

Identifying Evidence-based Interventions (EBIs)

Evidence is a powerful tool to identify ways to address education challenges and build knowledge on what has worked in specific educational settings and with identified student groups. The *Elementary and Secondary Education Act* (ESEA), as amended by the *Every Student Succeeds Act* (ESSA), emphasizes the use of evidence-based activities, strategies, and interventions (collectively referred to as “interventions”). Section 8101(21)(A) of the ESEA defines an evidence-based intervention as being supported by strong evidence, moderate evidence, promising evidence, or evidence that demonstrates a rationale (see text box below). Some ESEA programs encourage using “evidence-based” interventions (EBI) meeting one of the four tiers, while others, including several competitive grant programs and Title I, Section 1003 funds, require “evidence-based” interventions that meet higher levels of evidence.

Difference Between Evidence-based and Research-based Interventions

Too often, the terms research-based and evidence-based are used interchangeably. The explanation from Dr. Sally Shaywitz, Co-Director of the Yale Center for Dyslexia and Creativity, assists educational leaders in determining the difference between the two terms.

- **Research-based** means there are theories behind it, but that the theories are not always proven true. There is no evidence in the research proving efficacy.
- **Evidence-based** means there is efficacy to back it up:
 - the program was studied by researchers who were not involved in creating the program;
 - the researchers cannot stand to profit from the outcomes'
 - the program was compared to another type of program or a different kind of instruction; and
 - the effect sizes were reported and revealed a significantly greater improvement than any improvement in the comparison condition.

Understanding the ESSA Tiers of Evidence

The [What Works Clearinghouse](#) (WWC), a part of the Institute of Education Science, is one source for determining which programs and practices have evidence of effectiveness. The WWC reviews research designed to answer the question, “What works in education?” Educators can visit the WWC site and use the filters to locate reviews specific to content-related skills, programs, and guides. Note: EBIs meeting Tier 4 does not qualify for support with Section 1003 funds.

ESSA Tiers of Evidence

DETERMINANT	TIER 1: STRONG EVIDENCE	TIER 2: MODERATE EVIDENCE	TIER 3: PROMISING EVIDENCE	TIER 4: DEMONSTRATES A RATIONALE
 Study Design	Well-designed and implemented <u>experimental</u> study that meets WWC standards <u>without</u> reservations*	Well-designed and implemented <u>quasi-experimental</u> study that meets WWC standards <u>with</u> reservations**	Well-designed and implemented <u>correlational</u> study that statistically controls for selection bias	Well-defined logic model based on rigorous research
 Study Results	Statistically significant positive effect on a relevant outcome	Statistically significant positive effect on a relevant outcome	Statistically significant positive effect on a relevant outcome	An effort to study the effects of the intervention is planned or currently underway
 Related Studies	No strong negative findings from experimental or quasi-experimental studies	No strong negative findings from experimental or quasi-experimental studies	No strong negative findings from experimental or quasi-experimental studies	Not applicable
 Sample Size and Setting	At least 350 participants conducted in more than one district or school	At least 350 participants conducted in more than one district or school	Not applicable	Not applicable
 Match	Similar population <u>and</u> setting to the investigating district	Similar population <u>or</u> setting to the investigating district	Not applicable	Not applicable

* Meets WWC standards without reservations means in most cases that a study was a randomized controlled trial (RCT) that was deemed by experts to be well-designed and well-implemented and that did not have problems with attrition.

** Meets WWC standards with reservations means that a study has some potential issues that require caution. It may be a strong quasi-experimental study with comparison groups that are similar at the baseline or an RCT that is not as well implemented or has issues with attrition.

Source: Regional Educational Laboratory Midwest, American Institutes for Research and What Works Clearinghouse | Institute for Education Sciences ¹⁶

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Evidence for ESSA (<https://www.evidenceforessa.org/>) is a different website that was developed to give educators “a simple, straightforward way to identify programs and practices that meet the ESSA evidence standards.” It provides information such as practical descriptions, costs, and the associated ESSA tier of evidence for each evidenced-based intervention and practice (EBIPs). Major search categories include reading, mathematics; social-emotional; attendance; science; and writing.

Federally-Identified: School Improvement Grants Requirements

A school that is identified for comprehensive support and improvement (CSI), targeted support and improvement(TSI), or additional targeted support and improvement (ATSI) must implement evidence-based interventions as part of the school’s improvement plan. Such evidence-based interventions (EBIs) supported with Section 1003 school improvement funds must be based on **strong, moderate, or promising** evidence of a statistically significant effect on improving student outcomes or other relevant outcomes, as defined in the *Elementary and Secondary Education Act* (ESEA) of 1965, Section 8101(21)(A)(i).

- The school must, in its application, identify and include evidence-based interventions.
- Depending on the source, EBIs may be referred to by other terms such as evidence-based practices (EBPs) or evidence-based interventions and practices (EBIPs).

Additionally, in order to receive Section 1003 funds, the local education agency (LEA) must describe how the LEA will support the development and implementation of the school’s comprehensive support and improvement plan for each school identified for comprehensive support and improvement and/or identified for targeted support and improvement.

Inclusion in Continuous School Improvement Plans

Supporting the need to address the examination of the processes surrounding student achievement, the U.S. Department of Education’s [§1116\(b\) \(3\) \(A\)](#) and the Standards of Accountability (SOA’s). [8VAC20-180-10](#), share aspects of the features that should be considered for inclusion in a quality school improvement plan. Additionally, both agencies require that the school’s comprehensive school improvement plan encompass all areas where students fail to meet requirements and address issues in a scientific and highly structured way.

Per the Every Student Succeed Act (ESSA), section 1111(d)(2)(B), divisions with federally-identified schools are also required to monitor:

- the implementation of the school improvement plans;
- the implementation of the evidence-based interventions (EBIs) within the school’s approved school improvement grant (SIG) application; and
- the impact on the progress made by the school(s) towards improving student performance.

To ensure the most significant potential for improvement on student outcomes and organizational performance, the comprehensive school improvement plans (CSIPs) drafted by divisions and schools must leverage evidence-based practices and interventions (EBIPs). Divisions and schools should first determine their needs and priorities via a comprehensive needs assessment (CNA). Then, the division and schools should identify solutions to address those needs and priorities that are backed by empirical evidence and that the division and schools have the capacity to implement with fidelity.

Overall, it is important to note that a school identified for comprehensive or targeted support and improvement must continue implementing evidence-based interventions until it exits its status as an identified school. However, a school may modify or replace the interventions it is implementing following the end of support from Section 1003. Still, it may not stop implementing required interventions until it is no longer identified for comprehensive or targeted support and improvement.