

Common Federal Evidence Framework & Research Guidelines

Informal Federal Interagency Workgroup on
a Common Evidence Framework
April 2015

Goals of the Common Evidence Framework (CEF) Workgroup

- The CEF Workgroup is developing:
 - an “evidence framework” to show how different types of research and evaluation studies (not limited to randomized control trials) are part of a multi-step process and learning agenda that build and use evidence about what works, how to improve, and where to innovate.
 - quality guidelines for a variety of types of research and evaluation studies including foundational, design and development, implementation, and impact studies.

CEF Workgroup Participating Agencies

- Federal agencies involved to date:
 - U.S. Department of Education
 - Institute for Education Sciences
 - U.S. Department of Health and Human Services
 - Office of the Assistant Secretary for Planning and Evaluation
 - Administration for Children and Families
 - U.S. Department of Labor
 - Chief Evaluation Office
 - Corporation for National and Community Service
 - Social Innovation Fund
 - Research & Evaluation
 - National Science Foundation



Evidence, Evaluation & Innovation

Areas of Progress

- Understanding the spectrum of evidence and strategies for building evidence.
- Highlighting the importance of quality for all types of studies and promoting quality in study design through the use of common research guidelines.
- Identifying questions best answered by foundational, early-stage or exploratory, and design and development studies.
- Identifying the questions best answered by randomized control trials/studies or quasi-experimental designs.
- Judging findings from studies in terms of whether they have produced useful evidence using common criteria.



Evidence, Evaluation & Innovation

Gaps to Fill

- Is evidence about assessing whether programs work? Improving programs? Or both?
- How do we recognize the importance of combining and integrating studies using different methods?
- How do we fit evidence to context and address implementation?
- How do we go beyond evidence for individual programs to assessing systems and collective impacts?
- How do we balance evidence and innovation?
- How do federal efforts relate to external efforts?

Common Evidence Framework - Draft

Different Types of Evidence from Different Types of Studies

Exploratory Analysis

Developmental Designs

Implementation & Operational Studies

Formal Impact Evaluations of Interventions, Programs, Models, & Systems

Cost, Cost-Benefit & Cost Effectiveness

Planning Guidelines for Quality Studies & Evaluations

Criteria for Ensuring Quality of Research & Results (Methods and Analysis)

Review Guidelines for Critiques or Assessments of Studies

Criteria for Reviewing Quality of Research & Results

Infrastructure

For Creating Reporting & Review Guidelines (including Template) for Coding Studies

Linking & Sharing

Linking Clearinghouses & Sharing Reviews & Guidelines across Agencies

Analytic Products

Intervention Summaries & Evidence Reviews (e.g., Teen Pregnancy Prevention, CrimeSolutions, What Works Clearinghouse, CLEAR)

Cost-Effectiveness Analyses

Implementation, Performance & Operational Analyses

Technical Assistance Products (e.g., Promising Practice Guides)

Policy Analyses & Syntheses

Actions

Decision-Making for Replication & Improvement

Includes assessing:

- Evidence of Impacts
- Implementation Readiness
- Site Readiness
- Fit
- Feedback Loops

Decision-Making for Research

Includes assessing:

- Need for Refining, Improving, & Enhancing Evaluations
- Implications/ Recommendations for New Research Studies

Decision-Making for Innovation

Includes assessing:

- Gaps
- Promising Approaches from Exploratory Work that Require Demonstration

Agency Examples

- Department of Education and NSF “Common Guidelines
- Department of Labor CLEAR Guidelines and Review Criteria
- Department of Health and Human Services Comparisons of Standards for Systemic Reviews

Common Guidelines for Education Research and Development

U.S. National Science Foundation
U.S. Department of Education

Types of Research Studies

Exploratory Analysis

Developmental Designs

Implementation & Operational Studies

Formal Impact Evaluations of Interventions, Programs, Models, & Systems

Cost, Cost-Benefit & Cost Effectiveness

Planning Guidelines for Quality Studies & Evaluations

Criteria for Ensuring Quality of Research & Results (Methods and Analysis)

Review Guidelines for Critiques or Assessments of Studies *(Based on Quality Criteria)*

Criteria for Reviewing Quality of Research & Results

Definition of “Common Guidelines” (Ed & NSF example)

A cross-agency framework that describes:

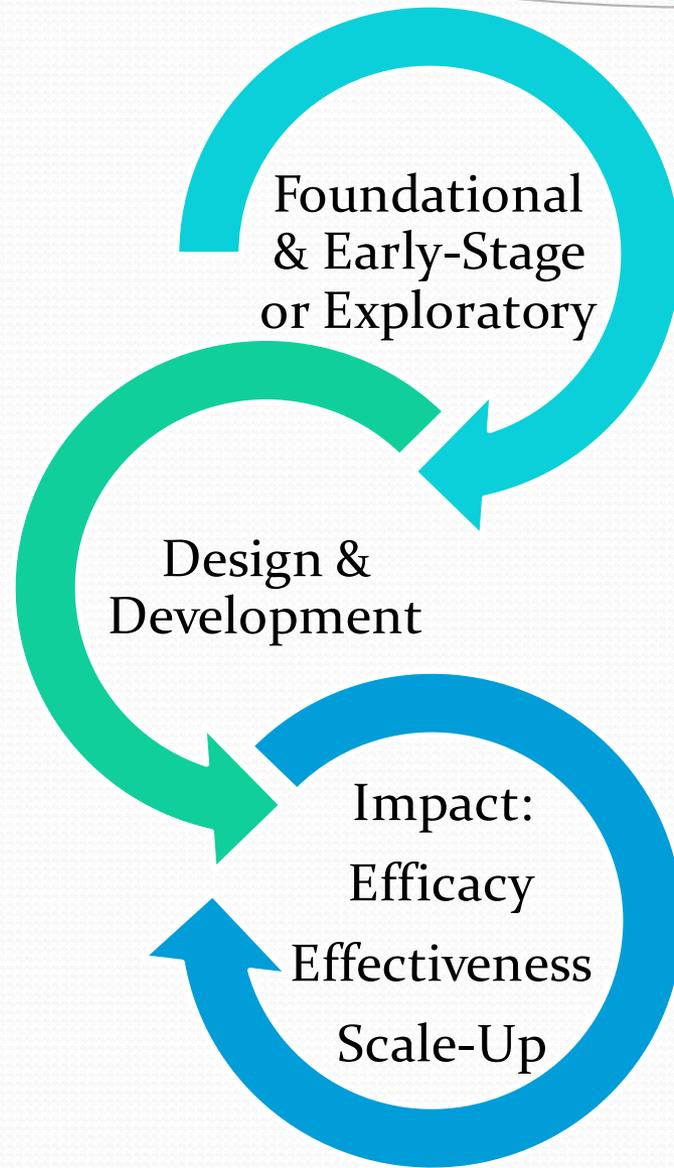
- Broad types of research and development
- The expected *purposes, justifications, and contributions* of various types of research to knowledge generation about interventions and strategies for improving learning

Need for Common Guidelines (Ed & NSF example)

- The American education system needs stronger evidence provided at a faster pace
- More constrained federal resources demand that NSF and ED purposefully build on each other's research and development portfolios
- A cross-agency vocabulary and set of research expectations is critical for effective communication

Implications of Common Guidelines (Ed & NSF example)

- For Decision-Making Within Each Agency
- For Peer Reviewers
- For Future Agency-Funded Principal Investigators
- For Practitioners



Common Guidelines for
Education Research and Development

A Report from the Institute of Education Sciences,
U.S. Department of Education

and the National Science Foundation

August 2013



- Clarify that **many types of studies are important** for building evidence for improving education
- Provide common understanding of the questions that each type of research can and cannot answer; **each type has its role.**
- Provide a common **vocabulary**
- Provide a way of **assessing our portfolios** – *are all of our eggs in one basket?*

Clearinghouse for Labor Evaluation and Research (CLEAR)

<http://clear.dol.gov>

U.S. Department of Labor

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Policy Analyses & Syntheses

Review Guidelines for Critiques or Assessments of Studies
(Based on Quality Criteria)

Criteria for Reviewing Quality of Research & Results

CLEAR Guidelines for Review

(DOL example)

- Causal study review guidelines: including RCT, instrumental variables, differences-in-differences, regression with controls (includes rating of evidence)
- Implementation, descriptive study review guidelines (does not include rating)
- Study summaries of all studies include: features of intervention/policy examined, study design, key findings, considerations for interpreting the study results, evidence rating (for causal studies only)



CLEAR Causal Study Review

(DOL example)

- Regression Models Criteria
 - Comparability between the treatment and control groups before the intervention: observed, unobserved
 - Confounding factors: changes for the treatment and control groups should be the same except for the intervention
 - Anticipating the intervention: different behavior by participants based on anticipation?

DOL example of an evidence criterion (CLEAR)

1. Study Design

Criterion 1.1: Is the overall study design appropriate for addressing the research questions?

- Demonstrates how overall research strategy was designed to meet aims of study (e.g. what the study will do to assess the implementation process or implementation fidelity)
- Discusses rationale for study design (e.g. why study does it this way)
- For studies of the quality of or fidelity to implementation, presents logic model for the intervention to illuminate research questions and guide study. The model should specify the implementation inputs and outputs, the expected outcomes, contextual factors, and specify the elements that are the focus of the implementation study.
- Presents a convincing argument for different features of design (e.g. reasons for different components or stages of research; purpose of particular methods or data sources, multiple methods, time frames)
- Discusses limitations of design and appropriate implications for interpreting findings

CLEAR Implementation Study Guidelines

(DOL example)

- Scientifically sound design appropriate for addressing the research questions
- Explicit and rational explanation of the selection of sites and respondents, and other sampling strategies, that are appropriate to the design
- Appropriate data sources and systematic, ethical, and unbiased data collection
- Analysis methods transparent, systematic, and sufficiently rigorous
- Findings explicit and credible

Are we using common criteria to judge evidence from impact studies?

Analytic Products

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Linking & Sharing

Linking Clearinghouses

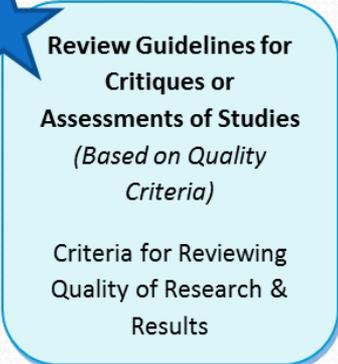
Sharing Reviews & Guidelines across Agencies



Selected Comparisons of Standards and Criteria Across Federally-Funded Systematic Evidence Reviews

U.S. Department of Health & Human Services

Home Visiting Effectiveness of Evidence (HomVEE) Review Team





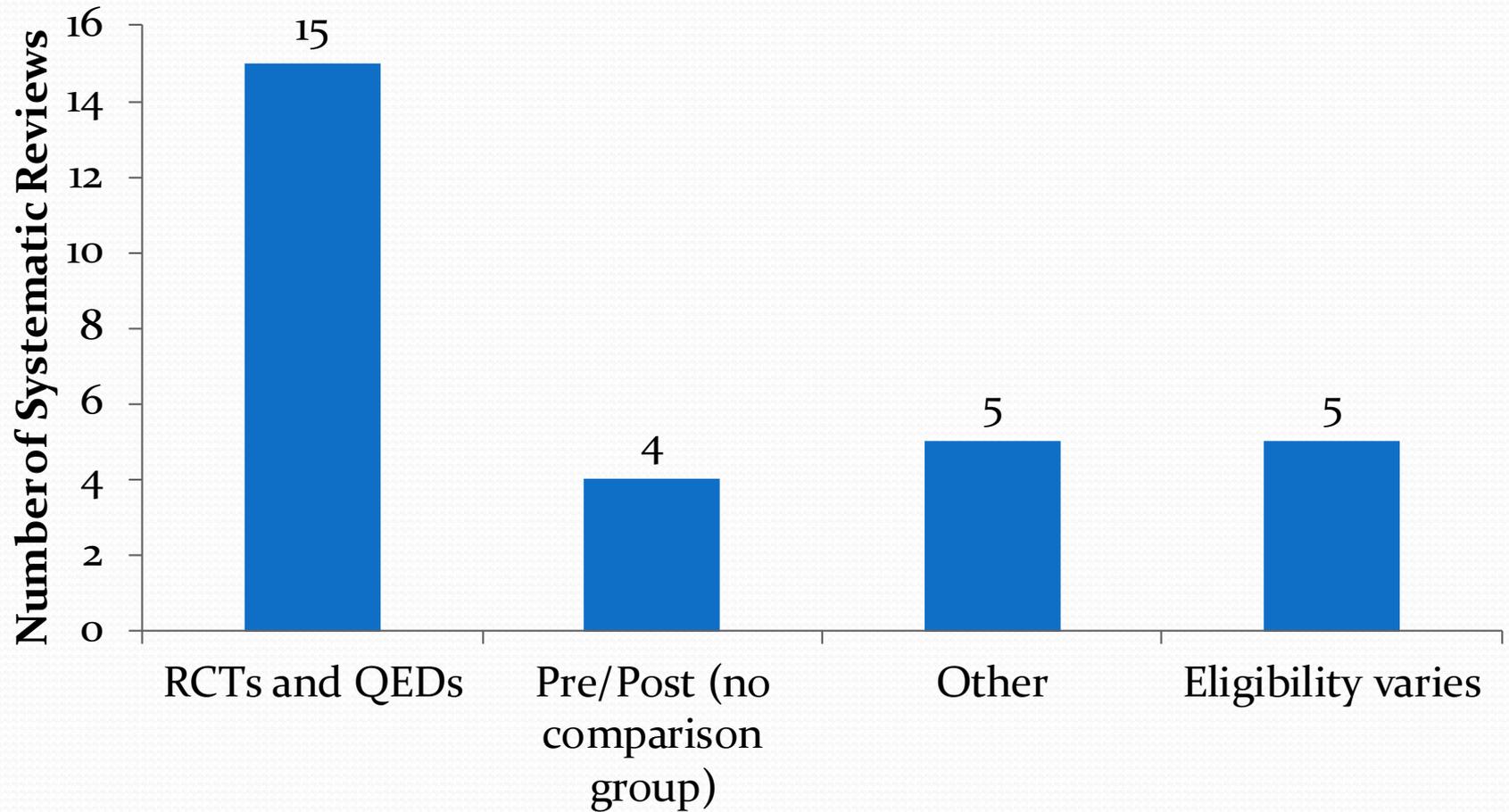
15 Reviews Used for Comparisons

(HHS Example)

- AOA Evidence-Based Prevention Program
- AHRQ Evidence-Based Practice Centers
- ASPE Learning about Infant and Toddler Early Education Services
- ASPE Teen Pregnancy Prevention Evidence Review
- CDC Community Guide
- CDC Prevention Research Synthesis (PRS)–Efficacy Reviews
- CDC HIV/AIDS PRS—Meta-analyses and other reviews
- DOJ What Works in Reentry Clearinghouse
- DOL Clearinghouse for Labor Evaluation and Research
- IES What Works Clearinghouse
- OPRE Employment Strategies for Low-Income Adults Review
- OPRE Home Visiting Evidence of Effectiveness
- OPRE Strengthening Families Evidence Review
- OJP Crime Solutions
- SAMHSA National Registry of Evidence-Based Programs

(HHS Example)

Eligible Research Designs



Note: RCT = Randomized controlled trial; QED = Quasi-experimental design; Eligibility Varies = The types of designs included in the review depends on the extent and quality of the available research evidence.

(HHS example)

Target Audience



- All 15 reviews try to reach practitioners and general public
- Most reviews (13) also try to reach other stakeholders, such as researchers, policymakers, and funders

Feedback on Common Evidence Framework and Research Guidelines

- Presentations have received positive feedback:
 - OMB Office of Information and Regulatory Affairs Briefing (July 2014)
 - DOL Chief Evaluation Office Seminar Series (May 2014)
 - Edna McConnell Clark Foundation Grantee Retreat (April 2014)
 - HHS Evaluation Day (January 2014)
 - William T. Grant Foundation and the Forum for Youth Investment Cross-Agency Learning Community on Federal Investments in Research and Evaluation Meeting (January 2014)
 - Interagency Working Group on Youth Programs Positive Youth Development Research Agenda Working Meeting (December 2013)
 - Association for Public Policy Analysis & Management Conference (November 2013)
 - OMB & GAO Federal Evaluation Working Group Meeting (January 2013)

Next Steps for the Workgroup

- Share the draft framework and guidelines and gather feedback
- Develop specifics for others areas of the framework
- Strategize on how framework and guidelines can be used by more federal agencies – both program and evaluation offices
- Continue to work on potential alignment with external groups developing evidence frameworks

References and Resources

- Exploring a Cross-Agency Platform for Judging Evidence: Resources for Federal Agencies (Informal Federal Interagency Workgroup on A Common Evidence Framework, February 2013): http://evidence-innovation.findyouthinfo.gov/docs/Common%20Evidence%20Framework-Draft_508_3-11-13.pdf
- Evidence-based policy initiatives across the Federal government (FindYouthInfo.gov): <http://evidence-innovation.findyouthinfo.gov/investingEvidence>
- Common Guidelines for Education Research and Development (U.S. Department of Education and National Science Foundation, August 2013):
<http://ies.ed.gov/pdf/CommonGuidelines.pdf> and
<http://www.nsf.gov/pubs/2013/nsf13126/nsf13126.pdf>
 - FAQs for the Common Guidelines: <http://www.nsf.gov/pubs/2013/nsf13127/nsf13127.jsp>
- Clearinghouse for Labor Evaluation and Research (CLEAR): <http://clear.dol.gov/>
- Proposed Framework for Continuous Evidence Building (The Bridgespan Group, The Edna McConnell Clark Foundation, and MDRC)
- *Show Me the Evidence: Obama's Fight for Rigor and Results in Social Policy* (2014, Ron Haskins)