

WWC QUICK REVIEW PROTOCOL, VERSION 2.0

What Works Clearinghouse (WWC) quick reviews are designed to provide education practitioners and policymakers with timely and objective assessments of the quality of the research evidence from recently released research papers and reports. These reviews focus on studies of the effectiveness of education or school-based interventions serving students in the pre-kindergarten through twelfth grade age range, as well as those in a post-secondary setting.

Eligibility Criteria

To be eligible for a WWC quick review, studies must meet BOTH of the following criteria.

1. A study must be in ONE of the following two categories:

- *A recent study whose public release is reported in a major national news source or a major education news publication.* To determine whether new education research is being mentioned in major news sources, the WWC will use a mix of strategies. The WWC will monitor some news sources directly and will also monitor a variety of news clipping and news aggregator services.
- *A study that Institute of Education Sciences (IES) officials have requested the WWC to review.* These studies may be provided to IES officials prior to public release. In these cases, the release of the quick review will be conditional on the public release of the study.

2. A study must examine the effectiveness of an education or school-based intervention that is intended to improve student outcomes.

For the purposes of this criterion, an education program is defined as a program, product, practice, or policy operating in a school or community setting that aims to improve student academic outcomes. A school-based program is defined as a program that operates in a school and aims to improve either academic or non-academic student outcomes. Programs serving students in pre-kindergarten through post-secondary settings will be considered for quick reviews.

Quick Review Methods

WWC quick reviews follow a standard one- to two-page format. The review provides a brief overview of the intervention or program being evaluated, the study's research design and methods, and the key study findings. The ratings and research summaries included in WWC quick reviews are based only on the evidence published in the report or article being reviewed. Study authors are not contacted to provide additional information about the study. Prior to publication, quick reviews are examined by peer reviewers on behalf of IES.

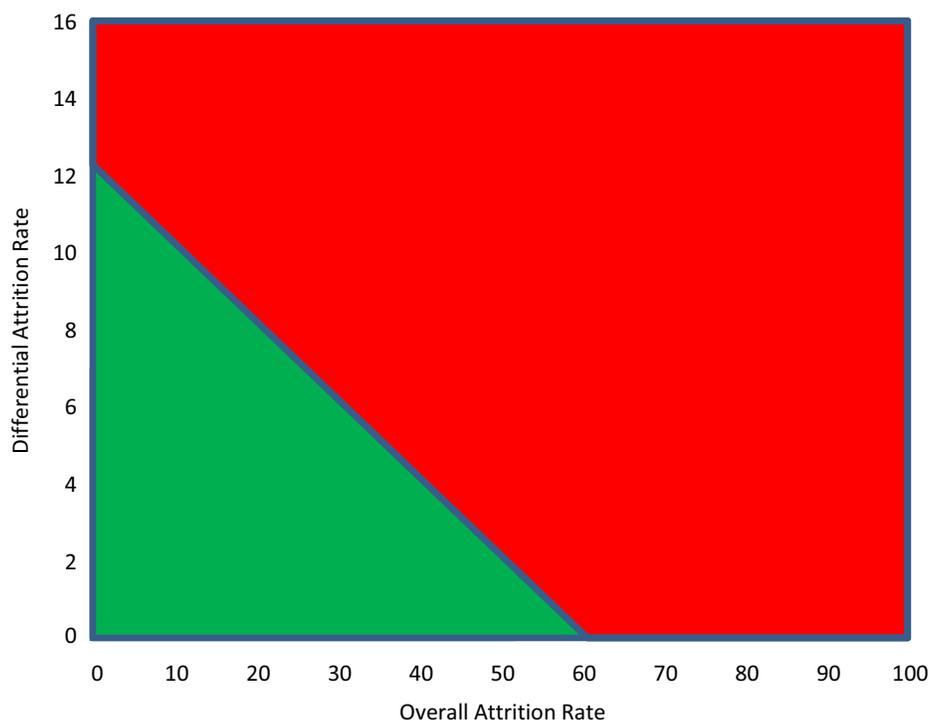
Quick reviews rate research evidence based on WWC Evidence Standards. Specifically, they follow the WWC attrition and equivalence standards described below in assigning a study rating.

Attrition

As described in the *WWC Procedures and Standards Handbook (version 2.0)*, the WWC is concerned about overall and differential attrition from the intervention and comparison groups for randomized controlled trials (RCTs), as both contribute to the potential bias of the estimated effect of an intervention. Quick reviews use the attrition bias model developed by the WWC to determine whether a study is consistent with WWC evidence standards (see Appendix A of the *Handbook*).¹ Quick reviews use the more liberal of the two attrition standards because this is the standard adopted by most WWC topic area teams.

For quick reviews, when the combination of overall and differential attrition rates cause an RCT study to fall in the green area on the diagram shown below, the attrition will be considered “low” and the level of bias acceptable. However, for RCTs with combinations of overall and differential attrition rates in the red area, the attrition will be considered “high” and potentially have high levels of bias, and therefore must demonstrate equivalence.

¹ Quick Reviews released after June 3, 2009, were reviewed using WWC version 2.0 standards. Three Quick Reviews were released under version 2.0 standards in June 2009: School-Based Mentoring, National Guard Youth Challenge and National Board Certification.



Equivalence

If the study design is an RCT with high levels of attrition or a QED, the study must demonstrate baseline equivalence of the intervention and comparison groups for the analytic sample. Quick reviews examine a wide range of studies that examine effects on a diverse set of outcomes. Therefore, the key characteristics on which baseline equivalence must be established varies across studies. These pre-intervention characteristics should include baseline versions of the key outcome measures (collected prior to the intervention) or student characteristics that are likely to be highly correlated with these outcomes. They should also include key demographic characteristics that are likely to be correlated with key outcome measures, such as race/ethnicity or gender.

Groups are considered equivalent if the reported differences in pre-intervention characteristics of the groups are less than or equal to one-quarter of the pooled standard deviation in the sample, regardless of statistical significance. However, if differences are greater than 0.05 standard deviations and less than or equal to one-quarter of the pooled standard deviation in the sample, the analysis must control analytically for the individual-level pre-intervention characteristic(s) on which the groups differ. If pre-intervention differences are greater than 0.25, the study is not consistent with standards. In addition, if there is evidence that the populations were drawn from very different settings (such as rural versus urban, or high-SES versus low-SES), these settings may be deemed too dissimilar to provide an adequate comparison.

(Updated April 2009)

Rating

A study that is the subject of a quick review can receive one of three ratings:

- *Consistent with WWC evidence standards.* This rating is used for randomized controlled trials that do not have problems with randomization or sample attrition.
- *Consistent with WWC evidence standards with reservations.* This rating is used for quasi-experimental studies and randomized controlled trials with high attrition that have demonstrated equivalence and are consistent with other WWC evidence standards.
- *Not consistent with WWC evidence standards.* This rating is used for studies that provide insufficient evidence of causal validity.

Statistical and analytical issues

Quick reviews report the findings as reported by the authors and do not adjust estimates to correct for multiple comparisons or clustering. If the study authors do not make these adjustments, this can be raised as a caution in a quick review; it does not affect the study rating.