



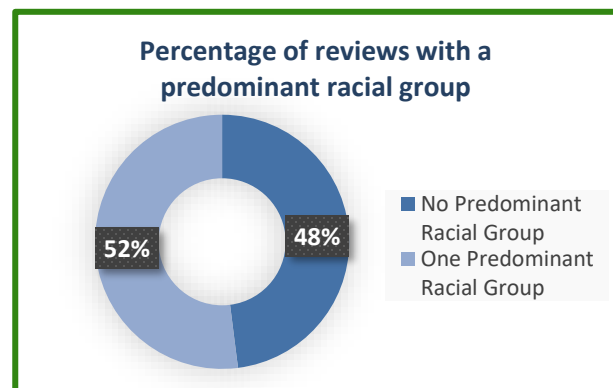
Effectiveness in Context: Tips for Identifying Evidence - Based Practices for Diverse Student Populations

While finding interventions with proven effectiveness has become easier through resources like the [What Works Clearinghouse \(WWC\)](#), identifying what works for diverse student populations can still be challenging. Knowing the context, specifically, sample demographics for research, can help bridge this gap. In a recent scan of studies that met WWC standards with and without reservations, and that had at least one statistically significant positive finding, 70 percent of the resulting WWC reviews reported race for at least a segment of the study sample. Decision-makers can use this information, when available, to help decipher how effective an intervention might be for their specific students. This tip sheet explains the importance of the demographic information provided in research studies and provides steps to identify evidence-based practices and the sample characteristics behind the evidence.



Tip 1: Understanding the demographic composition of study samples can help educators determine whether a practice is evidence-based for their student populations.

» Sample demographics tell the important story of how generalizable outcomes are to districts and schools. For the 70 percent of reviews in our scan that reported race for at least a segment of the study sample, more than half of the reviews had a sample that was predominately (greater than 50%) one racial group. This finding may cause educators to wonder if an intervention has been proven effective for the students they serve.



» More specifically, of the reviews included in the scan that reported race, 28 percent reported a study sample greater than 50 percent White. Of those, 9 percent reported a study sample greater than 75 percent White. For 24 percent of reviews in this scan, the study sample was greater than 50 percent Black. Of those, 5 percent reported a study sample greater than 75 percent Black. Only one review in this scan reported a study sample greater than 50 percent Asian, with a reported study sample, more specifically, 100 percent Asian. With respect to ethnicity, 19 percent of reviews in this scan reported a study sample greater than 50 percent Hispanic. Of those, 2 percent were entirely Hispanic.



- » No reviews in this scan reported a study sample greater than 50 percent Native American or Pacific Islander. The highest study sample reported as Pacific Islander was 41 percent, and the highest study sample reported as Native American was 14 percent.
- » These characteristics are not always available in a WWC review. Some studies do not report this information, while others do not report it for the sample of students who were analyzed for study outcomes. In the next two tips, you will learn how to locate this important information when it is available in WWC reviews.



Tip 2: Finding and comparing evidence-based practices is a key step toward assessing effectiveness in context.

- » The WWC has been a notable resource for identifying evidence-based programs and practices since 2002. There are different ways to find information on “what works” through the WWC.
- » The [Find What Works tool](#) allows you to compare the evidence of effectiveness of interventions by topic and grade (see Exhibit 1). First select a topic of interest, and then select a single intervention to view or compare several interventions.

Exhibit 1. Use Find What Works and select an intervention to view the underlying evidence

The screenshot shows the 'Find What Works' tool interface. On the left is a 'Filter by topic' sidebar with categories like Literacy, Mathematics, Science, Behavior, etc. The main area shows '456 Results filtered by: Kindergarten to 12th Grade'. Below this is a table of interventions with columns for 'Evidence of effectiveness', 'Intervention', 'Grades examined', and 'Compare'. The 'Intervention' column header is circled in blue.

Evidence of effectiveness	Intervention	Grades examined	Compare
K-12	Dual Enrollment Programs	9-12	<input type="checkbox"/>
K-12	Accelerated Middle Schools	6-8	<input type="checkbox"/>
K-12	Knowledge is Power Program (KIPP)	5-12	<input type="checkbox"/>
K-12	Reading Recovery®	1	<input type="checkbox"/>
K-12	READ 180®	4-10	<input type="checkbox"/>
K-12	Sound Partners	K-1	<input type="checkbox"/>
K-12	Caring School Community (CSC)	K-6	<input type="checkbox"/>
K-12	First Step to Success	K-3	<input type="checkbox"/>
K-12	Teach for America (TFA)	K-12	<input type="checkbox"/>



- » After selecting an intervention, you can view citations and review details for the studies, meeting [WWC standards](#), with and without reservations. You can also export review results **across intervention reports** to an Excel file (as displayed above in Exhibit 2). Once an exported file is downloaded, the file provides you access to review details across intervention reports, including the intervention delivery method, demographics, including race and ethnicity, and the effectiveness rating by outcome.

Exhibit 2. Select a citation to see review details or export results

WWC SUMMARY OF EVIDENCE FOR THIS INTERVENTION

Reading Recovery®

Reading Recovery® is a short-term tutoring intervention that provides one-on-one tutoring to first-grade students who are struggling in reading and writing. The goals of Reading Recovery® include promoting literacy skills, reducing the number of students who are struggling to read, and preventing long-term reading difficulties. Reading Recovery® supplements classroom teaching with tutoring sessions, generally conducted as pull-out sessions during the school day. Tutoring is delivered by trained Reading Recovery teachers in daily 30-minute sessions over the course of 12–20 weeks.

Reviewed Research

Beginning Reading | English Language Learners

July 2013 | EVIDENCE SNAPSHOT | INTERVENTION REPORT (259 KB) | REVIEW PROTOCOL

Outcome domain	Effectiveness rating	Studies meeting standards	Grades examined	Students	Improvement index
Alphabetics	[Rating Scale]	2 studies meet standards	1	148	21
		Pinnell, G. S., DeFord, D. E., & Lyons, C. A. (1988)	1	74	18
		Schwartz, R. M. (2005)	1	74	23
Comprehension	[Rating Scale]	2 studies meet standards	1	145	14

- » The [Reviews of Individual Studies feature](#) is useful for larger searches across WWC products, including [intervention reports](#), [practice guides](#), and [reviews of individual studies](#). This feature was used for the scan discussed in the first tip. To use this feature, first select any filters of interest. Then, select a citation to see review details for each search result.



- » Filters allow you to narrow your search by WWC study rating, topic, study design, or Every Student Succeeds Act (ESSA) evidence tier (see Exhibit 3).

Exhibit 3. Select a citation under Reviews of Individual Studies to view study details

The screenshot shows the IES WWC What Works Clearinghouse website. The main heading is "REVIEWS OF INDIVIDUAL STUDIES". Below the heading, there are two buttons: "Searching for WWC's Reviews of Individual Studies" and "Introduction to the WWC's Reviews of Individual Studies". A paragraph explains the search process: "Use this search page to find individual studies that have been reviewed by the WWC and categorized into ESSA evidence tiers. Select options from the filters or enter author/title information into the search box. The resulting list of studies connects you to more information, including whether the study has been included in a WWC publication that summarizes evidence from more than one study."

Filters include:

- Meets WWC standards with or without reservations (dropdown)
- All Designs (for studies meeting standards) (dropdown)
- All Topics (dropdown)
- All ESSA ratings (dropdown)
- Checkmark: Select studies with at least one statistically significant positive finding
- Search WWC Reviewed Studies (input field)
- Clear Selections (button)

Displaying 1 - 10 of 454 results

Navigation: First Previous 1 2 3 4 5 6 7 8 ... Next Last

Abelman, R., & Molina, A. (2001). Style over substance revisited: A longitudinal analysis of intrusive intervention. *NACADA Journal*, 21(1-2), 32-39.

Agodini, R., Harris, B., Seftor, N., Remillard, J., & Thomas, M. (2013). After two years, three elementary math curricula outperform a fourth (NCEE 2013-4019). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education.



- » Similar to the export feature available using the Find What Works tool, the Reviews of Individual Studies feature also allows you to download results to an Excel file (see Exhibit 4). While the feature appears only when you select an individual study citation, the exported file includes reviewed studies **across products**. You can then filter the file to examine review details based on WWC study rating, topic, study design, ESSA evidence tier, and sample characteristics (e.g., grade, gender, ethnicity, and race).

Exhibit 4. Examine details for a single study or export results

IES WWC What Works Clearinghouse

WWC REVIEW OF THIS STUDY

Style over substance revisited: A longitudinal analysis of intrusive intervention.
Abelman, R., & Molina, A. (2001). NACADA Journal, 21(1-2), 32-39.

RANDOMIZED CONTROLLED TRIAL EXAMINING 134 STUDENTS, GRADE PS

Review Details Findings Sample Characteristics

Reviewed: February 2016

For: Grant Competition (findings for Intrusive Intervention)

Using: Postsecondary Education Review Protocol 2.0, Review Standards 3.0

Rating: Meets WWC standards without reservations

This review may not reflect the full body of research evidence for this intervention.

MEETS WWC STANDARDS WITHOUT RESERVATIONS

AT LEAST ONE STATISTICALLY SIGNIFICANT POSITIVE FINDING

Export Print



Tip 3: Examining the sample characteristics behind the evidence is the other pivotal step for assessing effectiveness in context.

- » As discussed in the first tip, the majority of reviews in our scan included details on race for at least a segment of the population. At the same time, the scan showed that many reviews had study samples that were overrepresented by one racial group. Educators can use these details to assess how relevant outcomes are to their students.
- » To find sample characteristics, first select an individual study citation (through the Find What Works tool or the Reviews of Individual Studies feature). Then, select the sample characteristics tab. Under this tab (as displayed in Exhibit 5), you can view available sample characteristics as classified in the study. These characteristics also appear in exported files obtained by using the export icon at the top of the page.



Exhibit 5. Examine sample characteristics under each study citation or export them

The screenshot displays the 'WWC REVIEW OF THIS STUDY' page. At the top, it includes the IES WWC logo, a search bar, and 'Export' and 'Print' buttons. The main heading is 'After two years, three elementary math curricula outperform a fourth (NCEE 2013-4019)'. Below this is the citation: 'Agodini, R., Harris, B., Seftor, N., Remillard, J., & Thomas, M. (2013). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Retrieved from: <https://eric.ed.gov/?id=ED544185>'. The study is identified as a 'RANDOMIZED CONTROLLED TRIAL EXAMINING 2,045 STUDENTS, GRADES 1-2'. A dropdown menu shows 'Select a WWC Review' with 'Saxon Math Intervention Report - Primary Mathematics, 5/2017' selected. Navigation tabs include 'Review Details', 'Findings', 'Sample Characteristics' (highlighted), 'Study Details', and 'Additional Sources'. The 'Sample Characteristics' section is titled 'Characteristics of study sample as reported by study author.' and contains several charts: '17% English language learners' with an EL icon; 'Female: 49%, Male: 51%' with gender icons; 'Race' with a bar chart showing Black at 40% and Not specified at 60%; 'Ethnicity' with a bar chart showing Hispanic at 28% and Not Hispanic at 72%; 'Rural, Suburban, Urban' with a house icon; and a map of the United States highlighting states: Connecticut, Florida, Kentucky, Minnesota, Missouri, Mississippi, Nevada, New York, South Carolina, and Texas.

Obtaining the necessary information to make decisions in context can be accomplished using the tips above. However, when sample characteristics are limited or unavailable in the research, educators will have more of a challenge in making informed decisions about which educational interventions to use with their students. Rather than using racial or ethnic demographic data, they may look to other available sample characteristics like gender, percentage of English language learners, or student free or reduced-price lunch status. They may also look to other study characteristics like geographic location or community setting, which also provide context for study findings. Researchers, along with state and local school districts, can also contribute to providing this vital context to aid decision-making. They can be intentional about including demographic data and outcomes for subgroups (where applicable) in studies that their evaluation teams design. These deliberate efforts will strengthen the evidence base on which significant decisions are made.

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