Ohio | Department of Education

Defining ESSA Levels of Evidence: An Overview

The purpose of this document is to provide a brief overview of how ESSA differentiates between four levels of evidence-based strategies. More information about using evidence-based strategies is available on the Department's Empowered by Evidence webpage.

ESSA (Section 8002) and the [U.S. Department of Education's Non-Regulatory Guidance: Using Evidence to Strengthen Education Investments](#) outline four levels of evidence. Level 1 represents the strongest level of evidence and, therefore, the strongest level of confidence that a strategy will work. The table below includes ESSA's definition for each of the four levels, along with a practical interpretation of each level.

	ESSA definition	What does it mean?
Level 1	Strong evidence from at least one well-designed and well-implemented experimental study.	Experimental studies have demonstrated that the strategy improves a relevant student outcome (for example, reading scores or attendance rates). Experimental studies (Random Control Trials) are those in which students are randomly assigned to treatment or control groups, allowing researchers to speak with confidence about the likelihood that a strategy *causes* an outcome. Well-designed and well-implemented experimental studies meet the What Works Clearinghouse evidence standards *without* reservations. The research studies use large, multi-site samples. No other experimental or quasi-experimental research shows that the strategy negatively affects the outcome. Researchers have found that the strategy improves outcomes for the specific student subgroups that the district or school intends to support with the strategy.

Level 2	Moderate evidence from at least one well-designed and well-implemented quasi-experimental study.	Quasi-experimental studies have found that the strategy improves a relevant student outcome (for example, reading scores or attendance rates). Quasi-experimental studies (Regression Discontinuity Design) are those in which students have not been randomly assigned to treatment or control groups, but researchers are using statistical matching methods that allow them to speak with confidence about the likelihood that a strategy *causes* an outcome. Well-designed and well-implemented quasi-experimental studies meet the What Works Clearinghouse evidence standards *with* reservations. The research studies use large, multi-site samples. No other experimental or quasi-experimental research shows that the strategy negatively affects the outcome. Researchers have found that the strategy improves outcomes for the specific student subgroups that the district or school intends to support with the strategy.
Level 3	Promising evidence from at least one well-designed and well-implemented correlational study.	Correlational studies (for example, studies that can show a *relationship* between the strategy and outcome but cannot show *causation)* have found that the strategy likely improves a relevant student outcome (such as reading scores or attendance rates). The studies do not have to be based on large, multi-site samples. No other experimental or quasi-experimental research shows that the strategy negatively affects the outcome. A strategy that would otherwise be considered Level 1 or Level 2, except that it does not meet the sample size requirements, is considered Level 3.
Level 4	Demonstrates a rationale based on high-quality research findings or positive evaluation that such activity, strategy or intervention is likely to improve student outcomes or other relevant outcomes.	Based on existing research, the strategy cannot yet be defined as a Level 1, Level 2 or Level 3. However, there is good reason to believe — based on existing research and data — that the

		strategy could improve a relevant student outcome.
		Before using a Level 4 strategy, districts should: • Explore Existing Research: Why do we believe this strategy will meet our needs? • Develop a Logic Model: How will the strategy improve student outcomes? • Plan to Evaluate: How will we know that the strategy is improving student outcomes?