January 2012

Education R&D Partnership Tool

Community for Advancing Discovery Research in Education

Prepared for CADRE by:

Policy Studies Associates
Derek Riley

With contributions from:
Patricia Baltzley, Baltimore County Public Schools
Deborah Bliss, Loudoun County Public Schools (VA)
Katya Denisova, Baltimore City Public Schools
Chris Holle, Los Angeles Unified School District
Kimberle Kelly, Los Angeles Unified School District
Jodi Lunt, Davis School District (UT)
Jeff Maher, St. Mary's County Public Schools (MD)

January 2012

This project is funded by the National Science Foundation, grant # 0822241. Any opinions, findings, and conclusions or recommendations expressed in this materials are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.

Community for Advancing Discovery Research in Education

Education R&D Partnership Tool

January 2012

Education research and development (R&D) partnerships have the potential to develop knowledge and resources that contribute to improved student learning. Often districts and schools are asked to participate in R&D projects, and yet, there is little guidance in the field of education R&D regarding strategies to make project partnerships effective and mutually beneficial. Based on the hard-won lessons of education practitioners, researchers, and developers who have partnered on R&D projects, this tool is intended to help others assess and improve their own R&D partnerships. The tool assumes that most education R&D projects benefit when they are built on collaborative relationships in which partner districts and schools have a substantive role and give valued input on project goals, design, and implementation.

Organized around six themes for establishing and nurturing successful partnerships, the Education R&D Partnership Tool includes a Work Sheet that prompts reflection and discussion on prominent issues, as well as a parallel Reference Sheet with practical considerations. It includes tips for starting and sustaining a partnership dialogue and an appendix that elaborates on the six themes.

Intended Users. Intended users of the Education R&D Partnership Tool include 1) district and school personnel who are considering or engaged in partnerships that carry out education R&D projects and 2) project leaders from universities and research institutions who believe effective, mutually beneficial partnerships can enhance project success, sustainability, and broader use. The authors encourage project partners, regardless of affiliation, to share this with the project team and work through it collaboratively.

For those at the earliest stages of partnering, the tool provokes thinking about how to best design project features and partner roles from the outset. For those with established partnerships, it promotes reflection and communication on progress. Given that challenges persist even in strong project partnerships, both green and seasoned R&D partners may benefit from reflection on the tool's themes. Informed by the challenges experienced by its contributors, the tool is geared toward those who want to optimize partnership capacity such that the project is better equipped to avoid pitfalls and achieve desired outcomes.

CADRE

This project is funded in part by the National Science Foundation, grant # 0822241. Any opinions, findings, and conclusions or recommendations expressed in this materials are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.

Abt EDC PSA

UMASS DONAHUE INSTITUTE

Six Themes for Effective Education R&D Partnerships. In discussions among the contributors to this tool, six core themes emerged regarding challenges and strategies for effective, mutually beneficial education R&D partnerships. Elaboration on these themes appears in the Appendix.

1. Project Design and Alignment – R&D projects involving districts and schools are implemented within complex contexts that include existing curricula, priorities, capacities, incentive structures, and culture. Partners can work together at the outset and throughout project implementation to ensure goodness of fit, feasibility, and relevance.
2. Potential Benefits and Costs – Good partnerships work strategically and collaboratively to maximize the benefits that are most important to each partner. Likewise, they work to minimize organizational and individual costs, including those that are difficult to measure such as time, conflict with established priorities and processes, and opportunities missed.
3. Roles and Relationships – True partnerships entail substantive input from all parties. Indeed, project success can hinge on having the right people involved and drawing effectively on each partner's capacities. Collaborative discussions can clarify the project's organizational structure and activities, and then determine who has the expertise and affiliation needed to fill specific roles.
4. Sustained Commitment to Project Goals and Activities – Preparing for sustained commitment begins early and continues throughout the project's life. Project implementation benefits when partners make a sincere ongoing effort to ensure that stakeholders across units and up and down the line "buy-in" and have a clear understanding of what the project involves.
5. Communication and Collaboration – Partnerships are human endeavors that benefit from trust and regular communication. Partners might consider: developing structures and roles that enhance communication, regularly discussing project and partnership progress, and planning recursively for the likelihood of turnover and changing priorities.
6. Project Evaluation and Progress Monitoring – Typically, R&D projects have a third-party evaluator, but less often is that evaluator given a specific role in strengthening implementation and the partnership itself. Partnerships can benefit from working with the evaluator to develop an evaluation plan, perhaps one in which the evaluator will actively help clarify roles and tasks, monitor progress, provide timely formative feedback, collect implementation data, and serve regularly as a facilitative critical friend.

Development. Contributors to this tool have experience and interest in partnering on education R&D projects. They bring a variety of perspectives: about half are researchers who have worked in universities or other research organizations, while half have worked in school districts supervising or delivering instruction. Collectively, they have worked on R&D projects in science, technology, engineering, and math education that were conducted in rural, suburban, and urban districts throughout the country. Most have worked on projects funded by the National Science Foundation (NSF), which supported the development of this tool through its funding of the Community for Advancing Discovery Research in Education (CADRE). Contributors shared their partnership experiences with CADRE staff through interviews and provided feedback on iterative drafts of the tool. The tool accompanies and grows out of an issue brief titled *Fostering Knowledge Use in STEM Education: R&D Partnerships with Districts and Schools* that was developed by a CADRE work group for a researcher audience.

Work Sheet for the Education R&D Partnership Tool

How to use the tool:

This tool is organized around six themes, each with multiple questions to provoke thinking about an R&D project's partnership and design. Some questions should be prioritized, according to your project's goals, current stage, existing partner relationships, and implementation contexts.

1. Assess: For each question, assess whether the partnership is optimal (+), in need of change (Δ), or unclear (?). See the Reference Sheet for practical considerations.
2. Strategize: Clarify partnership related strengths, concerns, and potential improvements. If possible, draw on input from knowledgeable stakeholders in your organization.
3. Collaborate: Gather with R&D partners for collegial discussion about improving the project and its partnerships, while meeting each partner's essential needs.

Theme 1 – Project design and alignment	**+**	**Δ**	**?**
1.1. Is there a shared and clear understanding of the project design, including its intended outcomes, activity timelines, and partner roles?			
1.2 Does the project align with district priorities and initiatives—current and anticipated, codified and implied?			
1.3 Will current district and school operational realities accommodate the project's plans?			
1.4 Will current school staff capacities and interests realistically accommodate the project's plans without overly compromising the normal daily activities of the school?			
1.5 Does the project realistically account for current student skills and knowledge?			

Strengths	*Concerns*

Theme 2 – Potential benefits and costs	**+**	**Δ**	**?**
2.1 Does participating offer the potential of organizational and individual benefits that the intended beneficiaries want and find useful?			
2.2 Have project partners clearly identified organizational and individual costs of participating, and are these costs outweighed by potential benefits to the district and schools?			

Strengths	*Concerns*

Theme 3 – Roles and relationships		+	Δ	?
3.1	Does the project leadership team include the people and management structure needed for project success?			
3.2	Do key stakeholders from the district and schools have project roles, authority, and levels of involvement needed for project success?			
Strengths		*Concerns*		

Theme 4 – Sustained commitment to project goals and activities		+	Δ	?
4.1	Have key stakeholders from affected district divisions and schools "bought into" the project, based on a clear understanding of project design, potential benefits, costs, and implementation requirements?			
4.2	Have district and school leaders, in collaboration with project partners, planned strategically for the institutionalization of the project, as well as its possible sustainability and growth after the project ends?			
Strengths		*Concerns*		

Theme 5 – Communication and collaboration		+	Δ	?
5.1	Is there a plan for key district and school stakeholders and project leaders to regularly meet and discuss the project's progress and challenges?			
5.2	Has each organization identified primary contacts for the project, perhaps specified by implementation task or responsibility?			
5.3	Does the project plan include strategies to sustain communication and collaboration specifically in the face of turnover and changing priorities?			
Strengths		*Concerns*		

Theme 6 – Project evaluation and progress monitoring	+	Δ	?
6.1 Does the project have a rigorous evaluation plan that will: (1) provide usable formative feedback to make mid-course corrections, (2) promote ongoing project-wide accountability and progress monitoring, and (3) collect data on implementation that can increase usable findings and enhance understanding of effects?			
6.2 Does the evaluation collect data on the experiences and perspectives of varied district and school stakeholders?			
6.3 Will the project's researchers and evaluators report on findings in a format, frequency, and timeframe that is useful to the district and project leadership team?			

Strengths	*Concerns*

Tips for Starting and Sustaining a Partnership Dialogue

- Begin dialogue early and purposefully, yet patiently, knowing that not everything on this Work Sheet can or should be resolved at once. Get to know each other and be cognizant of what is needed for you and your partners to be comfortable at each stage, from submitting a proposal through work after the grant ends.
- Gather and review project documents, such as the proposal, project design and implementation plans, evaluation plans, district or school strategic plans, MOUs, contracts, and progress reports.
- Involve knowledgeable authorities from all stakeholder groups from WITHIN your organization for a discussion of important topics or concerns (e.g., curricular alignment, data needs, burden).
- With key partners and project leaders, identify and discuss the hopes, concerns, and non-negotiables that each has for the project and their participation.
- Strive for reciprocal relationships and mutual benefits among partners, as well as internally at various levels and across divisions in your organization.
- Use agendas, meeting schedules, and facilitators to sustain attention on partnership issues, as well as project progress.
- Work recursively toward clear roles and ongoing active participation among team members.

Community for Advancing Discovery Research in Education

The Community for Advancing Discovery Research in Education (CADRE), a resource network funded by the National Science Foundation, supports researchers and developers who participate in Discovery Research K–12 (DR K-12) projects on teaching and learning in the science, technology, engineering, and mathematics (STEM) disciplines. CADRE works with projects to strengthen and share methods, findings, results, and products, helping to build collaboration around a strong portfolio of STEM education resources, models, and technologies.

Notes: Topics for Discussion

Summarize key topics and questions for discussion with R&D project partners. Consider prominent strengths to build on, concerns that may require action, and options that could maximize benefits for all partners. Balance your organization's essential interests with those of partners and what is feasible at this stage of the project.

Reference Sheet for the Education R&D Partnership Tool

While reflecting on prompts in the preceding Work Sheet, refer to these practical considerations.

Theme 1 – Project design and alignment
1.1. Is there a shared and clear understanding of the project design, including its intended outcomes, activity timelines, and partner roles? *Consider:* • *the comprehensiveness and clarity of the project's plan* • *whether individual and organizational commitments are specified for the length of the project* • *the benefits of early opportunities for district and school stakeholders to air concerns or contribute to design revisions* • *which design features are and are not negotiable, given the interests of all partners*
1.2 Does the project align with district priorities and initiatives—current and anticipated, codified and implied? *Consider:* • *priorities expressed in the district's strategic plan and governing board's decisions* • *non-codified priorities expressed by decision makers, including new and incoming leaders* • *existing curricula, as well as anticipated curricular changes and adoption schedules* • *academic standards and assessments expected throughout the project's life (e.g., Common Core)* • *existing initiatives both district-wide and at individual schools* • *input from knowledgeable district and school staff (see 4.1)*
1.3 Will current district and school operational realities accommodate the project's plans? *Consider:* • *planned professional development and teacher release time* • *daily and yearly academic schedules, as well as current course offerings* • *union contracts* • *school and district staffing arrangements* • *district divisional responsibilities* • *technological and instructional infrastructure*
1.4 Will current school staff capacities and interests realistically accommodate the project's plans without overly compromising the normal daily activities of the school? *Consider:* • *teacher content knowledge and experience with specific pedagogical approaches* • *teacher interest in the project's topic and expected products* • *likelihood that the targeted teachers will buy-in and meet participation expectations throughout the project's life* • *teacher perceptions of conflicting job requirements and pressures* • *availability and arrangement of teacher time* • *trends in staff turnover and changes and teaching assignments*
1.5 Does the project realistically account for current student skills and knowledge? *Consider:* • *academic strengths and needs of targeted students, including their preparation for project content* • *project assumptions regarding student motivation and classroom behaviors* • *the availability of students who match project participant criteria* • *existing and anticipated course offerings, including those leading toward project content*

Theme 2 – Potential benefits and costs

2.1 Does participating offer the potential of organizational and individual benefits that the intended beneficiaries want and find useful?

Consider:

- *what the district and schools will gain*
- *how benefits will fit within the broader organizational vision and strategic plan*
- *whether individual participants view the potential outcomes as beneficial*
- *whether intended outcomes seem unrealistic*

2.2 Have project partners clearly identified organizational and individual costs of participating, and are these costs outweighed by potential benefits to the district and schools?

Consider:

- *time required for meetings and communication throughout the life of the project*
- *teacher professional development time and substitute reimbursements*
- *displacement of other curricula or professional development*
- *school-level scheduling burden and disruption*
- *teacher burden associated with implementation (e.g., preparing lessons, meeting with colleagues and project staff, and reporting on implementation)*
- *time required to manage implementation and provide data, including clerical help*
- *clerical help*
- *other opportunities that might be missed by participating in this project*

Theme 3 – Roles and relationships

3.1 Does the project leadership team include the people and management structure needed for project success?

Consider:

- *how each organization is represented in the project's management structure*
- *whether leadership is appropriately designated for all key implementation tasks*
- *how each leader's expertise will fit on the team and whether that team is well-structured for success*
- *whether to have a designee responsible for facilitating partner collaboration and communication*
- *whether to develop project advisory boards, possibly with practitioner representatives*
- *ways in which key partner leaders are likely to interact and work through institutional differences or disagreements*

3.2 Do key stakeholders from the district and schools have project roles, authority, and levels of involvement needed for project success?

Consider:

- *whether district and school perspectives are adequately represented in project leadership and on advisory boards*
- *the desirability of district subcontracts or cost sharing as a part of defining project roles for district and school staff*
- *whether district and school staff have a viable means to contribute to decision making or give feedback on implementation*
- *the benefits and tradeoffs of having district and school staff manage implementation tasks, perhaps as part-time staff or on temporary leave from the district*
- *whether district and school participants are clear early in the project about their roles and responsibilities throughout all stages of implementation*

Theme 4 – Sustained commitment to project goals and activities

4.1 Have key stakeholders from affected district divisions and schools "bought into" the project, based on a clear understanding of project design, potential benefits, costs, and implementation requirements?

Consider:

- *the benefits of securing broad institutional buy-in very early or even before committing to the project*
- *who in the district can lend insight to benefits, trade-offs, and challenges; for instance, ask:*
  - *assessment or research staff regarding data collection and provision issues*
  - *school administrators and their managers regarding entré and fit with school context*
  - *instructional division staff regarding curricular and professional development alignment*
  - *teacher leaders regarding teacher buy-in and issues related to curricula, professional development, teacher time, feasibility, student capacity, and conflicting pressures*
  - *business staff regarding the contract and issues related to the use of project funds*
  - *information technology staff regarding infrastructure*
  - *the superintendent and grants coordinator regarding fit with the district vision and other grants*

4.2 Have district and school leaders, in collaboration with project partners, planned strategically for the institutionalization of the project, as well as its possible sustainability and growth after the project ends?

Consider:

- *whether and how project activities and roles become integrated into the work of districts or schools*
- *how to prepare staffing structures and capacity to support the project's spread and sustainability, should the there be evidence of success*
- *how districts and schools can be organized to readily learn from implementation and act on findings*
- *the early visioning of scenarios, in terms of funding and operations, that lead toward sustainability and broader use*

Theme 5 – Communication and collaboration

5.1 Is there a plan for key district and school stakeholders and project leaders to regularly meet and discuss the project's progress and performance?

Consider:

- *who should communicate and for what purposes*
- *which communication modes and frequencies will contribute to project success without overly burdening team members*
- *strategies to sustain team communication between meetings*
- *strategies to regularly and systematically focus on the progress of various project components*
- *the inclusion of the project evaluator in meetings and discussion of specific project progress measures*

5.2 Has each organization identified primary communication contacts for the project, perhaps specified by implementation task or responsibility?

Consider:

- *a communication and management structure that identifies leaders from each organization and a clear map of who should contact whom for specific purposes*

5.3 Does the project plan include strategies to sustain communication and collaboration specifically in the face of turnover and changing priorities?

Consider:

- *building broad institutional commitment to the project across and within institutional units*
- *distributing shared responsibility for tasks*
- *anticipating the effects of changing priorities, leadership, and line staff before they become problems*
- *documenting and communicating about processes and progress in task managers' work*

Theme 6 – Project evaluation and progress monitoring
6.1 Does the project have a rigorous evaluation plan that will: (1) provide usable formative feedback to make mid-course corrections, (2) promote ongoing project-wide accountability and progress monitoring, and (3) collect data on implementation that can increase usable findings and enhance understanding of effects? *Consider:* • *a collaborative evaluation design effort that involves the evaluator and a team of project partners, including district or school leaders* • *evaluation designs that will benefit the district and schools in addition to the project as a whole* • *the development of clear and specific evaluation measures early in the project's life* • *an evaluation plan that specifies deliverable schedules and formats that are timely and actionable* • *strategies for ongoing communication between evaluators and project partners* • *roles for the evaluator that afford ongoing accountability and feedback on both implementation and the partnership itself*
6.2 Does the evaluation plan collect data on the experiences and perspectives of varied district and school stakeholders? *Consider:* • *the collection of implementation feedback from multiple perspectives including district leaders down through classroom participants who are using project products* • *methods that could include focus groups, interviews, or surveys, but do so with a narrow focus on specific data needed by the project team* • *evaluation questions that address issues related to project improvement, as well as participant perceptions of the project's benefits, tradeoffs, challenges, feasibility of implementation, usability of products, and potential for sustainability and broader use*
6.3 Will the project's researchers and evaluators report on findings in a format, frequency, and timeframe that is useful to the district and project leadership team? *Consider:* • *the benefits of regular debriefings among project partners and the evaluator focused on the implications and applications of findings* • *deliverables that maximize formative opportunities (e.g., targeted briefs, memos about implementation and partnership processes, progress summaries using agreed-upon measures)* • *whether different audiences would benefit from targeted evaluation briefs (e.g., project leaders, participants such as field testers, school leaders and faculties with little project involvement, parent and community members)* • *evaluation deliverables that include actionable recommendations*

Appendix to the Education R&D Partnership Tool

The goal of the Education R&D Partnership Tool is to help district and school staff work with their project partners to plan, improve, and sustain an R&D project partnership. The tool is organized around six themes, and in this appendix the authors elaborate on each theme and provide examples of district experiences partnering in STEM education R&D projects. Lastly, the appendix identifies the individuals who contributed to the development of the tool.

Descriptions and Examples of Six R&D Partnership Themes

1. **Project design and alignment: Ensure that project details are clearly understood and fit with district needs and realities.** School districts and schools face many demands to improve student achievement, implement rigorous and relevant instructional programs, and support and evaluate staff performance. R&D projects are often a relatively tiny fixture amidst a complex district ecology that includes a multitude of existing programs and priorities.

   Tapping Practitioner Insights and Concerns

   One district leader recounted how researchers wanted to randomly place students in classrooms as part of their research methodology, yet they did not inform the district until August when the schedules for the year had already been created. Including district staff in the planning process would have allowed the school district to point out problems or accommodate the researchers' needs.

   Elsewhere, school-level staff were not consulted on the design of a project, resulting in debilitating logistical problems for school implementation. For example, algebra and biology teachers who were expected to collaborate were unable to because of their schedules.

   Though it demands some time and coordination, districts and schools should consider rigorously reviewing all R&D opportunities before committing to ensure that they are supportive of and aligned with current improvement efforts. While institutional review boards and research offices of large districts increasingly carry an approval function, the authors suggest that the review involves those who will be responsible for or affected by implementation. Also, do not commit to an R&D project without a full accounting of how it fits within district and school educational contexts.

   Aligning Curricular Goals

   Contrasting two projects, a district staffer noted that curriculum products were most successful when they were aligned with state and district priorities. In these projects, implementation success depended on alignment with state academic standards and the district's model for curriculum design, and district personnel were best able to judge the fit.

   In a worst-case scenario, a poorly aligned R&D project will need to be abandoned mid-course when it conflicts with larger priorities. At the least, increasing alignment among various projects and programs can help limit the extent to which they work at cross-purposes and reduce the level of confusion and frustration experienced by the staff charged with implementation. Also, an early assessment of project design, including its feasibility and goodness-of-fit, can help head off implementation obstacles and increase the chances of sustained commitment over time and throughout the district.

In reviewing project design and alignment, partners may want to identify specific ways in which the R&D project is likely to support or coordinate with other district or school activities. Additionally, project partners may want to assess the project's timeline and people involved for tension with other plans. In short, are the district and schools "ready" for this specific R&D effort, in light of where they are now and where they aspire to be several years in the future?

2. **Potential benefits and costs: Fully account for all costs and weigh them against potential benefits.** In addition to ensuring that the R&D project's design and goals fit with district activities, as discussed above, staff from each partner organization should consider a careful weighing of costs and benefits. For starters, measure potential benefits in light of agreed-upon needs of the organization. It also may be useful to consider the values attached to these benefits by various stakeholder groups, including individuals who are expected to implement or benefit from the project.

Ensuring Mutual Benefit

A district leader suggested that R&D partnerships should be founded on aligned partner "charters" or priorities, and that mutual benefit should be somewhat easy to see in the project. Her district proactively identified district shortcomings in the areas of using data for instruction, chemistry, and inquiry-based science. Through networks, she linked with projects that focused on these issues and that seemed likely to fit with district context. Now, the district gets cutting-edge professional development, stipends, and a connection to higher education, while the research partners get access to participants and data.

Such an analysis would also likely include a fair accounting of the resources that the project might consume, as well as costs associated with political capital and the ability of staff to carry out a coherent vision. For instance, cost-benefit discussions might include an assessment of the costs associated with the purchase of materials, hiring facilitators, and paying for substitutes and stipends when staff participate in professional development or other project activities. Easily overlooked costs include the time required to get the project off the ground, sustain communication, and maintain implementation through turnover. Though hard to measure, there might also be costs when project activities push other priorities aside, strain stakeholders' trust and job satisfaction, or nullify other promising R&D opportunities.

Meeting User Needs

In one district, many teachers who received a stipend to attend a project's professional development series ended up not implementing the project's strategies because they were not relevant to their needs. A district representative commented that the researchers would have been better off targeting teachers who were interested in the content and who were more likely to benefit from participating. She added that teachers were more motivated to sustain participation by professional development that met their needs than by a stipend.

An accurate accounting of a partnership's costs and benefits will help foster realistic expectations and shared understandings among members of all partner organizations. Discussing these issues with partners provides an opportunity to identify ways to enhance benefits and minimize costs. On the other hand, shortchanging this analysis may contribute to wasted resources and the frustration of people implementing project activities.

3. **Roles and relationships: Ensure that the right people have the right project roles.** Each project and set of partners requires a unique arrangement of project roles and management structures. Regardless, an early and open discussion of who should do what can help partners build a stronger project. If nothing else, this will help clarify a shared understanding of specific roles and responsibilities. Moreover, it provides an opportunity to identify and tap the needed skills, perspectives, and authorities from within the district. Some projects may benefit from including district or school stakeholders in larger project leadership roles, including co-Principal Investigator or local implementation director.

Collaborating Early and Regularly

From project onset, a district and its external partners worked together as coequal contributors to design a program aligned with specific curricular needs. Roles and relational structures enabled the district to make substantive contributions to planning, and all stakeholders came away invested in a common vision. Quarterly advisory board meetings made up of district, university, and community stakeholders have helped all partners remain committed to the vision and make mid-course changes that enhance progress toward shared goals.

Codifying job responsibilities and action plans up front can clarify the work to be done and who is in the best position to do it. Project leaders from each partner organization may want to be explicit in devising how project staffers will contribute to project design, implementation, and monitoring. Also, while defining roles, partners may want to ensure that individuals involved in the project understand what their initial and ongoing responsibilities are, what the anticipated timeline for project activities is, and what, if any, deliverables partnership members are expected to share with the project team.

Drawing on District Perspectives on Feasibility

One district's experience suggests that there is an ongoing role for district staff in providing feedback on instruments and activities, particularly as they relate to the feasibility of implementation. For instance, the district partner found that even the best-intentioned researchers underestimate the amount of time required by their surveys and professional development. Likewise, they underestimate the complications and burden incurred by school staff when activities take longer than intended.

4. **Sustained commitment to project goals and activities: Garner broad buy-in that can be sustained throughout and after the project cycle.** Commitment to participate in a project should be made with confidence that key stakeholders understand and are on board with the project's design, costs, and potential benefits. Key stakeholders might be those with oversight responsibilities, such as district division heads and principals, as well as those who might be carrying out implementation, such as district professional developers and teachers. Consider that, whoever those stakeholders are for the project, their views be represented in initial and ongoing discussions about

Broadening Buy-In and Responsibility

One district with frequent turnover at the superintendent level realized that a superintendent's commitment does not guarantee long-term district buy-in. To make a grant work over the course of several years, the project included a district research staffer as a project leader responsible for local implementation and paid other district staff from the research and instructional divisions to help implement and collect data. The district had a subcontract on the project, which helped sustain commitment over time.

the project. Including input from the different departments or schools affected by the project may lead to stronger and sustainable buy-in, while also preemptively identifying flaws in project design and implementation. In the end, if practitioners view the project's goals as relevant and its implementation as feasible, they and other potential adopters are more likely to use its products.

Discussions about commitment to the project could include input from as many perspectives as possible among those who could either contribute to project success or derail implementation. The earlier challenges and opportunities are identified, the earlier they can be addressed. Assuming there is broad buy-in, consider whether and how to institutionalize the project. Should project outcomes prove to be useful for the district and schools, it could prove wise to have planned early on for sustainability and broader use in the out years.

Communicating to Sustain Buy-In

Another district emphasized the importance of internal district communication to ease and sustain buy-in. District project managers are wise to communicate regularly with stakeholders about project progress and upcoming activities, and to do so well before their help is needed. In fact, this content area supervisor benefits from formal communication structures: a district-wide science steering committee, monthly meetings with principals and department heads, and bimonthly cross-division meetings that include the research and assessment office.

5. **Communication and collaboration: Develop explicit strategies to promote ongoing communication and collaboration among all project partners.** Regular, open communication among the different members of the partner organizations may be critical to the success of an R&D partnership project. Focused communication strategies may afford opportunities for staff from all organizations to discuss the project's progress, monitor changes in the implementation environment, assess strengths and weaknesses, and make mid-course corrections when necessary. Conversely, some communication patterns among partners may strain relationships and implementation. Every project and set of relationships will likely require a unique approach to communication, but one would expect effective communication to involve a measure of trust, time, and purpose. As in every relationship, and perhaps more so here, R&D partners should consider how communication can remedy perceived (and real) imbalances in authority and differences in institutional cultures.

Planning for Sustained Communication

A district researcher found that formal structures for communication can help sustain a focus on project work in the face of other priorities. One recommendation is to hold regular meetings that include discussion of project progress and formative evaluation data. This researcher found it beneficial to include evaluators in meetings, as their feedback on the R&D project can help initiate and frame conversations about implementation and partnerships. Another suggestion is to recognize that a true partnership requires an ongoing investment of time and to plan generous time estimates for partnership meetings and communicating with other district and school participants.

Discussions about communication and collaboration strategies should address the specific purposes for communication, and from there determine the best methods of communication, frequency of meetings or discussions, topics, and people who should be involved. Project leaders may want to develop explicit communication plans or include communication activities in implementation plans. For instance, the team may want to establish a

regular meeting schedule for project leaders and for sub-committees of individuals responsible for implementation components. Having ongoing exchanges among stakeholders allows for regular collaborative reflection and feedback on project implementation. It also may prove worthwhile to think strategically up front about how to sustain collaborative work through turnover and organizational change—two big challenges that any long-term partnership should anticipate.

6. **Project evaluation and progress monitoring: Establish a framework for assessing implementation.** Though some projects may not be required to have one, the authors believe R&D projects can benefit from a third-party evaluation that assesses implementation and progress. It is in the interest of all partners for the evaluation to provide useful and timely information that can help partners monitor their plans, improve implementation, and correct emergent design flaws. Particularly on R&D projects that are collecting outcome data, evaluations can be most useful when they are formative in nature. By working closely with an independent evaluator, project partners can gain an observer's perspective on their work and systematically measure progress on the indicators they believe to be most important. Evaluators can be helpful in collecting feedback from partners on the partnership itself and in serving as an accountability mechanism. Evaluators can also be well positioned to collect data from "user" participants (e.g., teachers, district professional developers, instructional leaders, students) on the usability and relevance of the R&D innovation.

Maximizing Evaluator Contributions

One district leader believes evaluators can provide an independent perspective and accountability function that helps projects improve. The leader has found that evaluators add a great deal of value when they are active partners who contribute to mid-course corrections and help monitor if milestones are being met. Such a role can be a balancing act, since an evaluator who is overly partial toward the research team may not provide the honest feedback that is needed for improvement and objective measurement.

If the project has or will have an independent evaluator, project partners should consider working together to sketch out the evaluator's purposes and to find an evaluator who is able and willing to work with the team as desired. Project partners and the evaluator might work collaboratively to develop an evaluation plan that includes useful indicators of progress, as well as a schedule of briefings and deliverables that will provide partners with information that they can use to make improvements. Furthermore, project partners may want to consider an iterative approach to evaluation design–one in which the partners work with the evaluator periodically to ensure that the design continues to produce practically useful and timely results as the project evolves.

Discussions with a third-party evaluator might address how the evaluation can help the project identify, and even address, unanticipated challenges and consequences of a project. In many cases, evaluation data will be most helpful if the project partners receive them as early or frequently as possible, even if that means that the data are delivered informally or in brief documents. In designing the evaluation, consider which specific evaluation questions will likely lead to the most usable implementation findings, including those than can be analyzed in conjunction with outcome data collected by the project's researchers. It is possible that different project partners will hope to learn different things from the evaluation. Lastly, think about how the evaluation can be designed to inform scaling and sustainability, such as by identifying

which practices and policies should be implemented outside of the project, by whom, and under what conditions.

Contributors to the Development of the Tool

CADRE staff. CADRE staff from Policy Studies Associates led discussions with contributors, drafted this document, and incorporated revisions suggested by contributors.

- Derek Riley, Senior Research Associate, Policy Studies Associates
- Jeanine Hildreth, Managing Director, Policy Studies Associates
- Andrea Palmiter, Research Associate, Policy Studies Associates

School district staff. District practitioners provided content for this document based on their experiences in R&D project partnerships and provided feedback on iterative drafts.

- Patricia Baltzley, Director of Mathematics PreK-12, Baltimore County Public Schools
- Deborah Bliss, Mathematics Supervisor, Loudoun County Public Schools (VA)
- Katya Denisova, Science Content Liaison, Baltimore City Public Schools
- Chris Holle, Elementary Science Specialist (retired), Los Angeles Unified School District
- Kimberle Kelly, Project Director in the Program Evaluation and Research Branch (former), Los Angeles Unified School District
- Jodi Lunt, Director of Secondary Science, Davis School District (UT)
- Jeff Maher, Director of Teaching, Learning, and Professional Development, St. Mary's County Public Schools (MD)

National Science Foundation DR K-12 grantees. Leaders on DR K-12 grant projects collaborated to develop a precursory brief on R&D project partnerships and identified the need for a tool to help district and school personnel assess and contribute to effective R&D projects. The following grantees reviewed or advised in the development of this document.

- Gary Benenson, Professor of Mechanical Engineering, City College of New York
- Mary Hobbs, Coordinator for Science Initiatives for the Texas Regional Collaboratives, University of Texas-Austin
- Karen King, Director of Research, National Council of Teachers of Mathematics
- Cathy Kinzer, Mathematics Educator, New Mexico State University
- Karin Wiburg, Associate Dean for Research, College of Education at New Mexico State University