

Select a topic to Find What Works based on the evidence



Literacy



Math



Science



Behavior



Children and Youth with Disabilities



English Language Learners



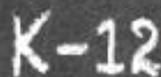
Teacher Excellence



Schoolwide Programs



Early Childhood (Pre-K)



Kindergarten to 12th Grade



Postsecondary



Path to Graduation

How to Use the What Works Clearinghouse

A Presentation for the Policies, Programs, and Implementation Committee at the NCES Forum

Diana F. McCallum

National Center for Education Evaluation and Regional Assistance

July 11, 2016

Overview

- Team, Mission, & Primary Activities of the WWC (5 min)
- Brief Overview of the Review Process (4 min)
- Products (6 min)
- How to Use the WWC (15 min)
 - Demonstration of the new *Find What Works* Tool
 - Finding effective practices in an IES Practice Guide
- Questions (5 min)

WWC Team

- Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance (IES-NCEE)
 - Joy Lesnick, *Acting Commissioner/Associate Commissioner of Knowledge Utilization, NCEE*
 - Christopher Weiss, *Team Lead*
 - Diana McCallum, *Project Officer*
 - Vanessa Anderson, *Project Officer*
 - Jonathan Jacobson, *Project Officer*
 - Erin Pollard, *Project Officer*
 - Daphne Garcia, *Project Officer*
- Contractor Staff
 - Mathematica Policy Research, Inc., *PreK-12 Content and Dropout Prevention Practice Guide*
 - Development Services Group, Inc., *Postsecondary Education and Reviews, Reporting, Dissemination, & Development (R2D2)*
 - Sanametrix, Inc., *Website*

Mission

- Initiative of IES established in 2002
 - First intervention reports across PreK-12 areas created in 2005
 - First reports in postsecondary education in 2013
- Provides comprehensive and systematic reviews of the research on educational interventions—programs, products, practices, and policies
- Creates reports that help educators and decision makers make choices using scientifically-based research

Topic Areas: Pre-K through Postsecondary Education

The screenshot shows the IES What Works Clearinghouse website. The header includes the IES logo and the text 'INSTITUTE OF EDUCATION SCIENCES' and 'WHAT WORKS CLEARINGHOUSE'. A search bar is located in the top right corner. The navigation menu includes 'Home', 'Topics in Education' (highlighted with an orange circle), 'Publications & Reviews', 'Find What Works!', 'Inside the WWC', 'News & Events', and 'About Us'. The 'Topics in Education' dropdown menu lists the following categories:

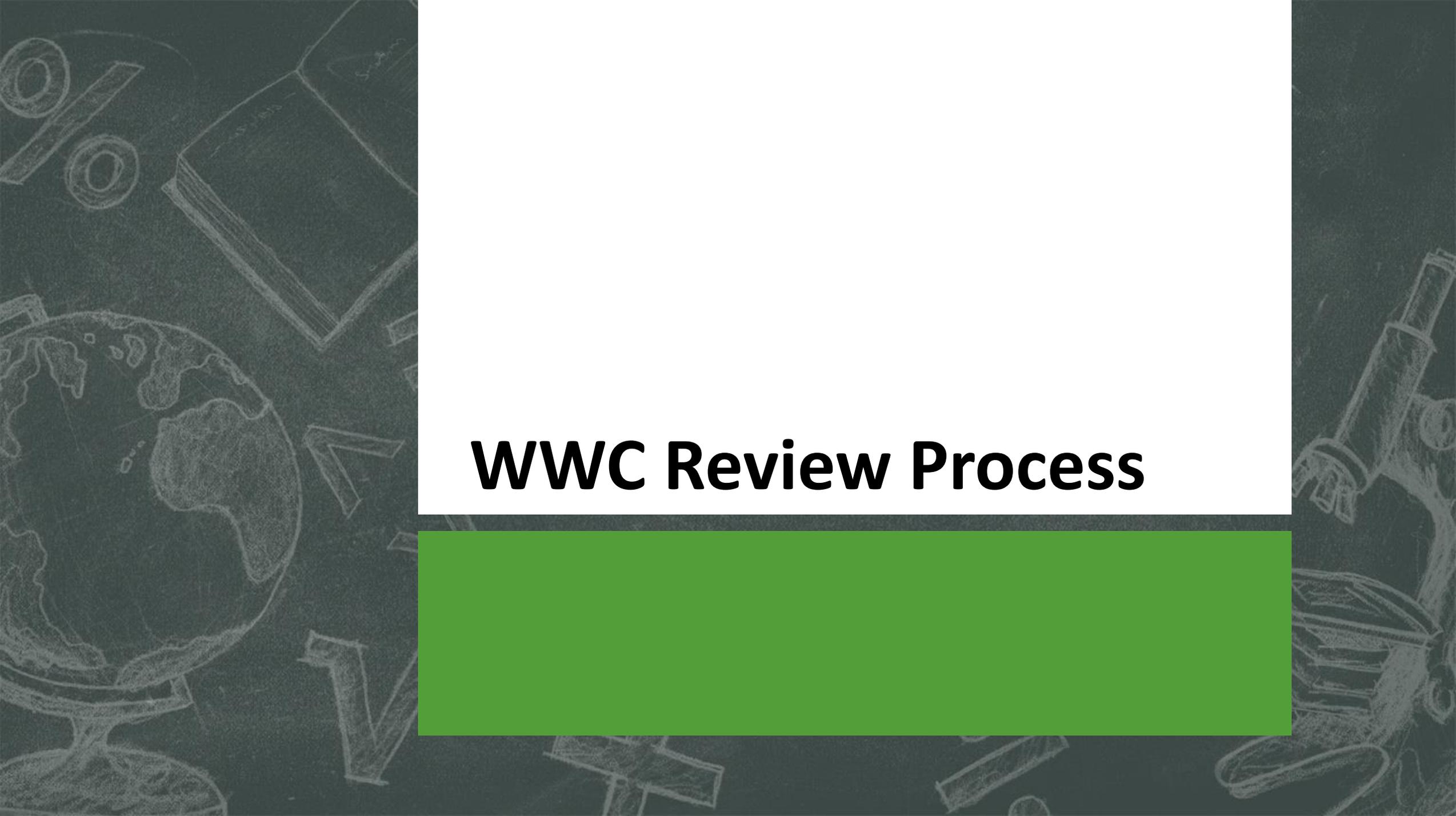
- Children and Youth with Disabilities
- College and Career Preparation
- Dropout Prevention
- Early Childhood Education
- Education Technology
- English Language Learners
- Literacy
- Math
- Postsecondary Education
- School Choice
- School Organization and Governance
- Science
- Student Behavior
- Teacher and Leader Effectiveness
- Teacher Incentives

Below the menu, there is a featured article titled 'Teaching Math to Young Children' with a thumbnail image. To the right, there is a section titled 'Evidence for What Works in Education' with a sub-header 'Evidence for What Works in Education' and a paragraph: 'We review the research on the different programs, products, practices, and policies in education. Then, by focusing on the results from high-quality research, we try to answer the question "What works in education?" Our goal is to provide educators with the information they need to make evidence-based decisions.'

- [Children and Youth with Disabilities](#)
- [College and Career Preparation](#)
- [Dropout Prevention](#)
- [Early Childhood Education](#)
- [Education Technology](#)
- [English Language Learners](#)
- [Literacy](#)
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- [Teacher and Leader Effectiveness](#)
- [Teacher Incentives](#)

Primary Activities of the WWC

- Produce systematic reviews that provide a comprehensive overview of the existing research
- Develop practice guides that combine systematic evidence and expert opinion to identify effective practices
- Summarize the results of individual studies
- Review studies submitted as evidence for the Department's evidence-based grant competitions
- Actively disseminate findings via whatworks.ed.gov



WWC Review Process



Assess Effectiveness Research

- The WWC assesses the quality of *effectiveness research*
- Goal is to identify *original intervention studies* with strong claims to *internal validity*
- *Secondary data analyses* and *research syntheses* are NOT reviewed by the WWC.

Evidence Standards: Criteria for Reviewing Studies

- Developed by panels of national experts, modeled after other prominent systematic reviews
- Applied to each study by WWC-certified reviewers
- Used together with a study *review protocol* defining eligible *studies*, eligible *outcomes*, and required measures of *baseline equivalence*
- Result in a study rating
 - *Meets WWC Standards without Reservations*
 - *Meets WWC Standards with Reservations*
 - *Does Not Meet WWC Standards*

Standards for Evaluating Causal Evidence

- Group Design Standards
 - Used for RCTs and QEDs (such as matched comparison designs)
 - Version 1.0 introduced in May 2008 (current version is 3.0)
- Regression Discontinuity Design Standards
 - Pilot RDD standards introduced in September 2011
- Single Case Design Standards
 - Pilot SCD standards introduced in September 2011

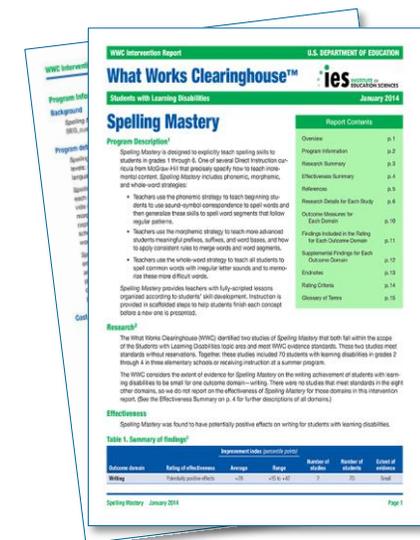


WWC Products

Overview of the central WWC products and their reach

WWC Products: Intervention Reports

- **Intervention:** a curriculum, program, practice, or policy designed to improve student outcomes
- An **intervention report (IR)** is a summary of findings of research that meets standards on the effectiveness a given curriculum, program, practice, or policy in education
- Process
 - Prioritize interventions for review
 - Conduct a comprehensive literature search
 - Review each study against WWC standards
 - Only summarize the findings from the well-designed studies
- Currently over 219 IRs with reports available across topic areas
- IRs populate the Find What Works Tool, received almost 350,000 views in the past year



WWC Products: Practice Guides

- Sets of recommendations for *educators* to address challenges in their classrooms and schools
- Process
 - Expert panel develops recommendations
 - WWC certified reviewers conduct a comprehensive literature search
 - Studies reviewed according to WWC standards
 - Summarize the review
- Level of research evidence supporting each recommendation is provided: minimal, moderate, or strong
- Currently 20 practice guides

Example from Foundational Reading Guide

Recommendation 2: Develop awareness of the segments of sounds in speech and how they link to letters.

Action Step 1. Teach students to recognize and manipulate segments of sound in speech.

Building and dividing compound words⁶⁵

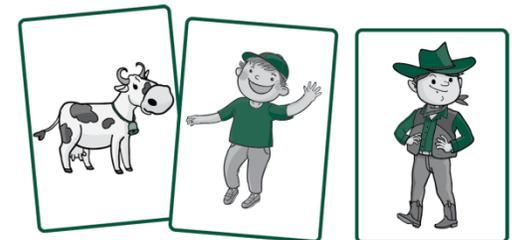
Teacher: Sometimes you can put two words together to form another word. For example, if I put *straw* and *berry* together, I get *strawberry*. What do you get if you put *book* and *shelf* together?

Student: *Bookshelf.*

Teacher: That's right! You can also break some words into smaller words. What do you get if you take the *cow* out of *cowboy*?

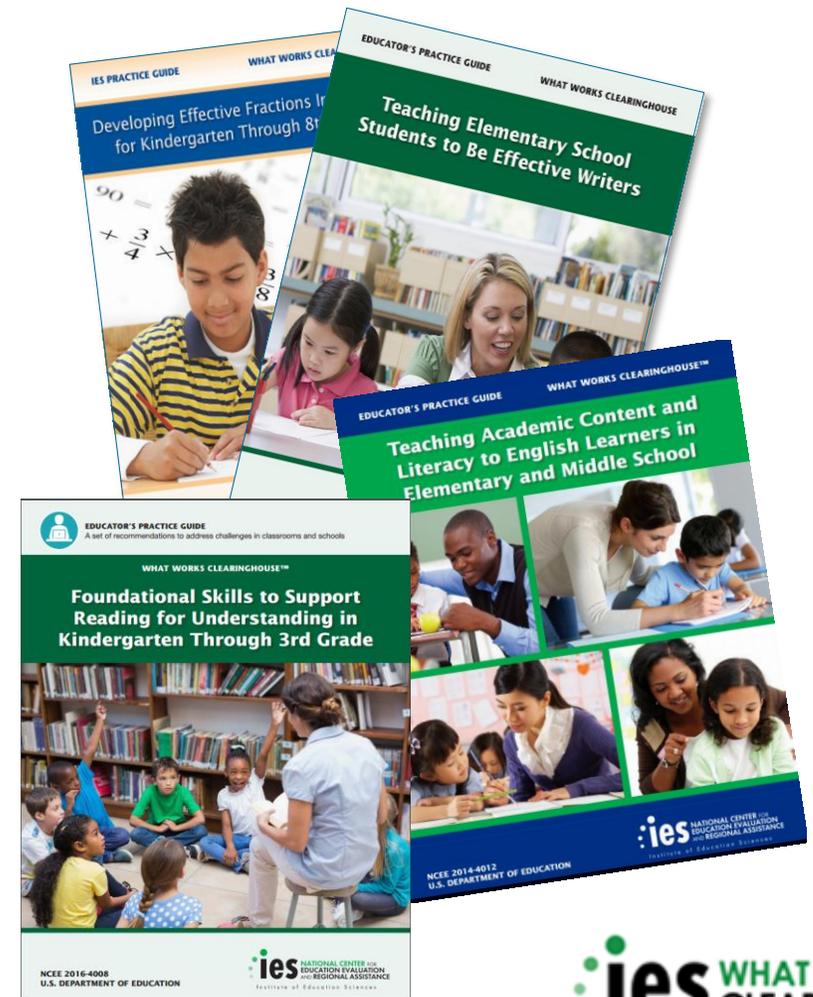
Student: *Boy?*

Teacher: That's right!



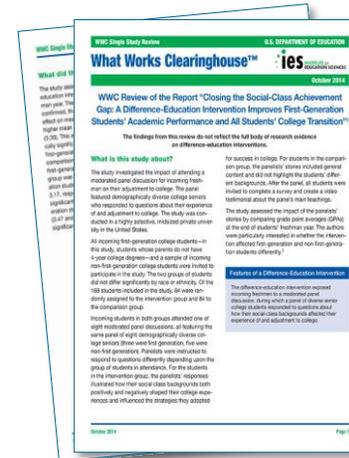
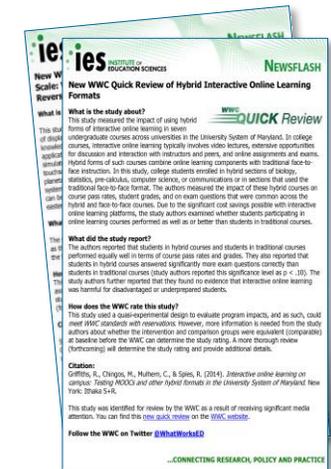
WWC Practice Guides: Data on Usage

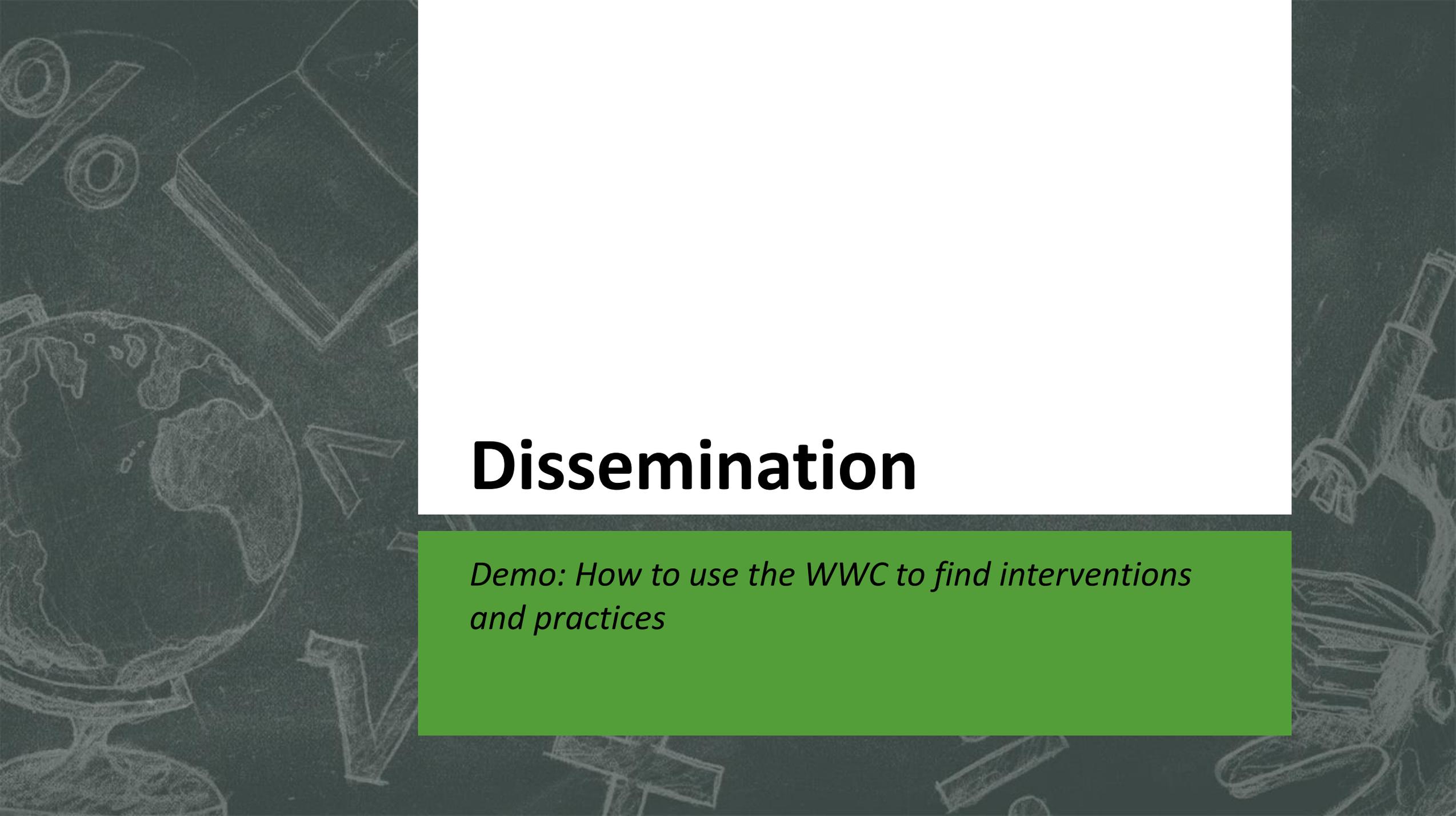
- Most popular WWC product, with 4000 downloads in June 2016 among top 10 guides
- Newly released Foundational Reading Practice guide was viewed close to 1200 times on the date of release
- Supplemental materials created for the guides to expand usage, including summaries, webinars, and videos where available



Reviews of Individual Studies

- *Quick reviews* are timely and objective assessments of recent research that is reported in a major national news source
 - Identify recent research with media mentions
 - Provide quick summary and rating in less than two weeks
- *Single study reviews* provide an objective assessment of an individual research study
 - Review the study against WWC standards
 - Summarize the evidence





Dissemination

Demo: How to use the WWC to find interventions and practices

Current Website: whatworks.ed.gov

ies INSTITUTE OF EDUCATION SCIENCES

WHAT WORKS CLEARINGHOUSE

Enter search terms here 

Home | About the WWC | Topics in Education | Publications & Products | Special Features | Resources | Stay Connected



A Closer Look at the WWC Review Process and Key Resources

Learn more about high-quality research and WWC design standards.



Evidence for What Works in Education

We review the research on the different programs, products, practices, and policies in education.

Then, by focusing on the results from *high-quality research*, we try to answer the question “What works in education?”

Our goal is to provide educators with the information they need to make **evidence-based decisions**.

Publications & Products

11,323 studies reviewed!

Get started with free products from the WWC:



Practice guides help educators address classroom challenges.

Find What Works!

Intervention	Topic	Improvement Index	Effectiveness Rating	Extent of Evidence
Fast Forward® Language	English Language Learners	48	++	++
Instructional Conversations and Literature Logs	English Language Learners	29	+	+

WWC Fact Check: Test Your Knowledge...

The WWC conducts research on interventions.

True

False

How to *Find What Works*: Demonstration

The screenshot displays the homepage of the What Works Clearinghouse. At the top left is the WWC logo and the text "What Works Clearinghouse". To the right is a search bar with the word "Search" inside. Below the header is a dark banner with the text "Select a topic to Find What Works based on the evidence". The main content area features a grid of 12 topic categories, each with an icon and a text label. The "Math" category is highlighted with a blue background. The categories are: Literacy (book icon), Math (math symbols icon), Science (flask icon), Behavior (person icon), Children and Youth with Disabilities (heart with hand icon), English Language Learners (globe with ELL icon), Teacher Excellence (hand holding paper icon), Schoolwide Programs (stack of books icon), Early Childhood (Pre-K) (ABC block icon), K-12 Kindergarten to 12th Grade (K-12 text icon), Postsecondary (classroom building icon), and Path to Graduation (graduation cap icon).

WWC What Works Clearinghouse

MENU

Search

Select a topic to Find What Works based on the evidence

- Literacy
- Math**
- Science
- Behavior
- Children and Youth with Disabilities
- English Language Learners
- Teacher Excellence
- Schoolwide Programs
- Early Childhood (Pre-K)
- K-12 Kindergarten to 12th Grade
- Postsecondary
- Path to Graduation

How to Find Effective Practices: Demonstration

[Home](#) > [Topics](#) > [Math](#)



Teaching Math to Young Children

Summary

This practice guide provides five recommendations for teaching math to children in preschool, prekindergarten, and kindergarten. Each recommendation includes implementation steps and solutions for common roadblocks. The recommendations also summarize and rate supporting evidence. This guide is geared toward teachers, administrators, and other educators who want to build a strong foundation for later math learning.

Practice Guide and Related Resources

The practice guide is accompanied by supplemental resources, including a practice guide summary and quick overview for understanding the guide. The guide is also available in e-book format. Click below to access any of the available resources.



 **By the Numbers: Five Recommendations for Teaching Math to Young Children (4.8 MB)** New to the WWC practice guides? This six-pager provides an overview of essential features. Take a quick look at the recommendations. Review action steps, examples, and teaching tools.



Practice Guide Details

Released: November 2013

Topic: [Math](#),
[Early Childhood Education](#)

Education Level: Prekindergarten,
Elementary

Audience: Administrator,
Parent/Family,
Teacher

Related Resources: [Teaching Math to Young Children Practice Guide Review Protocol](#)

Panel

Douglas Frye (Chair)
University of Pennsylvania

Questions: Contact the WWC

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 Help Desk