## Opportunities for education research

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# Some context on where I'm coming from

- Trained as a statistician
- Worked at Mathematica for 2 years post-PhD; at Hopkins in the School of Public Health for 15 years
- Research lies on methods for education, public policy, public health
  - Especially causal inference methods
  - Trade-offs between study designs, e.g., non-experimental studies, randomized trials
- President-Elect of the Society for Research on Educational Effectiveness (SREE), former Methods Editor of the Journal of Research on Educational Effectiveness (JREE)
- Long-time reviewer for IES and NIH



# Assumptions about what we're trying to do

- I assume the goal is to conduct and learn from research in order to improve the educational experiences of children and adults across the US
  - Reduce inequities
  - Identify promising practices
  - Help local areas implement those practices, potentially with adaptations
  - With efficiency and timeliness

IES mission statement: "Our mission is to provide scientific evidence on which to ground education practice and policy and to share this information in formats that are useful and accessible to educators, parents, policymakers, researchers, and the public."



### Methodological needs (1)

- Smarter use of existing administrative and other data
  - [JREE special issue anecdote]
  - The pandemic showed the challenges in relying only on our standard ways of collecting data
  - We need to be creative about how to use existing data, and also careful and thoughtful (and clever) about how to manage its limitations
- Studies that can help inform local decisions
  - Balance rigor of RCT with other (local) data?
  - Need for consistent measures across data sources
  - Need for concern about limited generalizability of "national" evaluations



## Who participates in "national" evaluations?

	% in US population of districts	% in samples of districts in rigorous national evaluations
Large, urban, low performing	2	25
Suburban, large, low performing	4	12
Town, large, low performing	1	2
Rural, small, high performing	26	1

Note: This may be the distribution we want (!!) but we need to be up front about it.

Source: Stuart, E.A., Bell, S.H., Ebnesajjad, C., Olsen, R.B., and Orr, L.L. (2017). Characteristics of school districts that participate in rigorous national educational evaluations. *Journal of Research on Educational Effectiveness* 

#### Methodological needs (2)

- Implementation science
  - Increasingly important in public health; still in infancy in education research (outside of prevention area)
- Broad set of methods, including to be able to study structural or system-side changes



# Research infrastructure notes

- IES grant goal structure thoughtful
- Strong support for methodological work, interest in helping train researchers in methods
- Need for more investment in training, especially pre- and postdoctoral programs

#### Cons:

- Needs to be more timely: 1 grant cycle/year not enough
- Grant proposals should be shorter
- Stress need for interdisciplinary teams
- Need to also make space for innovative proposals that don't neatly fit into one of the existing goals

