

Evidence-Based Interventions in ESSA

Background of Evidence-Based Interventions

Since the inception of the Elementary and Secondary Education (ESEA) act, efforts to define best practices for effective use of funds have been made. In its earliest inception, the ESEA required interventions to be grounded in research but did not rigorously define what “research” had to entail. When amended by NCLB, the law further stipulated interventions were to be supported by “scientifically-based research.” Finally, the Act as amended by ESSA requires or recommends interventions be supported on the basis of evidence and stipulates specifically four tiers of such evidence-based support (Section 8101(21)(A)).

Tiers of Evidence-Based Interventions

The tiers of evidence-based interventions defined in ESSA describe a continuum of methodological rigor with the first tier providing the most rigorous, statistically significant evidence of positive student outcomes. The second and third describe progressively less rigorous but still statistically significant evidence of the same. The fourth tier provides a clear rationale that the intervention could lead to positive student outcomes and is undergoing continuing efforts to examine the impact of the intervention in question. The table below, adapted from [Chiefs For Change](#) outlines in greater detail the four tiers of evidence-based support.

<p>Category One: “Demonstrates statistically significant effect on student outcomes or other relevant outcomes.”</p> <p><i>Required for funding under School Improvement (Sec. 1003). A comparison table on page 3 provides information on requirements across all Federal Programs in the CRP.</i></p>			<p>Category Two: “Demonstrates a rationale based on high quality research findings or positive valuation that such activity, strategy, or intervention is likely to improve student outcomes or other relevant outcomes.”</p>
<p>Tier 1: Strong Evidence</p>	<p>Tier 2: Moderate Evidence</p>	<p>Tier 3: Promising Evidence</p>	<p>Tier 4: Strong Theory Under Evaluation</p>
<p>Supported by at least one well-designed, well-implemented experimental study (randomized-control trials).</p>	<p>Supported by at least one well-designed, well-implemented quasi-experimental study (matched groups, interrupted time series, et al.)</p>	<p>Supported by at least one well-designed, well-implemented correlational study with statistical controls for selection bias</p>	<p>Includes ongoing efforts to establish the effectiveness of the intervention and bolster its evidence tier.</p>

A note on the meaning of “well-designed, well-implemented.”

While there are many qualities of research studies that must be considered in general, some aspects of a well-designed, well-implemented study that should be considered include, but are not limited to:

- 1) Prevalence of findings: the findings in the study at hand are consistent with other studies of the same intervention and/or not overridden by significant negative effects from other studies that meet the same tier of rigor.
- 2) Sample size: the findings in the study are from a large population across several sites or trials to reduce sampling error to sufficiently small margins to determine statistical significance, and
- 3) External validity: there are sufficient similarities between the setting and sample and the population for which the intervention is being selected (e.g. urban high school sample would be more externally valid for an intervention selected for an urban high school population).

In general and when possible, educators and policy makers should consider the broadest body of evidence available when considering and selecting interventions and not rely solely on the minimum requirement of one well-designed and implemented study established in law. Strength of justification even within tiers of rigor can differentiate the promise of competitive funding applications.

Requirements for Evidence-Based Interventions

Interventions carried out and supported by funding from Title I, Section 1003 (School Improvement) must have strong, moderate, or promising evidence supporting them. All other activities under Titles I-IV may use all four tiers of evidence as support for selected interventions. The following resources can assist districts in locating research to provide a more rigorous evidence base for funding applications:

- The What Work Clearinghouse provides topical practice guides grounded in research as well as reviews of individual studies. <https://ies.ed.gov/ncee/wwc/>
- Google Scholar provides a simple way to broadly search for scholarly literature. <https://scholar.google.com/>
- ERIC is an internet-based digital library of education research and information sponsored by the Institute of Education Sciences (IES) of the USDOE. ERIC provides access to bibliographic records of journal and non-journal literature from 1966 to the present. <https://eric.ed.gov/>

Additional details on the federal grants requiring evidence-based support can be found in the comparison chart on the next page as well as at [Results For America](#).

Evidence-Based Interventions in Federal Funding

Federal Program	Do LEAs submit research on evidence tier for RIDE to approve funds?	Are LEAs required to spend funds on evidence-based interventions?	Expectations for use of evidence-based practices (EBP) in this program <i>(For specific questions, see your RIDE program specialist as outlined in your federal program document library in AcceleGrants.)</i>
Title IA	No	No - however, in order to receive funds, LEAs must comply with Sec. 1116 requirements	Under Sec. 1116, every LEA receiving Title I funds is required to annually evaluate the content and effectiveness of its written parent/family engagement policy. The LEA must use the results of the evaluation to design evidence-based strategies for more effective parental involvement, and to revise, if necessary, its parent/family engagement policy.
School Improvement (Title I – 1003)	Yes	Yes – part of the evaluation of funds application is the use of EBP and Tiers	All school improvement activities must be evidence-based at tiers 1-3.
Title II	No	Yes - LEAS must consider evidence-based research when selecting a strategy	PD programs must be Evidence-based with a minimum of one evidence-based research study that aligns with one of the Tiers (I-IV) for each intervention budgeted with Title II; documentation should be saved at the district level and be submitted by the LEA at the request of the SEA
Title III	No	No - Title III does not explicitly name EBP and tiers.	A related concept of <i>highest available level of evidence</i> is required for professional development. Also, Title III funds must support “effective” approaches, methodologies, and language instruction educational programs (LIEPs). The state and LEAS should consider “rigorous, relevant research” in determining effectiveness of LIEPs.
Title IVA	No	No	EBP are not required for every activity but are included in the law in 3 sections under safe and healthy students. Activities may include evidence-based (1) drug and violence prevention, (2) trauma-informed practices, (3) and strategies to reduce exclusionary discipline practices, if the State determines that such evidence is reasonably available.
21 st Century (Title IVB)	No	No	EBP are not strictly required, but the law includes language allowing for their use. Subgrantees can include EBP in the initial 5-year application. If appropriate, program and activities shall be based on evidence-based research.
IDEA	No	No	Coordinated Early Intervening Services/CEIS for general education students K-12 and Specific Learning Disability Criteria use the NCLB language of “scientifically based”

Tiers of Evidence-Based Interventions

Tier 1 - Strong Evidence (Experimental Study)

- Randomized control experiment (i.e., has treatment and control group, uses random assignment)
- Large sample - at least 350 students or other units
- More than one site (school, district, or state)
- Produces a statistically significant, positive outcome
- Relevant to your context (i.e., similar student population/setting)

Tier 2 - Moderate Evidence (Quasi-Experimental Study)

- Quasi-experimental design (i.e., has treatment and control group, **NOT assigned randomly**)
- Large sample - at least 350 students or other units
- More than one site (school, district, or state)
- Produces a statistically significant, positive outcome
- Relevant to your context (i.e., similar student population/setting)

Tier 3 - Promising Evidence (Correlational Study)

- Correlational study (i.e., examines relationship between treatment and outcome, does not establish causation)
- Uses statistical control for selection bias
- Produces a statistically significant, positive outcome

Tier 4 - Demonstrates a Rationale (Logic Model + Research + Effort to Study)

- Logic model (i.e., identifies key components of proposed intervention, describes relationship between components and relevant outcomes)
- Relevant research or intervention suggest improving relevant outcomes is **likely**
- Includes an effort to study the impact of the intervention (or points to one happening elsewhere)
- Consider including fidelity of implementation

