



# Evidence-Based Interventions

## Definition of Evidence-Based and Levels of Evidence:

Evidence-based interventions are practices or programs that have strong or moderate evidence to show that they are effective at producing results and improving outcomes when implemented. The kind of evidence described in ESSA has generally been produced through formal studies and research. Under ESSA, there are four tiers, or levels, of evidence:

### ❖ Tier 1 – Strong Evidence:

- Highest level of evidence
- Supported by one or more well-designed and well-implemented randomized control experimental studies
- Intervention leads to favorable results

### ❖ Tier 2 – Moderate Evidence:

- Supported by one or more well-designed and well implemented quasi-experimental study
- Controlled experiment was conducted with a treatment group
- Intervention shows statistically significant and positive effect on the outcome

### ❖ Tier 3 – Promising Evidence:

- Not as strong as evidence in an experiment
- Supported by one or more well-designed and well-implemented correlational studies (with statistical controls for selection bias)
- Formal study if a relationship exists between intervention and a given outcome
- Intervention shows a statistically significant and positive effect on the outcome

### ❖ Tier 4 – Demonstrates a Rationale:

- Practices that have a well-defined logic model or theory of action
- Supported by research in the field
- Some efforts are underway by a state, district, or outside research organization to determine the effectiveness of o no formal evidence exists to prove interventions are successful

## Why:

Evidence-based interventions are selected and implemented in order to address student needs within the district and improve student outcomes.

## Using Evidence Under ESSA:

Ways to strengthen the effectiveness of ESEA investments include identifying local needs, selecting evidence-based interventions that districts and schools have the capacity to implement, planning for and then supporting the intervention, and examining and reflecting upon how the intervention is working. These steps, when taken together, promote continuous improvement and can support better outcomes for students.

1. Identify local needs by collecting and analyzing data, conducting a gap analysis, consulting with stakeholders, and identifying root causes
2. Determine if an intervention, that is supported by strong or moderate evidence, is differentiated, appropriate, and relevant to the identified needs; also determine staff capacity to implement the researched interventions
3. Develop a plan for implementation
4. Implement the intervention and monitor quality
5. Examine outcomes (after about 6 weeks of use) and reflect on goals; use that data to make decisions



## Resources for Selecting Evidence-Based Interventions:

- [MT ESSA](#)
- [What Works Clearinghouse \(WWC\)](#)
- [Institute of Education Sciences \(IES\) Guides](#)
- [Evidence for ESSA](#)
- [Results First Clearinghouse Database](#)
- [Center On Instruction](#)
- [National Implementation Research Network \(NIRN\)](#)
- [Best Evidence Encyclopedia](#)
- [Synthesis of Evidence Resources](#)
- National Center on Intensive Interventions (NCII)
  - [Academic Intervention Tools Chart](#)
  - [Behavioral Interventions Tools Chart](#)
- Implementation data

## System vs. Program Interventions:

System (Examples):

- MTSS
- Instructional Framework
- Early Warning System (EWS)

Program (Examples):

- Reading Mastery
- System 44
- SRA

## Terms:

+ Capacity - Answer the following questions to determine LEA capacity:

- *Is there enough funding to support the requirements to implement with fidelity?*
- *Is there enough staff to implement the intervention with fidelity?*
- *Do current staff have the skills necessary to implement the intervention with fidelity?*
- *Is there cooperation and support from stakeholders (i.e., educators, parents, school board, administration, and support staff) for implementing the intervention?*