Agenda

- Overview of Evidence-based Interventions
- Five Steps for Implementing an Intervention
- Research-based vs. Evidence-based
- The Four ESSA Evidence Levels
Objectives

- By the end of this training, you will be able to...
  - describe the characteristics of an evidence-based intervention.
  - recognize evidence-based language.
  - define the four ESSA evidence levels.
Evidence-based References

(21) **EVIDENCE-BASED.**—

(A) **IN GENERAL.**—Except as provided in subparagraph (B), the term “evidence-based”, when used with respect to a State, local educational agency, or school activity, means an activity, strategy, or intervention that—

(i) demonstrates a statistically significant effect on improving student outcomes or other relevant outcomes based on—

(I) strong evidence from at least 1 well-designed and well-implemented experimental study; 
(II) moderate evidence from at least 1 well-designed and well-implemented quasi-experimental study; or 
(III) promising evidence from at least 1 well-designed and well-implemented correlational study with statistical controls for selection bias; or 
(ii)(I) 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; and

(II) includes ongoing efforts to examine the effects of such activity, strategy, or intervention.
An Overview: Evidence-based Interventions

- The Elementary and Secondary Education Act (ESEA) calls for the use of evidence-based activities, strategies and interventions to accelerate student learning.

- The Every Student Succeeds Act (ESSA) establishes a framework with tiers of evidence for consideration and by use of school districts when selecting evidence-based activities, strategies and interventions—especially related to school improvement.
Must Do & Must Be Evidence-based

- Federal:
  - All CSI/TSI school improvement plans must include evidence-based interventions aligned with the results of the schools’ needs assessments.
  - When using school improvement funds (Section 1003), the top three levels of the evidence-based definition apply.
  - Title I, Part A parent and family engagement provisions require evidence-based strategies, but all four levels of evidence apply here.

- State:
  - CSI turnaround plans must include evidence-based interventions.
  - TSI school improvement plan must include evidence-based interventions.
Five Steps for Implementing an Intervention

- The following steps, when taken together, promote continuous improvement and can support better outcomes for students:
  - Identify Local Needs
  - Select Relevant, Evidence-based Interventions
  - Plan for Implementation
  - Implement
  - Examine, Reflect and Measure the Results
Research-based vs. Evidence-based

Research-based

Evidence-based

founded in an accumulation of facts that have been obtained by research.

founded in the demonstration of statistically significant effect on improving student outcomes.
Characteristics of an Evidence-based Activity, Strategy, Intervention

- Supported by a preponderance of scholarly literature
- Has been studied using a study design that measures the impact of the intervention
- Study results are supported by statistical analysis
- Research compares the achievement of a control group to an intervention group
- May be based on long-term changes in archival data
- Is not overridden by more recent or more rigorous research
The Sniff Test
This book:

- links the biggest ever research project on teaching strategies to practical classroom implementation
- champions both teacher and student perspectives and contains step by step guidance including lesson preparation, interpreting learning and feedback during the lesson and post lesson follow up
- offers checklists, exercises, case studies and best practice scenarios to assist in raising achievement
- includes whole school checklists and advice for school leaders on facilitating visible learning in their institution
- now includes additional meta-analyses bringing the total cited within the research to over 900
- comprehensively covers numerous areas of learning activity including pupil motivation, curriculum, meta-cognitive strategies, behaviour, teaching strategies, and classroom management.
Recognizing Evidence-based Statements

Research-based Statement

“This intervention is rooted in a combination of Skinner’s operant conditioning theory and Bandura’s self efficacy theory.”

Evidence-based Statement

“A 2015 study showed that this intervention had a statistically positive impact on student outcomes when the intervention group was compared to the control group.”
Activity

- Take a moment to practice the sniff test using the cards available in the resources download for this webinar.
  - With your team or on your own, review each of the eight cards available in the packet.
  - Determine whether or not each research-based statement is also an evidence-based statement.
  - Take a moment to defend your answer.

- Pause the webinar now.
  - When you are finished, resume playing to see the correct answers.
Activity Answers: Is it Evidence-based?
The Four ESSA Evidence Levels
What are the levels?

ESSA breaks the definition of evidence-based into four distinct levels. Each level reflects the rigor of the study design used to study the intervention.

Why do the levels matter?

Federal funding sources will be tied to different evidence levels. For example, school improvement funds may only be spent on interventions supported by Level I, Level II or Level III evidence.
The Four ESSA Evidence Levels

- **Level IV**: A rationale if:

  - Logic model informed by evaluation suggests that the intervention proves a student outcome.
  - Evidence or higher overlapping.

- **Level III**: Assuming evidence statistical controls for positive effect of some or related intervention or is significant and other studies.

- **Level II**: Evidence for or without positive effect of intervention or related.

- **Level I**: If:

  - Effect of tested.
  - Significance.
Thank you for participating!

Non Regulatory Guidance: Using Evidence to Strengthen Educational Investments

U.S. Department of Education

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If you have questions regarding evidence-based interventions, please contact the District 180 branch in the Office of Continuous Improvement and Support at (502) 564-2116.