Evidence Considerations, Resources, and Criteria for Levels

While the ESEA definition of “evidence-based” states that “at least one study” is needed to provide strong evidence, moderate evidence, or promising evidence for an intervention, SEAs, LEAs, and other stakeholders should consider the entire body of relevant evidence. Additionally, when available, interventions supported by higher levels of evidence, specifically strong evidence and moderate evidence, which describe the effectiveness of an intervention through causal inference, should be prioritized. Stakeholders should also consider whether there is evidence that an intervention has substantially improved an important education outcome (e.g., credit accumulation and high school graduation). The What Works Clearinghouse (WWC), an initiative of ED’s Institute of Education Sciences, is a helpful resource for locating the evidence on various education interventions. For a longer discussion of key steps and considerations for decision-making, including but not limited to the use of evidence-based interventions, see Part I of this guidance.

The criteria below represent the Department’s recommendations for identifying evidence at each of the four levels in ESEA (also summarized in Table 1 on page 12).

- **Strong Evidence.** To be supported by strong evidence, there must be at least one well-designed and well-implemented experimental study (e.g., a randomized control trial) on the intervention. The Department considers an experimental study to be “well-designed and well-implemented” if it meets WWC Evidence Standards without reservations or is of the equivalent quality for making causal inferences. Additionally, to provide strong evidence, the study should:
  1) Show a statistically significant and positive (i.e., favorable) effect of the intervention on a student outcome or other relevant outcome;
  2) Not be overridden by statistically significant and negative (i.e., unfavorable) evidence on the same intervention in other studies that meet WWC Evidence Standards with or without reservations or are the equivalent quality for making causal inferences;
  3) Have a large sample and a multi-site sample; and
  4) Have a sample that overlaps with the populations (i.e., the types of students served) AND settings (e.g., rural, urban) proposed to receive the intervention.

- **Moderate Evidence.** To be supported by moderate evidence, there must be at least one well-designed and well-implemented quasi-experimental study on the intervention. The Department considers a quasi-experimental study to be “well-designed and well-implemented” if it meets WWC Evidence Standards with reservations or is of the
equivalent quality for making causal inferences. Additionally, to provide moderate evidence, the study should:

1) Show a statistically significant and positive (i.e., favorable) effect of the intervention on a student outcome or other relevant outcome;
2) Not be overridden by statistically significant and negative (i.e., unfavorable) evidence on that intervention from other findings in studies that meet WWC Evidence Standards with or without reservations or are the equivalent quality for making causal inferences;
3) Have a large sample and a multi-site sample; and
4) Have a sample that overlaps with the populations (i.e., the types of students served) OR settings (e.g., rural, urban) proposed to receive the intervention.

❖ Promising Evidence. To be supported by promising evidence, there must be at least one well-designed and well-implemented correlational study with statistical controls for selection bias on the intervention. The Department considers a correlational study to be “well-designed and well-implemented” if it uses sampling and/or analytic methods to reduce or account for differences between the intervention group and a comparison group. Additionally, to provide promising evidence, the study should:

1) Show a statistically significant and positive (i.e., favorable) effect of the intervention on a student outcome or other relevant outcome; and
2) Not be overridden by statistically significant and negative (i.e., unfavorable) evidence on that intervention from findings in studies that meet WWC Evidence Standards with or without reservations or are the equivalent quality for making causal inferences.

❖ Demonstrates a Rationale. To demonstrate a rationale, the intervention should include:

1) A well-specified logic model that is informed by research or an evaluation that suggests how the intervention is likely to improve relevant outcomes; and
2) An effort to study the effects of the intervention, ideally producing promising evidence or higher, that will happen as part of the intervention or is underway elsewhere (e.g., this could mean another SEA, LEA, or research organization is studying the intervention elsewhere), to inform stakeholders about the success of that intervention.

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1 These steps largely draw from existing decision-making frameworks and take place as part of a continuous cycle.
2 See here for the Department’s policy letter on stakeholder engagement and here for a communication and engagement rubric for information on how they can be engaged in meaningful ways.