Strategies for Increasing the Utility of Research

Panel Justification

Practitioners and policymakers make little direct use of research findings to drive state, district, school, and classroom decision making (Asen, Gurke, Conners, Solomon, & Gumm, 2013; Burkhardt & Schoenfeld, 2003; Finnigan & Daly, 2014; Fusarelli, 2008; Hess, 2008; Kochanek & Clifford, 2014; Lagemann, 2002). For example, studies of central office administrators found that they most often considered budgetary, political, and administrative issues when framing policy discussions, suggesting that the practicalities of district governance, rather than evidence, set parameters for decision making (Burkhardt & Schoenfeld, 2003; Fusarelli, 2008; Lagemann, 2002). District administrators appear to weigh multiple forms of information simultaneously when making decisions rather than to rely on one or two instrumental student data points or research studies (Corcoran, Fuhrman, & Belcher, 2001; Kennedy, 1982).

Increasingly, education researchers are recognizing the structural division between researchers and practitioners and are looking for new ways to integrate practitioners into the research process as collaborators (Bryk & Gomez, 2008; Bryk, Gomez, & Grunow, 2010a; Burkhardt & Schoenfeld, 2003; Coburn & Stein, 2010; Committee on a Strategic Education Research Partnership, 2003; Hiebert, Gallimore, & Stigler, 2002). Proponents of emerging models of collaborative research argue that involving practitioners in the research process bridges the divide between research and practice, builds capacity to incorporate systematic inquiry into regular decision-making processes within practitioner communities, and informs the research process itself by bringing together experts from diverse perspectives to engage in problem-solving work so that research and practice become part of an interactive cycle supporting improvement (Bryk & Gomez, 2008; Bryk et al, 2010a; Bryk, Sebring, Allensworth, Luppescu, & Easton, 2010b; Coburn & Stein, 2010; Roderick, Easton, & Sebring, 2009).

In 2012, the Institute of Education Sciences shifted the scope of the Regional Educational Laboratory (REL) program to focus on the development of research alliances to inform the development of research projects and support services. The five year contracts supported 10 laboratories forming and/or joining research alliances as a context for rigorous analytic work has resulted in 79 research alliances across the country. The scope of work for these alliances was intended to build state and local education agency capacity to use data and conduct research, develop a cohesive body of knowledge in core priority areas identified in each region, and increase the use of data and research in education decision making. Program outcomes also included the development of strong relationships among those in research, policy, and practice and the completion of a range of rigorous studies that employ the appropriate research design for the research questions.

Through this panel session, representatives from four RELs will address one of the key questions posed by SREE this year: *How does the process through which research occurs impact its utility?* This panel will use a timed ignite presentation format to introduce the REL program and demonstrate how to apply strategies in four key stages of the research process to impact its utility: 1) setting the research agenda; 2) working with stakeholder advisory groups; 3) making sense of the research findings; and 4) driving knowledge utilization. The RELs will define these key stages, describe how they impact research utility, and highlight tools and resources they have developed to support the collaborative research process. The RELs also will highlight how the collaborative work has informed policy and practice decisions across the country.

Following the 30 minute panel presentation, the moderator will pose several questions for the panel and invite the participants to ask any clarifying questions about the presentations. Finally, panel members will join the session's participants to have interactive small group discussions (see pages 7-8). The conversations from each table will be summarized at the end of the session. The primary audience for this session are new scholars and those who are seeking experiences, insights, and tools for supporting research-practice partnerships.

Background/Context

Given the persistent lack of direct use of research findings, a field of investigation has emerged to explore decision making in education policy and practice and the influences related to the use of research in decision making. This field is often referred to as the study of knowledge utilization. Studies of knowledge utilization typically rely on the Weiss (1980) and Weiss, Murphy-Graham, and Birkeland (2005) categories of use of evidence: instrumental, conceptual, symbolic, and sanctioning. Instrumental use of evidence involves the direct application to policy and practice that is often anticipated by traditional research dissemination mechanisms but is infrequently seen. Conceptual use of research refers to when research provides users with a new perspective on existing understandings of problems and processes in educational policy or practice. Research is used symbolically when it is cited to legitimize preexisting conditions or decisions. Finally, as funding requirements for programming are increasingly linked to research-based interventions, we see the sanctioning use of research in which an external organization or authority defines the list of research-based practices and promotes their adoption in policy and practice.

With the knowledge utilization framework in mind, this panel will address this question - *How does the process through which research occurs impact its utility?* Specifically, the panelist will describe strategies designed to promote conceptual and instrumental uses of research throughout the four stages of the research process. Before describing the ways in which the research process can promote knowledge utilization, REL Midwest will provide background on the Regional Educational Laboratory Program's scope of work and intended outcomes. Specifically, REL Midwest will describe the program's intent to form collaborative research partnerships that build state and local education agency capacity to use data and conduct research, develop a cohesive body of knowledge in core priority areas identified in each region, and increase the use of data and research in education decision making.

Stage 1: Setting the Research Agenda, REL Northeast & Islands

REL Northeast and Islands (REL-NEI) will begin by describing how research alliances' first stage of the research process – setting the research agenda – is designed to build instrumental and conceptual use of research. REL-NEI will begin by describing the agenda-setting workshop they have developed (Kochanek, Lacireno-Paquet, & Carey, 2014). They will conclude with evidence of how the agenda-setting process laid the necessary groundwork for their partners' knowledge utilization.

The purposes of the agenda setting workshop are to further identify research alliance members' priorities and winnow those priorities into a set of research questions that lend themselves to an important, coherent research agenda. The agenda-setting workshops are led by a trained REL staff member, and the workshop participants are alliance members. Each workshop is typically divided into two sessions.

During the first session, REL staff members provide an overview of types of research and how methods relate to research questions. The researchers then walk through the characteristics of and process for developing a researchable question and aligning questions with study designs. The practitioner partners are then asked to begin to generate research topics they think the alliance should address. This portion of the workshop is where the partners begin to unpack the overarching priority area that brought them together (e.g., early childhood, college and career readiness), which builds capacity on both sides of the partnership. As the alliance generates topics for consideration, the researchers and practitioners have an opportunity to gain a more intimate understanding of all of the practitioners' needs and the challenges within their contexts. Throughout the discussion, the research topics are captured and made available for all to see and reflect upon.

Researchers often determine research needs by identifying gaps in the literature. Alliance members must act within a more structured context, sometimes making policy and practice decisions on topics not yet investigated through the research. For example, the initial focus of the Northeast College and Career Readiness Research Alliance was broadly focused on college and career readiness. During the research agenda setting process, the topic of competency-based graduation requirements was identified as the major priority area of interest for the practitioner members of this alliance. Discussions about pressing decisions in practice helped the research team better understand priority topics for the alliance and how to design projects to support alliance member decision making.

Using that initial list of topics as a springboard, REL staff members invite alliance members to ask clarifying questions about the topics, choose one to three topics that could drive a research agenda, and then vote on which topic(s) to prioritize. This short list of topics is the outcome of the workshop's first session.

Often, the topics from the first session still remain far too broad and require a similar discussion and voting process to narrow the list of subtopics and research questions under each topic. Each iteration of the conversation offers researchers and alliance members the opportunity to ask clarifying questions and to check whether the rephrasing of a given question still captures the practitioner partners' intent. These exchanges build the researchers' capacity to become more adept in their appreciation of the partners' needs and the specific questions they want to answer. After multiple conversations and note taking, the researchers and practitioner partners have a visual that shows them how they have narrowed their focus from a research priority to a list of specific research questions. With this list, the REL staff and practitioner partners work to finalize the research agenda.

To create a finite list of research questions that will define the alliance's research agenda, the REL staff members facilitate a discussion with the alliance members to come to a consensus on the answers to questions that include the following:

- How many of the top-rated questions should the research agenda comprise?
- Do these questions inspire a coherent set of work?
- What might be the types of studies (descriptive, correlational, and impact evaluations)?
- What is the right (or a possible) sequence?
- What are the anticipated research products (e.g., workshops, tools, work processes) that will enable stakeholders to use the knowledge produced by the research?
- What is the timing of the work?
- Is there data available to answer the research questions?
- Who should be involved in the project(s)?

This refinement process continues to happen on at least an annual basis to ensure that the partnership is deriving useful information from the collaborative research efforts and conducting the right projects to build upon the new knowledge, tools, and resources generated by their work.

Practitioners have reflected that the research agenda setting process allows for conversations about how research and related projects on the agenda will be used. Sometimes such work results in a specific policy change, sometimes it has resulted in changes in practice at the state, district or school level, and other times has led to additional research. For example, in our Northeast Educator Effectiveness Research Alliance, we conducted an implementation study of teacher evaluation in one state that, in part, led to the study of how professional development offerings are aligned to teacher evaluation.

Stage 2: Working with Stakeholder Advisory Groups, REL Midwest

Once a research alliance has prioritized its research questions, REL Midwest recruits a stakeholder advisory group (SAG) for each project. A SAG is a subgroup of two to three alliance members or designees from their organizations who meet regularly with a project team to ensure that the resulting products and services from the project are relevant and useful for the intended stakeholders. SAG members are active partners with REL Midwest researchers on the project team, and SAG feedback is critical to the project's success.

SAG members are recruited to fit the design of the project with attention to including individuals who can inform the project, who might learn from and replicate the project, and who might make use of the end product. For example, if the project involves a study using data from a district, it is helpful to include someone in the SAG who knows the data elements and can speak about data quality. If another district is interested in replicating the study, it is helpful to recruit a member from that district's organization to learn from the project team discussions about questions and challenges encountered along the way. If the study will likely have findings that inform district policy, it is helpful to include someone who can discuss the format for the end product and related services (such as tools, trainings, or debriefings) that might help the district make use of the findings. Similarly, if the project involves an event, it is helpful to include a SAG member who can help bring the audience to the event.

Typically, the SAG meets every four to six weeks during the life of a given project to discuss decisions made by the REL Midwest project team that shape the project. The topics will vary depending on the stage and type of the project. At the beginning of a project, a concept paper can be used as a project road map in which each section can be reviewed and discussed. When discussing a research project, for example, the discussions with the SAG may focus on confirming the research questions, framing the problem, determining the sampling strategy, identifying the data sources, and reviewing protocols and methods. SAG members will have varying levels of expertise to discuss and weigh in on these topics. However, even on the topic of methods, for which the REL Midwest project team may want to claim greater expertise, we take care to solicit and listen for feedback from SAG members. It is often during conversations about the reasons for choosing a method from the project team and reservations about the use of a method by the stakeholders that each side learns about and better understands the contexts of research and practice. When a project team attempts to find solutions to stakeholder concerns while maintaining the integrity of the project, stakeholders are more likely to find the project relevant and useful.

Stage 3: Making Sense of the Research Findings, REL West

As REL staff help to build the capacity of local and state educators to examine extant data in new ways for new purposes, or to support partners collecting new data to address priority challenges, these research efforts generate new information. How these research findings are communicated, to whom, and for what purposes clearly impacts the way information is used to guide and inform alliance work.

Making sense of research findings is key for several reasons. In general, it can shed light on new insights and raise questions about effects. More specifically, in the context of REL alliances, it can also create opportunities for partners (a) to determine which findings are most relevant for ongoing alliance work; (b) to share diverse perspectives to jointly address key problems; (c) to own the results, and (d) to use evidence to develop workshops, tools, work processes, or policies in order to make improvements.

For example, REL West has worked with partners in the Clark County Professional Learning Partnership to use local research-based information to build and carry out a coherent set of activities to help staff to meet one of Clark County School District (CCSD)'s core goals: *to increase the high school graduation rate within the context of a recently decentralized, site-based management system.* As a first step in a larger research agenda, CCSD and REL West collaborated to conduct a research study using local student-level data, and predictive analytics, which identified middle grade students in CCSD at risk of not graduating on time. The results showed that a set of four eighth grade academic performance factors identified approximately three-quarters of the students who fell off track in ninth grade, which is the first year of high school. In addition, students' self-reports of growth mindset and academic behavior at the end of eighth grade were strong predictors of on-track status at the end of ninth grade.

After first reviewing the research findings with a team of CCSD researchers, the findings were presented to district decision makers, including the superintendent and his leadership team. The group decided that the findings, as well as a strategy for helping staff to use the indicator data, should be targeted and gradually rolled out to every level of the system, from central office staff to site administrators. The ultimate objective of the effort was to tailor the dissemination of these predictive data, as well as the research findings that validate their use in this way, so that the research and indicators can be better understood by the school staff who are responsible for identifying and supporting students who are at risk of falling off track for graduation.

Based upon the study results, the partnership decided that it should initially work with school-level users such as counselors and principals to help them understand what the data mean, and to collaborate with them to design an easily accessible data dashboard that produces useful real-time data displays. Towards this end, REL West and the CCSD researchers are co-developing a set of "pilot" indicator data to send to high school and middle school principals and counselors in the fall of 2017, which will be disseminated though an interactive data dashboard. In preparation for the pilot phase, REL West staff presented to the district principals the aforementioned background research. The partners also presented examples of data reports to a smaller set of school principals to obtain feedback on the dashboard's design and usability. Similarly, the partners are bringing together a small group of school counselors to gather feedback on the utility and format of the data displays approach and to better understand their data needs, which will overlap but also diverge from that of principals. It is anticipated that once the pilot phase of the data dashboard is launched, partners will collect usage statistics that are district wide, and also collect user information from a small number of school principals and school counselors who be interviewed several times during the year.

Stage 4: Driving Knowledge Utilization, REL Southeast

With the key findings and ideal audiences identified, REL Southeast works to increase key education stakeholder groups' capacity to interpret and use research through the development of infographics, videos, and briefs that highlight findings in clear and concise language. In addition, REL Southeast uses convenings, workshops, debriefings, and events as platforms on which to jointly practice the interpretation of research and to model the group interpretation process. REL Southeast also surrounds published reports with tools, trainings, debriefings, and communication collateral to support alliance members' efforts to move findings into practice.

An example of the way the REL Southeast drives knowledge utilization is the development and use of the infographic "Implementing Evidence-Based Literacy Practices." The infographic contains embedded links to IES and REL Southeast resources organized into eight sections to help state education agencies (SEAs) and local education agencies (LEAs) implement evidence-based literacy practices in their classrooms. An introductory video introduces the eight sections: Understanding evidence-based practices; forming an implementation team; creating a logic model for implementing & evaluating evidence-based literacy practices; self-study of readiness for implementing literacy interventions; selecting evidence-based instructional materials and strategies; resources for selecting literacy assessments; implementing evidence-based practices; and evaluating implementation of evidence-based literacy practices on an ongoing basis. REL Southeast has shared this infographic with SEA staff and in presentations at practitioner conferences throughout the Southeast and with federally-funded and state-funded technical assistance centers. Practitioners appreciate not only the bundling of these resources into one infographic but they also appreciate the organizational framework that is relevant to their school improvement efforts under the Every Student Succeeds Act (ESSA).

Finally, this infographic represents the cycle of knowledge utilization integral to research success. For example, the report on the randomized controlled trial on early literacy interventions led to a request from a participating school district to develop a self-study guide on how to implement early literacy intervention, which led to the development of a professional learning communities (PLC) set of guides and videos based on the foundational reading skills practice guide, which, in turn, led to the development of an online course by a university in which the SEAs in several states in the Southeast are encouraging enrollment for their primary-grade teachers.

Interactive Segment of the Session

Following this 30 minute panel presentation, the moderator will pose several questions for the panel and invite the participants to ask any clarifying questions about the presentations.

Panel members then will join the session's participants in small groups to have an interactive discussion about the following prompts: Have you ever partnered with a district or state to conduct research? How does the collaborative research process described align with/contradict your professional training?; If you are engaged in a research-practice partnerships, what processes or tools have you used to increase the utility of the research you're doing?; What tools do you think need to be developed to increase the utility of research? The feedback from each table will be captured on chart paper. During the final 15 minutes of the session, the moderator will invite each table to report out on their discussion, making connections to the panel's presentation as appropriate. The moderator will invite the participants to share their key takeaways from the session.

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