RELEVANCE & RIGOR:

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ANNUAL PRINCIPAL INVESTIGATORS MEETING

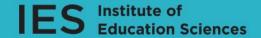
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Using Research at the Classroom,
School, District & State Levels: Results from the
Knowledge Utilization R&D Centers

National Center for Research in Policy and Practice Center for Research Use in Education (R4S)

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Our primary research questions:

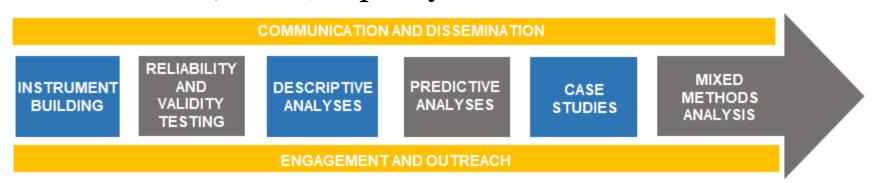
- •How do school and district leaders use research?
- What conditions in districts hinder or support research use?
- How does the design of research-practice partnerships shape research use?

ABOUT R4S



Our approach:

- Assumption that issue is bidirectional, focus is on both research production and research use
- Attention to role of research evidence in school-based decisions, so greater emphasis on instrumental use
- Development of measures that capture a) practices of research use and production, b) gaps in communities that influence use/production, c) networks within and between communities, and d) capacity for use



Overview of session

- What are key educational decisions, and how do they get made?
- How does research get used in these decisions?
- •What are pathways for research use?

Educational decision making

- What range of educational decisions do people at different levels of the system make?
- -How do these decisions get made?



Kinds of decisions: Schools

When asked about organizational decisions:

- Decisions addressed problems that were academic, but also cultural and resource-related, e.g.
 - Meeting student needs through RTI
 - Tardiness
 - Understaffed areas
- Decisions included adoption, implementation, training, and structural
 - Moving to full-day kindergarten
 - Refining interventions delivered in tiered supports
 - Workshops for teachers on new curriculum
 - Adjusting recess to accommodate PLC meetings





When asked about *classroom* decisions:

- Decisions addressed problems that were primarily about academic and behavioral outcomes, with less resource-related issues acted on, e.g.
 - Increasing student engagement
 - Raising test scores
- Decisions more likely adoption and implementation of curriculum and instruction than about training or structural change, e.g.
 - Implementing new technology platform
 - Small group instruction
 - Using data for progress monitoring



Kinds of decisions: State leaders

State curriculum supervisors in science say they are involved in decisions about:

- Reviewing or developing state science standards (in lead or support role)
- Advising state on course content and/or graduation policies
- Designing state assessments
- Designing and leading professional development
- Identifying resources to share with districts



How decisions get made

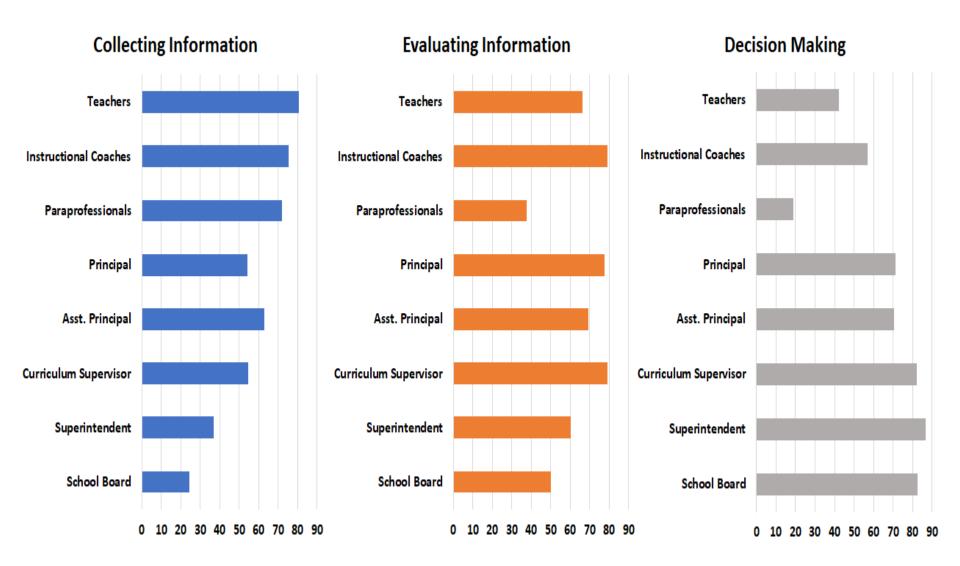
Decision making is not a single event: decisions "accrete" (Weiss, 1980).

By "accrete," we mean that decision making:

- Is an interactive process;
- Involves multiple people in multiple roles; and
- Is stretched across many divisions and layers in any large district.







Audience Discussion #1

Think about your own mental model of how decisions get made in schools, districts, and states:

How does it compare with the evidence we have presented?

Role of research in decision making

- How often is research used for instrumental, conceptual, and symbolic (political) purposes?
- -How often is research use imposed?
- How influential is research relative to other forms of evidence?



Uses of research: Instrumental

Table 4. Frequency of Instrumental Uses of Research

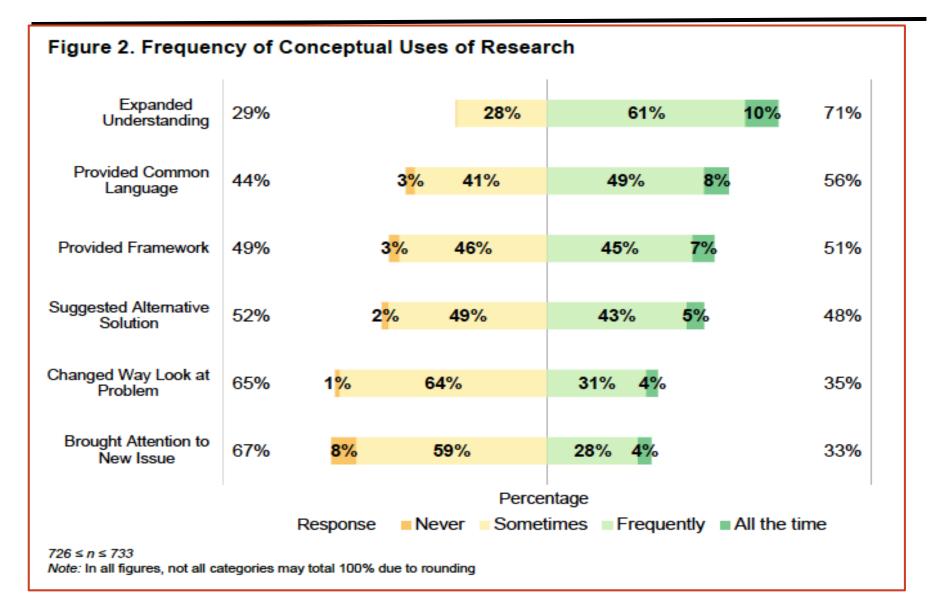
| | Never | Sometimes | Frequently | All the time | Did Not Engage in Activity* |
|--|-------|-----------|------------|--------------|-----------------------------------|
| Purchased an intervention or program | 1% | 7% | 24% | 31% | 37% |
| Designed professional development for teachers | 1% | 13% | 36% | 29% | 20% |
| Designed professional development for administrators | 2% | 15% | 32% | 26% | 25% |
| Conducted major adoption of a curriculum | 2% | 9% | 23% | 25% | 42% |
| Considered scaling up a program | 2% | 10% | 24% | 23% | 42% |
| Redesigned a program | 1% | 13% | 22% | 23% | 40% |
| Directed resources to a program | 2% | 17% | 31% | 23% | 28% |
| Considered eliminating a program | 2% | 16% | 23% | 20% | 39% |

n = 733

^{*}Includes respondents who indicated this activity did not take place or that they were not involved in the activity



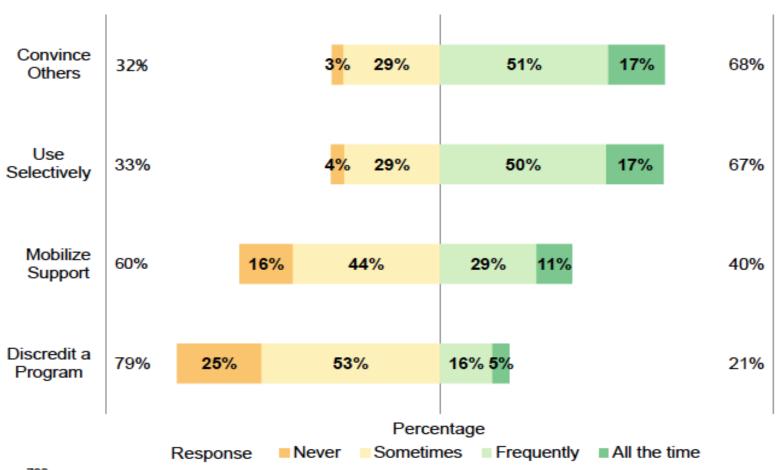
Uses of research: Conceptual





Uses of research: Symbolic

Figure 3. Frequency of Symbolic Uses of Research





Uses of research: Imposed

Imposed use was most common for decisions regarding curriculum adoption, for which leaders were required to choose from among research-based programs.

 About 60% of respondents reported using research frequently or all of the time for this purpose.

Uses of research: When and How



Whether research is used instrumentally, conceptually, tactically, or is imposed, it can inform different phases of a decision process:

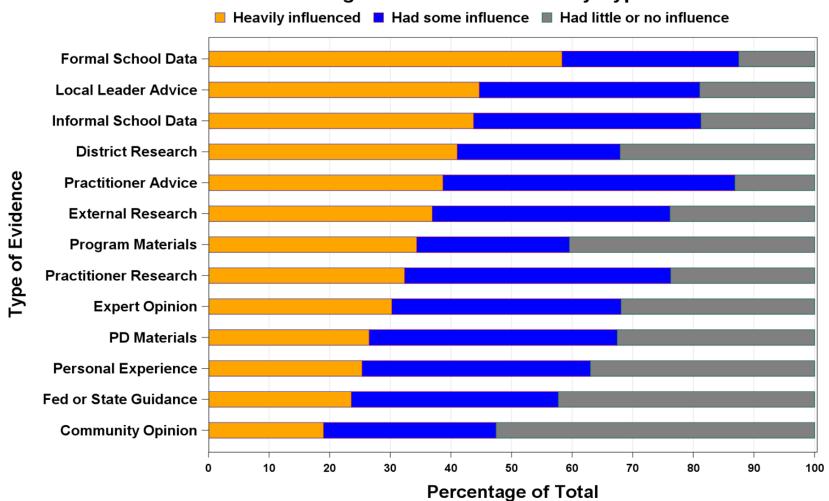
- Identifying or diagnosing problems
- Identifying or selecting solutions
- Implementing solutions
- Revising or improving solution

Different types of research are valued at different points, and research is more often used at some points than others.

Research vs. other forms of evidence



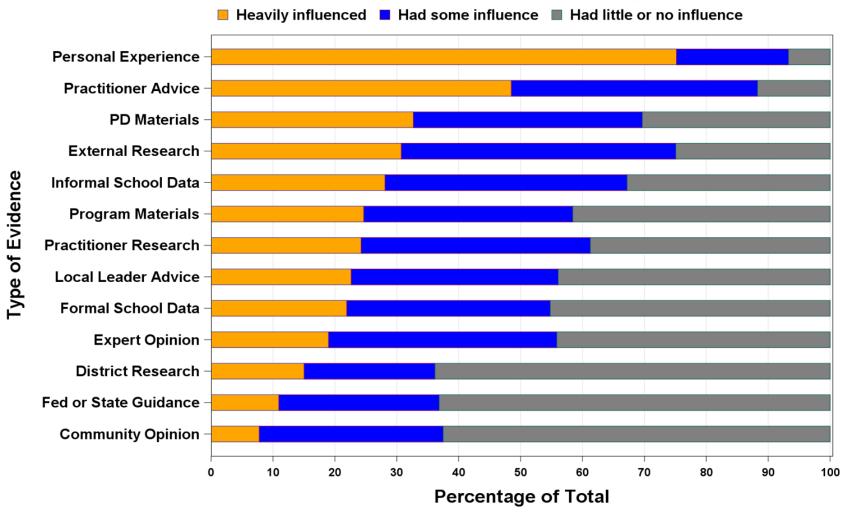
Influence on School-Wide Organizational Decisions by Type of Evidence



Research vs. other forms of evidence







Audience Discussion #2

How does the nature of research use and the role of other forms of evidence shape the kinds of research we need to do?

What opportunities does this data present for us?



Pathways for research use

- •How do education leaders access research?
- -How do leaders rely on researchers?
- •What forms of research end up being useful?
- How do organizational routines support or hinder research use?



How leaders access research

Leaders access research primarily through their own professional contacts.

TABLE 5
Sources Used to Access Research (in Percentages)

| Scale: Source of research | Never | Rarely | Sometimes | Often | All the time | Missing |
|--|-------|--------|-----------|-------|--------------|---------|
| Formal sources | | | | | | |
| What Works Clearinghouse | 36 | 20 | 24 | 13 | 4 | 3 |
| University researchers | 12 | 33 | 36 | 13 | 2 | 3 |
| National Center for Education Statistics | 28 | 27 | 29 | 11 | 2 | 3 |
| Regional Education Laboratories | 27 | 31 | 27 | 11 | 1 | 4 |
| Professional networks | | | | | | |
| Professional associations | 2 | 5 | 36 | 40 | 13 | 3 |
| Conferences | 4 | 10 | 43 | 35 | 5 | 3 |
| State department of education | 10 | 16 | 38 | 26 | 7 | 3 |
| People in other districts | 5 | 15 | 38 | 29 | 10 | 3 |
| County office of education | 28 | 28 | 24 | 14 | 3 | 4 |
| Translators of research | | | | | | |
| Newspaper or magazine | 16 | 24 | 39 | 14 | 3 | 3 |
| Social media | 38 | 25 | 21 | 9 | 3 | 3 |
| Vendors | 25 | 35 | 30 | 6 | 3 | 1 |
| Wikipedia | 61 | 25 | 9 | 2 | 0 | 4 |



How practitioners access research





How leaders rely on researchers

Leaders involved in RPPs turn to their partners for advice for design, resource, and scale up decisions.

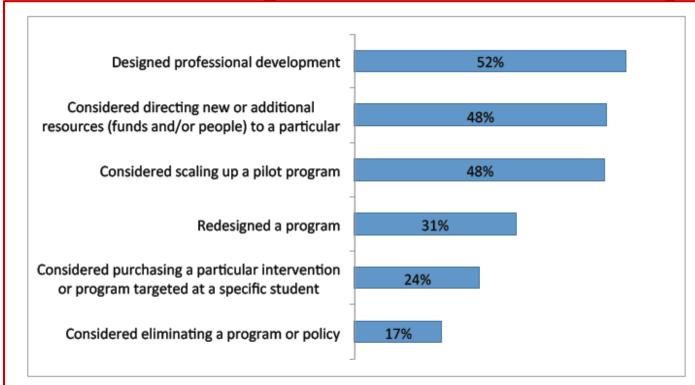


Figure 2. Involvement in organizational activities by RPP research partners, as reported by at least one practitioner. 28>n>23 partnerships.

Practitioner/researcher interactions



When asked about their connections with researchers over the past two years, practitioners noted the infrequency of interaction:

- Few practitioners indicated that a researcher had contacted them to ask for input on a study (%5, N=450)
- Similarly few responded that a researcher had contacted them to inquire about problems or challenges they were facing at their school (2%, N=449)



Forms of research leaders use

Leaders turned to books most frequently and least frequently to peer reviewed journal articles.

| | Book | Research/Policy Report | Peer-reviewed Journal Article | All Other |
|--|------|---------------------------|----------------------------------|-----------|
| Deputy/Associate/ Network Superintendents | 64% | 12% | 12% | 12% |
| Curriculum & Instruction | 59% | 12% | 11% | 18% |
| Special Education | 57% | 17% | 15% | 11% |
| Assessment | 42% | 26% | 19% | 14% |
| Principals | 73% | 6% | 10% | 11% |
| Federal Programs | 35% | 30% | 17% | 17% |
| Multi-Role | 63% | 19% | 13% | 4% |
| All Respondents | 58% | 17% | 14% | 12% |



Forms of research leaders use

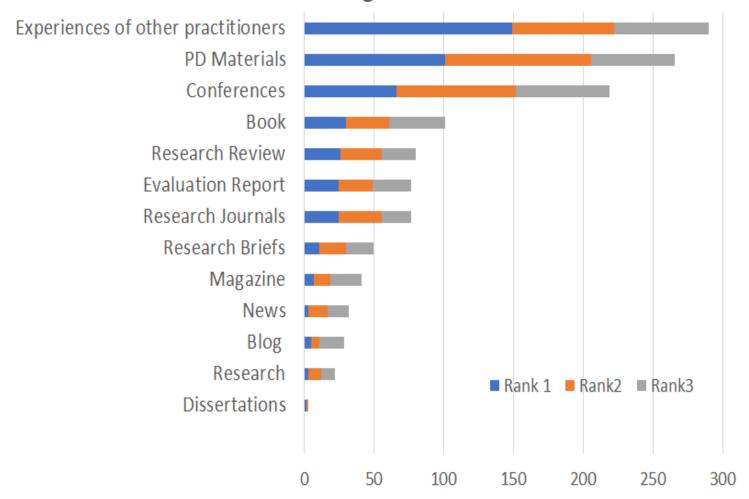
Education leaders in research-practice partnerships appear to come from a different population of users of research.

- Overall, RPP practitioners most frequently named journal articles (46%) as useful whereas national survey respondents most often named books (58%).
- In a professional association of state science leaders with a strong RPP, research reports or policy briefs made up 35% of named pieces, while peer-reviewed journal articles made up 27%.





School-Based Practitioners' Rankings of Research Format Relied on Most





Organizational routines at schools

When asked about school structures that support research use, respondents noted the importance of routines over other supports:

- PLCs, instructional leadership teams, and instructional coaching as most frequent supports (n=250-300)
- Other types of supports, like PD for research use and staff or consultants with research use expertise were reported less than half as often (n=60-100).
- RPPs and district research offices were least likely to be reported as available supports (n=<25)

Organizational routines in district central offices



- Designing professional development, curricular materials, assessments
- School instructional walk-throughs
- Observation, coaching, evaluation cycles

Audience Discussion #3

What relationships do you have with educators at different levels of the system?

How, if at all, do these relationships shape your research?

What strategies do you use to engage educators with ideas or findings from your research?

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