

Finding Everything that Works: Accessing and Using What Works Clearinghouse Source Data

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Background:

The What Works Clearinghouse (WWC) website provides users multiple ways to access the results of reviews: (1) through publications such as intervention reports and practice guides, (2) through the Find What Works tool, and (3) through accessing data from individual studies.

In this presentation, authors will describe the different ways in which studies are selected for WWC review, the data that are available from each source of information on the WWC website, and how to fully leverage WWC data available to the public.

Objective:

This presentation is centered on two research questions:

1. How can What Works Clearinghouse users access the full range of evidence reviewed by the WWC?
2. How can this access be leveraged to identify high-quality evidence on what works, particularly in postsecondary education?

Research Design and Data Collection:

Since 2016, the WWC website has prominently featured the [Find What Works](#) tool, which allows users to filter evidence from systematic review of interventions by topic areas and explore each intervention's evidence of effectiveness and grade levels examined. Users can also compare interventions side-by-side and can download copies of WWC intervention reports.

In 2016, the WWC also released a database of studies reviewed by the WWC and of findings from studies meeting WWC standards. As of September 2019, there were 10,650 unique studies in this database, including 735 postsecondary studies. Findings from these individual studies can be accessed on the [Reviews of Individual Studies](#) section of the WWC website. Users can filter studies by WWC rating, study design, topic, or by keyword search. Users can also filter results according to whether studies have at least one statistically significant positive finding.

WWC users can also download a selection of source data from WWC reviews in the [Data from Individual Studies](#) page. This source allows users to analyze data from WWC reviews, which allows opportunities for customized syntheses or meta-analyses. These data include intervention and comparison group means, effect sizes, and p-values from individual studies, among many other variables.

Results:

In order to demonstrate the full range of evidence available to WWC users, we compared postsecondary findings from intervention reports – to all findings in the WWC source data. The

intervention reports highlights 10 postsecondary interventions, six of which have positive or potentially positive evidence of effectiveness.

The WWC individual study findings for the postsecondary topic areas (Developmental Education, Transition to College, Supporting Postsecondary Success, Career and Technical Education) collectively report on 50 interventions. Table 1 presents average effect sizes and the percentage of findings that are statistically significant by domain and purpose of the review. As shown in Table 1, intervention reports account for 235 individual findings with reported effect sizes, while there are 555 individual findings from individual study reviews. These findings by outcome domain show that the amount of evidence covered by intervention reports is well under half of all postsecondary findings documented in WWC reviews.

Conclusions:

Reviews of individual studies by the What Works Clearinghouse include findings from recently released, high-profile studies in postsecondary education. These studies are not always incorporated into intervention reports, both because the reasons why the WWC reviews studies vary, and because postsecondary interventions are not necessarily replicated across institutions and may not be prioritized for WWC intervention reports.

The Find What Works tool was designed to help WWC users sift through a large number of WWC systematic reviews of interventions, and is ideally situated to help school administrators “comparison shop” for interventions. For researchers, FWW may be less useful for those looking to leverage the full array of review data available than other tools available on the WWC website, in particular the data from individual studies. Downloading data from WWC reviews of individual studies provides maximum flexibility for summarizing evidence assessed by the WWC.

Table 1: WWC Postsecondary Mean Effect Sizes, by Outcome Domain and Purpose of Review

Outcome Domain	Purpose of Review	N	Mean	Std Dev
Academic achievement	Department-funded evaluation	2	0.0284523	0.1153258
	Grant Competition	42	0.3038891	0.3410421
	IES Performance Measure	12	0.0931522	0.1038966
	Intervention Report	21	0.0441120	0.0734619
	Single Study Review	39	0.1460321	0.2183928
Access and enrollment	Grant Competition	37	0.1989264	0.3069596
	Intervention Report	68	0.1168158	0.2438895
	Quick Review	5	0.0846981	0.0945646
	Single Study Review	71	0.0774744	0.2456368
Attainment	Grant Competition	8	0.1625206	0.5855234
	IES Performance Measure	6	0.1299306	0.0342031
	Intervention Report	26	0.9568738	0.8241145
	Single Study Review	29	0.5206864	1.6223251
Attendance (high school)	Intervention Report	4	0.0983678	0.0960747
	Single Study Review	3	0.1335007	0.0802469
College enrollment	IES Performance Measure	23	0.1087420	0.0928611
College readiness	Grant Competition	2	0.1147295	0.0693882
	Intervention Report	15	0.2981472	0.2313115
	Quick Review	2	0.0843758	0.0176428
	Single Study Review	18	0.2952801	0.3340110
Completing school	Grant Competition	7	0.8080478	0.5748365
	Intervention Report	14	0.2336284	0.0883342
	Quick Review	2	0.2847247	0.0119136
	Single Study Review	8	0.2131878	0.0769288
Credit accumulation	Grant Competition	12	0.1748239	0.1417083
	IES Performance Measure	83	0.2343381	1.3131189
	Intervention Report	14	0.1056860	0.4107911
	Single Study Review	30	0.0365746	0.0409940
Credit accumulation and persistence	Grant Competition	29	0.3771663	0.6662167
	Intervention Report	26	0.0351923	0.1077658
	Quick Review	1	0.2008180	.
	Single Study Review	39	0.0684978	0.2174720
General academic achievement (high school)	Grant Competition	8	1.0976043	1.0134907
	Intervention Report	20	0.1989694	0.1770143
	Single Study Review	7	0.1774541	0.2016007
General academic achievement - college	Intervention Report	1	-0.0240000	.
Progress in developmental education	Grant Competition	3	0.3593870	0.2522586
	IES Performance Measure	18	0.1366742	0.0776622
	Intervention Report	21	0.0185714	0.0751190
Progressing in school	Single Study Review	3	-0.0476754	0.0404589
Staying in school	Department-funded evaluation	1	0.0070312	.
	Intervention Report	5	0.4565628	0.0567133
	Single Study Review	5	0.1561288	0.4490073