Practitioner only
<i>n</i> (RPPs)	27	26	20	25	25	25
Cross-type activities						
Interpret data together	0	0	0	0	0	0
Communicate findings to others in the organization	0	0	1	0	1	1
Reach out to key stakeholders in the organization	0	1	1	0	1	1
Communicate findings to the public	2	1	1	1	3	4
Identify gaps in student outcomes	0	2	1	0	3	1
Examine relationships between things you can change and outcomes	2	7	4	1	6	3
Connect findings to other contexts	2	2	2	0	6	5
Alliance-type activities						
Analyze <u>outcomes</u> of a policy or program in the organization	3	5	2	2	3	2
Build database that combines data sets	0	1	2	0	1	2
Analyze <u>implementation</u> of a policy or program in the organization/district	3	4	3	2	4	2
NIC-type activities						
Conduct Plan-Do-Study-Act cycles to address a problem for the organization	1	2	0	0	3	0
Develop ways for practitioners to quickly test whether changes are working	1	5	0	0	6	0
Use tools from improvement science to represent understanding of a problem	1	3	0	0	3	1
Create a "networked improvement community" interested in testing solutions	1	3	1	0	3	1
Design-type activities						
Develop a set of conjectures or hypotheses about features of programs needed to address a problem	0	1	0	0	5	0
Jointly design a program or intervention that addresses a problem for the organization	2	4	2	1	5	3
Try out a program or intervention the partnership designed	5	7	1	1	6	1
Adapt or refine a program the partnership designed, based on testing it in the organization	3	6	1	0	9	1

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Endnotes

¹Coburn and Penuel (2016); note that we use the RPP acronym to refer to both IES researcher–practitioner partnerships and researcher–practitioner partnerships more broadly.

²Tseng (2012)

³Donovan, Snow, and Daro (2013)

⁴Braga, Kennedy, Waring, and Piehl (2001); Brown, Hawkins, Arthur, Briney, and Fagan (2011); Bullock, Morris, and Atwell (2011); McKay et al. (2011); McKay et al. (2010)

⁵Coburn and Penuel (2016)

⁶e.g., Rosenquist, Henrick, and Smith (2015)

⁷Coburn (2010); D’Amico (2010); Honig and Ikemoto (2008); Hubbard (2010)

⁸Weiss and Bucuvalas (1980)

⁹Henrick, Jackson, Cobb, Penuel, & Clark (2016)

¹⁰Weiss and Bucuvalas (1980)

¹¹Coburn, Honig, and Stein (2009); Coburn and Talbert (2006); Coburn, Toure, and Yamashita (2009); Farley-Ripple (2012)

¹²Weiss (1980)

¹³Coburn, Honig et al. (2009)

¹⁴Penuel, Briggs et al. (2016)

¹⁵Penuel and Means (2011)

¹⁶Hubbard (2010)

¹⁷Penuel and Gallagher (in press)

¹⁸Contandriopoulos, Lemire, Denis, and Tremblay (2010); National Research Council (2012)

¹⁹Amara, Ouiment, and Landry (2004)

²⁰Cobb, Jackson, Smith, Sorum, and Henrick (2013); Roderick, Easton and Sebring (2009)

²¹Gioia and Chittipeddi (1991)

- ²²Donovan (2013)
- ²³Henrick et al. (2016)
- ²⁴Coburn, Penuel, and Geil (2013)
- ²⁵e.g., Booth et al. (2015)
- ²⁶e.g., Castrechini (2009)
- ²⁷Allensworth (2015)
- ²⁸Penuel, Van Horne, Severance, Quigley, and Sumner (2016)
- ²⁹Bryk, Gomez, Grunow, and LeMaheiu (2015)
- ³⁰Allensworth (2015)
- ³¹Cobb and Jackson (2011)
- ³²Allen and Davidson (2015)
- ³³Coburn et al. (2013)
- ³⁴Patton (2002)
- ³⁵Penuel, Briggs et al. (2016)
- ³⁶Miles and Huberman (1994)
- ³⁷Creswell (2003); Miles and Huberman (1994)
- ³⁸Coburn and Penuel (2016)
- ³⁹Coburn and Penuel (2016); Coburn et al. (2013)