Synthesizing and Building Evidence of “What Works” in Education

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What is the What Works Clearinghouse™?

Key audiences for the WWC

Systematic reporting standards

Eligibility of studies for WWC review

Example of a WWC intervention report and the underlying WWC reviews of individual studies

Related requirements of IES research replication grants

Connecting with the WWC
What is the What Works Clearinghouse™?

- Begun in 2002 as an initiative of the newly-established Institute of Education Sciences (IES)
- Mission is to be a trusted source of scientific evidence for what works to improve student outcomes or other relevant education outcomes
- Reviews original research on education interventions  
  - “Intervention” means a program, product, practice, or policy  
  - WWC does not review descriptive studies, qualitative studies, secondary data analyses, or research syntheses
- The WWC currently includes IES staff plus 6 contractors and 7 contracts funded at about $10 million/year total
Key Audiences for the What Works Clearinghouse™

- ED grantees and grant applicants interested in the strength of evidence from education research that could inform proposed education projects
- ED program offices interested in the quality of ED-funded impact studies and project evaluations
- Teachers, principals, and other school leaders seeking guides to evidence-based practices that describe how to implement those practices
- State and local administrators seeking to assess claims of effectiveness for education interventions or compare the effectiveness of interventions in different topic areas
Only *publicly available* studies are eligible for WWC review

- ED-funded studies available through the [Education Resources Information Center](https://eric.ed.gov) (ERIC), a free, publicly available, searchable database of education research
- Studies only available behind paywalls for journals or books
- Unpublished, *non-peer reviewed* studies available to the public online

The WWC queries study authors for information needed for the WWC review but not reported in studies

In the case of multiple manuscripts, the WWC prioritizes the *final, peer-reviewed manuscript* submitted to ERIC, or else the *final, published version*
Eligibility of Studies for WWC Review

- Systematic reviews of interventions or practices include all studies that meet the requirements defined in the corresponding WWC topic area review protocol for eligible...
  - interventions
  - populations
  - settings
  - outcomes
  - time frames
  - study designs

- Interventions are prioritized for WWC intervention reports on the basis of the number of eligible studies of the intervention available for WWC review and that are likely to meet WWC design standards for RCTs, QEDs, RDDs, or SCDs
Find WWC Intervention Reports by Topic Area

The **Find What Works!** tool allows users to search for **systematic reviews of evidence on interventions** by topic area.
See Which Interventions Have Evidence of Positive Effects

**Find What Works!** allows users to see which interventions have evidence of positive or potentially positive effects.
The WWC only reports and synthesizes findings from eligible impact studies that meet WWC design standards, with or without reservations.
The WWC study page includes information on the study, the WWC’s review of it, and study findings meeting WWC standards.
See and Download the Protocol Used for the WWC Review

The WWC protocol page includes both current and prior versions of the topic area review protocol.
See and Download the Handbook(s) Used for the WWC Review

All previous versions of the WWC Procedures and Standards Handbook are available for download.

**Prior Standards**

- Procedures and Standards Handbook Version 3.0 (1.3 MB)
- Summary of changes (96 KB) between the Procedures and Standards Handbook Version 2.1 and 3.0
- Version 2.1, Sep 2011 (1.3 MB)
- Version 2.0, Dec 2008 (994 KB)
- Version 1.0, May 2008 (506 KB)
Example: Download data on the findings for First Step to Success that met WWC standards
The ERIC page includes the study abstract, a URL to full text of study, whether the study was peer reviewed, the ED grant number, the WWC study rating, and the WWC study page URL.
Related Requirements of IES Research Replication Grants

▪ **Preregistration:** The study must be preregistered in a repository in a manner consistent with the IES *Standards for Excellence in Education Research* (SEER), for example in the *Registry of Efficacy and Effectiveness Studies* (REES) associated with the *Society for Research on Educational Effectiveness* (SREE).

▪ **Conflicts of interest:** Key personnel designing or conducting independent evaluations of interventions must NOT have related financial interests.

▪ **Public access requirement:** Final manuscripts accepted in a *peer-reviewed scholarly publication* must be submitted to ERIC to be accessible to the public at no charge in a searchable database [book chapters, editorials, reviews, and non-peer-reviewed conference proceedings do not count].

▪ **Data availability:** A *Data Management Plan* must specify how, and for how long, data collected for the study will be made available to other researchers.
Connecting with the WWC

- Website: whatworks.ed.gov
- The WWC Help Desk
- Follow the WWC
  - Facebook
  - Twitter
  - NewsFlash
- Jon’s email: jonathan.jacobson@ed.gov