Title: Tools for Designing, Implementing, and Interpreting Randomized Controlled Trials in Postsecondary Education

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Session Description

Over the last 20 years, there has been an increase in the number of higher education RCTs, with over 130 RCTs meeting What Works Clearinghouse (WWC) standards without reservations. There are also pockets of researchers following best practices in open science (as recommended by IES) and conducting syntheses to draw lessons across bodies of evidence. Yet challenges remain. Many higher education RCTs are underpowered and inconsistencies in outcome reporting make it difficult to draw conclusions across studies. Moreover, the tools, materials, and code needed to implement high-quality RCTs are often reinvented by researchers and research organizations, missing opportunities to improve the quality and efficiency of implementing higher education RCTs.

This workshop introduces participants to a set of **freely available tools and resources** developed by MDRC and collaborators through The Higher Education Randomized Controlled Trial (THE-RCT) Network (See Screenshot 1 for the list of collaborators who helped create or curate these resources). These resources are designed to support more **rigorous, efficient, transparent, and comparable** postsecondary RCTs and to reduce unnecessary reinvention across studies. The workshop will provide a structured overview of how these tools can be used in practice, with concrete examples drawn from real postsecondary evaluations.

The session will be organized around three phases of an RCT: **(1) planning and design**, **(2) implementation and analysis**, and **(3) interpretation and use of results** (see Screenshot 2 for a list of specific topics covered). For each phase, workshop instructors will (a) describe common challenges researchers face, (b) demonstrate relevant THE-RCT tools (e.g., a minimum detectable effect calculator, guidance on recruitment for generalizability, R code for processing administrative data, and empirical benchmarks for interpreting impacts), and (c) facilitate guided discussion about how these tools can be adapted across institutional contexts and research questions.

The workshop will be interactive. Participants will be encouraged to reflect on their own current, planned, or hypothetical studies, identify decision points where greater efficiency, standardization or transparency could improve credibility and usefulness, and discuss tradeoffs that arise when conducting RCTs under real-world constraints. The goal is to equip researchers and funders with resources that improve rigor, efficiency, transparency, and comparability across postsecondary RCTs.

Topic Significance and Support of Conference Theme

The 2026 SREE conference theme—**Education and Public Trust: Evidence and Accountability in a Changing Landscape**—highlights growing concerns about the credibility, interpretability, and cumulative value of education research. Even well-designed RCTs can fail to build public trust when studies are underpowered, outcomes are inconsistently defined, analytic choices are opaque, or results are difficult to situate within a broader evidence base.

This workshop directly addresses these concerns by focusing on tools that strengthen the *infrastructure* of causal research rather than any single finding. The THE-RCT resources promote transparent planning, encourage upfront consideration of statistical power and generalizability, support consistent outcome construction to enable cross-study pooling and comparison, and provide empirical benchmarks that help stakeholders interpret estimated effects in context. Together, these features enhance both internal rigor and external credibility—key ingredients for strengthening trust in education research.

In addition, the workshop speaks to accountability within the research enterprise itself. By reducing idiosyncratic practices and encouraging shared standards, these tools help align individual research projects with broader norms of open science, reproducibility, and cumulative learning. The session will explicitly engage participants in discussion about how improved research infrastructure can support more responsible evidence generation and clearer communication with policymakers, practitioners, and the public.

Target Audience

The workshop is intended for a broad audience within the SREE community, including:

- Researchers planning or conducting randomized controlled trials in postsecondary or adult education settings
- Early-career scholars and graduate students seeking practical guidance on designing and analyzing RCTs
- Applied researchers working in partnership with colleges, universities, or state systems
- Funders and research managers interested in improving the efficiency, transparency, and comparability of evaluations

The content will assume familiarity with basic causal inference concepts but will not require advanced statistical training. Participants working outside postsecondary education are also welcome; many of the tools and principles discussed (e.g., power planning, outcome standardization, and interpreting effect sizes) are relevant across education sectors.

Screenshot 1 – [The Higher Education Randomized Controlled Trials Network]

THE-RCT Network

THE-RCT Network is a group of leading national experts in postsecondary research and policy. Network members help create, curate, and vet THE-RCT tools and materials; support the formation of field-wide norms for rigorous postsecondary research; and promote the use and dissemination of these resources.

Christopher Avery
Professor, Harvard University

Andrew Bacher-Hicks
VP of Evidence and Evaluation, Arnold Ventures

Eric Bettinger
Professor, Stanford University

Tom Brock
Director, Community College Research Center

Benjamin Castleman
Associate Professor, University of Virginia

Colin Chellman
Senior University Dean, City University of New York

Lindsay Daugherty
Senior Researcher; Professor, RAND

Susan Dynarski
Professor, Harvard University

Marybeth Gasman
Professor, Rutgers University

Sara Goldrick-Rab

Sean Grant
Associate Professor, University of Oregon

Kelly Hallberg
Senior Associate, University of Chicago

Bridget Long
Professor, Harvard University

Bethany Miller
Director of Learning & Impact, Ascendium Education Philanthropy

Trey Miller
Associate Professor, University of Texas at Dallas

Ruth Neild
Senior Fellow, Mathematica Policy Research

Lindsay Page
Associate Professor, Brown University

Joshua Polanin

Bruce Sacerdote
Professor, Dartmouth University

Judith Scott-Clayton
Professor, Columbia University

Lashawn Richburg-Hayes

Lesley Turner
Associate Professor, University of Chicago

Screenshot 2 – Topics Covered

Resources for Conducting Randomized Controlled Trials (RCTs) in Postsecondary Education

The Higher Education Randomized Controlled Trial (THE-RCT) Network equips researchers with resources to conduct high-quality, efficient postsecondary RCTs that follow best open science practices and support cross-study analyses.

PHASE 1

Planning

- **Forecasting the Size of the Evaluation Sample**
- Informed Consent Process *(coming soon)*
- **Preanalysis Plan**
- **Minimum Detectable Effects / Power Calculations**
- Data-Sharing Agreement *(coming soon)*
- Core Baseline Set *(coming soon)*
- **Designing a College Recruitment Plan for Generalizability**
- Communication with the Data-Sharing Organization *(coming soon)*
- **Cost-Feasibility Analysis**

PHASE 2

Implementation and Analyses

- Core Outcome Set *(coming soon)*
- **Code for Processing National Student Clearinghouse Data**
- **Implementation, Fidelity, and Service Contrast**
- **Cost Analysis**
- **Cost-Effectiveness Analysis**
- **Benefit-Cost Analysis**

PHASE 3

Interpreting Results

- **Empirical Benchmarks for Interpreting Effects**
- **Intervention Return on Investment (College Perspective)**
- **Generalizability of Findings in a Completed Evaluation**