## Research Worth Using

<table>
<thead>
<tr>
<th>Relevance of Question</th>
<th>Relevance of Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Theoretical</strong></td>
<td>Alignment of research topic to practical priorities</td>
</tr>
<tr>
<td><strong>Methodological</strong></td>
<td>Explanatory strength and coherence of principles investigated</td>
</tr>
<tr>
<td><strong>Credibility</strong></td>
<td>Internal and external credibility of study design and execution</td>
</tr>
<tr>
<td><strong>Evidentiary</strong></td>
<td>Robustness and consistency of cumulative evidence</td>
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<td></td>
<td>Justification for practical application</td>
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</tbody>
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Explore Multiple Sources & Forms of Evidence

Evidence of implementation (artifacts, observations, interviews about strategies and practices)

Evidence of impact (school / staff / student outcomes)

Evidence from research
www.sfusd.edu/research
incl. IES practice guides

Evidence from interest holders
(surveys, interviews, focus groups of students, staff, families)

...to describe current & desired states and determine how to bridge them.
Different Evidence Types for Different Purposes

**Vision**
- Hold high expectations
- Ideal strategies, practices, & outcomes
- Community values, policy objectives, external research

**Reality**
- Build on strengths
- Actual strategies, practices, & outcomes
- Internal research & evaluation

**Path**
- Convey growth mindset
- How are we getting there?
- Continuous improvement & evaluation

**ACCELERATE**

**NORMATIVE:**
- What works?

**PRESCRIPTIVE:**
- How do we make it work (better)?

**DESCRIPTIVE:**
- What’s working?

Similar to decision-making framework from:
Impact Chain: System ⇒ Educators ⇒ Students

District Strategies

School Practices

Knowledge, skills, & dispositions

Practice

Student Impact

Access

Attitudes

Actions

Achievement

IMPLEMENTATION STRATEGY
Deliver experience (product or service)

INTERVENTION

Evidence of Impact: Improvements in Student Outcomes

At Muir Elementary:
- high concentrations of historically underserved students
- sustained improvement in math proficiency rates on state assessment (SBAC)
  - over time
  - relative to SFUSD
  - overall and for major focal populations
- narrowed equity gaps

Source: CDE research file (‘14–’22); RPA tables (‘22–’23). Date: 9/27/2023. Definitions: Percentage of students meeting or exceeding standards on Smarter Balanced Assessment (math). AA = African-American; HL = Hispanic/Latinx; EL = English Learner; SED = socioeconomically disadvantaged.

For fuller description, see:

San Francisco Unified School District

Lesson Study as Research Engagement


Image from https://lessonresearch.net

SAN FRANCISCO UNIFIED SCHOOL DISTRICT

Features

- Teachers are the researchers, generating their own questions for investigation through presenting and discussing public research lessons with colleagues.
- Outside experts provide commentary and calibrate observations with existing research literature, but do not conduct new research.

Some key conditions?

- Shared instructional vision & research theme
- Opportunities to observe and discuss together
- Collegial, trusting culture
Network connectivity:
- Muir shows a densely connected, centralized network with multiple centers, where most individuals can reach others in a few steps.
- Other schools show increased connectivity over past year.

Overall network patterns by roles:
- Coaches are brokers within and between sites.
- Site leaders are brokers between sites across the network.
- Teacher leaders are brokers within sites.
- Interventionists are brokers within one site (School B).

Summary of Findings

Social Network: Whom do you ask for support on math instruction or Lesson Study?
What kinds of systems do we need to build?

1. Social infrastructure
   a. Collegial, trusting culture of using evidence for improvement
   b. Networks for learning together and sharing knowledge
   c. Regular routines for using evidence to guide decision-making

2. Data infrastructure
   a. Implementation data infrastructure
   b. Build robust data infrastructures internally to maximize use by agency

3. Knowledge management infrastructure
   a. Systems for documenting and organizing knowledge
   b. Norms and routines for maintaining knowledge systems

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Building agency capacity for evidence use

Recommendations: For funders and governing bodies

- Create **stable**, reliable funding sources to **sustain** the work of agency research staff.
- Structure accountability expectations to support stronger, more **versatile** internal systems for reporting and improvement.
- Beware of tradeoffs which may “cannibalize” internal research.
- Require **sustainability** plans that maintain internal capacity.
- Recognize invisible costs of external partnership.
- Invest in **robust internal systems**.

**Key themes:**
- Stability
- Sustainability
- Versatility
- Internal responsiveness

Caveats: “Dark side of co-production” on the P-side*

Risks that participatory engagement may be experienced as:
- Costly, inauthentic, extractive
- Pathologizing, oppressive, duplicitous

Asymmetries in expectations & experiences:
- Contributions
- Costs
- Benefits
- Power dynamics

* Ming, N., & Dickson, S. Untitled manuscript in preparation.
Build systems and cultures for integrated evidence generation and use within education agencies. That’s where they can have the greatest impact.