

How To Find A Capable Evaluator To Conduct a Rigorous Evaluation Of An Educational Program Or Practice:

A Brief Guide



A Project Sponsored by

June 2007

This publication was produced by the [Coalition for Evidence-Based Policy](#), in partnership with the [What Works Clearinghouse](#) (a joint venture of the [American Institutes for Research](#) and the [Campbell Collaboration](#)). It was produced under a contract with the U.S. Education Department's Institute of Education Sciences (Contract #ED-02-CO-0022). The views expressed herein do not necessarily reflect the views of the Institute of Education Sciences.

This publication is in the public domain. Authorization to reproduce it in whole or in part for educational purposes is granted.

We welcome comments and suggestions on this document (jbaron@excelgov.org).

Purpose and Overview

Purpose: To provide education officials, program providers, and others seeking to sponsor a rigorous program evaluation with practical advice on finding a capable evaluator.

More specifically, this Guide offers practical advice on finding an evaluator to conduct a rigorous evaluation to measure the effect of an educational program on outcomes such as student achievement. (Such evaluations are often called “impact” evaluations.) The Guide’s main focus is on finding an evaluator to conduct a well-designed randomized controlled trial¹, since that is the primary type of evaluation capable of meeting the evidence standards of the What Works Clearinghouse of the U.S. Education Department’s Institute of Education Sciences (IES). However, the Guide also includes endnotes in each section discussing how the principles might be adapted for those seeking to sponsor other high-quality evaluations when a randomized controlled trial is not feasible (e.g., well-matched comparison-group studies or regression-discontinuity studies).

This Guide limits itself to key principles, and does not seek to be an exhaustive list of factors to consider in finding a capable evaluator.

Problem the Guide seeks to address: Many attempts at rigorous evaluation fail to yield credible estimates of a program’s effect because of serious flaws in study design or implementation.

In some cases these flaws mean that a program evaluation, despite a considerable investment of effort and funds, does not produce a valid answer to the basic question of whether the program has a meaningful effect on educational outcomes.

Often, these are flaws that a highly-capable evaluator could have foreseen and prevented. Illustrative examples of common flaws include: (i) using a sample too small to detect meaningful effects of the intervention; (ii) failing to obtain and analyze outcome data for a high proportion of the original sample; and (iii) measuring surrogate outcomes that lack practical and policy importance (e.g., attitudes toward school, rather than attendance and graduation rates).²

To address this problem: We suggest finding an evaluator with two core capabilities:

- (i) **A demonstrated track record in conducting well-designed randomized controlled trials (or another type of high-quality study design if that is what you plan to sponsor); and**
- (ii) **Expertise in the program area being evaluated, or closely-related areas.**

The reason we recommend this approach is that an evaluator’s demonstrated track record in conducting high-quality evaluations is likely to be a stronger predictor of success in conducting your study than, for example, anything the evaluator might promise to do on a piece of paper, as part of an application. We also recommend finding an evaluator with substantive expertise in the program area being evaluated (e.g., K-2 math education), or closely-related areas, so as to ensure that the study selects sites, sample members, outcome measures, and other design features that are appropriate for the program being evaluated.

The remainder of this Guide offers step-by step advice on how to find an evaluation team with these core capabilities. The Guide assumes you already know the general parameters of the study you are sponsoring (e.g., main questions you seek to answer, study timeline, available budget). It then outlines a process for finding a capable evaluator that is streamlined so as minimize cost and administrative burden. If you have questions as you go forward, please contact the What Works Clearinghouse Help Desk at 1-866-WWC-9799, info@whatworkshelpdesk.ed.gov.

Step 1 – Identify a pool of candidates with experience conducting randomized controlled trials in program areas similar to yours.³

Here are several possible approaches you might take, separately or in combination, to identify this initial pool of candidates:

- **Search the What Works Clearinghouse’s [Registry of Outcome Evaluators](#).**

The Registry can be an efficient tool for building your initial pool of candidates because it enables you to (i) search for and screen evaluators by content area (e.g., dropout prevention), geographic availability, and organizational size; (ii) view evaluations in which they have been involved and whether these evaluations used an experimental design (i.e., a randomized controlled trial); and (iii) in many cases, download reports on these evaluations. Keep in mind, however, that the evaluators on this list are self-nominated, so there is no guarantee that the information they provide is accurate, nor that the randomized controlled trials they list are of high quality (hence the importance of the vetting process in step 2, below).

- **Find the authors of previous well-designed randomized controlled trials in program areas similar to yours.**

To find authors of well-designed trials, you can go to websites that summarize findings from such trials, such as the [What Works Clearinghouse](#) or other sites listed in [Appendix A](#) of IES’s *Identifying and Implementing Educational Practices Supported By Rigorous Evidence*. We suggest you look specifically for randomized controlled trials that these sites identify as meeting the highest standards of evidence, and find the list of study authors, who in most cases played a central role in the study. Some of these sites also list the authors’ contact information, to facilitate your following up with them.

- **Ask around for recommendations of evaluators with a demonstrated track record in conducting well-designed randomized controlled trials in program areas similar to yours.**

For example, you might ask for such recommendations from (i) individuals identified through the methods listed above who are not themselves available to conduct your study; (ii) research organizations with expertise in randomized controlled trials, such as the IES’s [Regional Educational Laboratories](#) and the organizations listed in [Appendix A](#) of the IES Guide; (iii) professional associations of researchers that specialize in such studies, whose websites and meeting proceedings can be found on-line; and (iv) schools, districts, state agencies, local universities, and other entities who you may know have sponsored, conducted, or participated in such studies.

As you get started, you can obtain personalized assistance in navigating the above resources from the What Works Clearinghouse Help Desk (1-866-WWC-9799, info@whatworkshelpdesk.ed.gov).

- **Issue a solicitation for capability statements from potential evaluators.**

Government and other organizations that fund studies and/or program services often solicit capability statements as a first step in sponsoring a project. The solicitation, in this case, could be a very simple statement describing the evaluation project you will be sponsoring, and asking potential evaluators to submit evidence of a demonstrated track record in conducting well-designed randomized controlled trials in program areas similar to yours. The evidence

they submit should include (i) study reports on two randomized controlled trials they have conducted, at least one of which is in a program area similar to yours; and (ii) the resumes of key staff who would work on your study and their expected roles.

Step 2 – Review the randomized controlled trials conducted by your initial candidates, to determine whether they were well-designed and implemented.

For the candidates identified in step 1 who are interested in conducting your study, we suggest the following actions:

Ask them to send you the items in the suggested capability statement above – namely:

- (i) **The study reports on two randomized controlled trials⁴ they have conducted, at least one of which is in a program area similar to yours; and**
- (ii) **The curricula vitae of key staff who would work on your study, and their expected roles.**

We then suggest, as a threshold matter, that you briefly peruse their submission to confirm (i) whether the studies they submitted were, in fact, randomized controlled trials; and (ii) whether one or more of their proposed key staff helped conduct these trials. Once you have confirmed these items, we suggest the following action.

Have each candidate’s two trials reviewed briefly by 1-2 experts to determine whether they were well-designed and implemented.⁵

- **Why we believe this step is critical: As noted earlier, many randomized controlled trials fail to produce credible results because of serious flaws in design and/or implementation.**

This is true even of many trials published in peer-reviewed journals. It is therefore important for you to verify independently whether your candidate evaluators have the demonstrated ability to avoid such flaws and conduct a study that produces valid evidence.⁶

- **The expert(s) you ask to review the trials submitted by the evaluator(s) should have a key qualification: *the ability to read a randomized controlled trial and judge its quality.***

We suggest, therefore, that you look specifically for individuals with a strong understanding of randomized controlled trial research, although they need not necessarily be a researcher themselves or intimately familiar with your program area. If you don’t already have such an expert in your organization, you might engage an outside expert who has this key qualification to conduct the review, perhaps as a brief consulting project. Examples of organizations that may have, or be able to recommend, experts in randomized controlled trial research include IES’s [Regional Educational Laboratories](#) and the organizations listed in [Appendix A](#) of the IES Guide. For personalized assistance in navigating these resources as you get started, contact the What Works Clearinghouse Help Desk (1-866-WWC-9799, info@whatworkshelpdesk.ed.gov).

- **We suggest you ask the expert(s) to conduct a brief (e.g., 30-60 minute) review of each submitted study, using the 10 “key items” listed on pages 5-9 of the [IES Guide](#).**

The IES Guide lists 10 key items to look for when reviewing a randomized controlled trial to see whether it was well-designed and implemented. You should make clear to the expert(s) that

you seek only a top-level review to assess whether the study was free of serious flaws in design and implementation such as those described in the list (and not a more comprehensive examination as would typically be done, for example, in a systematic evidence review).

The above vetting process will hopefully yield one or more candidate evaluators with a demonstrated track record in conducting well-designed randomized controlled trials.

Step 3 – For the evaluator(s) that pass the step 2 vetting process, request a proposal.

Your request would presumably include a number of items specific to the evaluation you are sponsoring.

For example, your request might include general parameters of the study that you, as the sponsor, wish to specify, such as: the program to be evaluated, the setting for the study, the main questions you seek to answer, and your timeline and available funding. Within these general parameters, your request might then invite the applicant to describe its proposed research questions, research methods, data analysis plan, management and staffing plan, timeline, and budget.

A full discussion of project-specific items to include in your request is beyond the scope of this Guide.

To help ensure that the randomized controlled trial will be well-designed and implemented, we suggest that you also request and review the following:

- **The applicant’s plan for addressing each item in the What Works Clearinghouse’s [Key Items To Get Right When Conducting A Randomized Controlled Trial in Education](#).⁷**

This document is a user-friendly checklist of items that are often critical to the success of a randomized controlled trial, a significant departure from any one of which may undermine the validity of the study’s results. As part of your proposal review process, we suggest you ask 1-2 experts (such as those you identified in Step 2) to review the applicant’s plan for addressing these key items to determine whether it constitutes a sound approach.

- **The curricula vitae of key staff and their proposed roles (including time commitments), which should demonstrate that the study team has the core capabilities you seek:**
 - (i) **A demonstrated track record in conducting well-designed randomized controlled trials⁸ in program areas similar to yours; and**
 - (ii) **Expertise in the program area being evaluated, or closely-related areas.**

Ideally, the proposed principal investigator will have both of these core capabilities. But often that may not be the case, and instead different individuals on the team will have these respective capabilities. In this circumstance, we suggest you verify that at a minimum: (i) the individual(s) with a demonstrated track record in conducting well-designed randomized controlled trials will play a *hands-on* role in all main aspects of study design and implementation; and (ii) the individual(s) with substantive expertise in the program area will

play a key consulting role in study design and implementation, and in interpretation and communication of the study's findings.

- **A list of 3-4 references, so you can verify that the proposed key staff did indeed play a central role in the applicant's earlier well-designed randomized controlled trials.**

Useful references would be other researchers or school officials who participated in the earlier trials. We suggest you ask these references to confirm whether the proposed key staff: (i) played a central role in the earlier trials; and (ii) successfully handled that role, demonstrating the organizational and interpersonal skills needed to carry out the trial within budget and schedule. You may wish to assure the references that their answers will be kept confidential, so as to facilitate an open and complete conversation.

The above process should enable you to choose a highly-capable evaluator -- one with (i) a demonstrated track record in high-quality evaluations, (ii) substantive expertise in your program area, or related areas, and (iii) a sound plan for conducting your study so as to produce scientifically-valid results.

Step 4 – Request periodic reports on the evaluation, once underway, to ensure it is adhering to the key items needed for success

Specifically, we suggest you ask the evaluator, as a condition of its funding award, to provide quarterly or semi-annual updates on its progress in addressing each checklist item in [*Key Items To Get Right When Conducting A Randomized Controlled Trial in Education*](#). As noted earlier, the items on this checklist are critical to the success of your study; it is therefore important that both you and the evaluator remain vigilant throughout the course of the study to possible deviations from these key items. If you find such a deviation has occurred and cannot be corrected, you might consider discontinuing funding for the study. An expert in randomized controlled trial research, such as the one you identified in step 2, can help you assess whether a deviation is serious enough to warrant such an action.

Notes

¹ A randomized controlled trial is a study that randomly assigns individuals (or other units such as classrooms or schools) to a program group or to a control group, in order to measure the program's impact on educational or other outcomes.

² Other examples of common flaws include randomizing groups (e.g., classrooms or schools) but conducting the statistical analysis as if individual students had been randomized; and reporting only the program's positive effects, rather than its effects on all outcomes that were measured.

³ If a randomized controlled trial is not feasible and you plan to use another study design, such as a matched comparison-group study, this step would involve identifying candidates with experience in that design.

⁴ If you plan to use a high-quality study design other than a randomized controlled trial, you should ask for two study reports on evaluations using that design.

⁵ If you plan to use a high-quality study design other than a randomized controlled trial, we suggest you use an expert review process parallel to that outlined in this section, but with experts who have a strong understanding of that specific design.

⁶ We do not mean to suggest that *all* of the evaluator's randomized controlled trials need be well-designed and implemented, because sometimes studies fail for reasons outside an evaluator's control. Rather, we are suggesting that you look for evidence that the evaluator has successfully carried out a trial in at least two instances.

⁷ Many of the items in this checklist would apply to high-quality designs other than a randomized controlled trial, such as a well-matched comparison-group study, if that is what you plan to sponsor. However, you would need to add a few items - e.g., on effective matching techniques -- and modify a couple others. To do so, we suggest you seek the advice of someone with expertise in that specific design.

⁸ If you plan to use a high-quality study design other than a randomized controlled trial, the study team should have a demonstrated track record in conducting studies using that design.