

# Transformative Research in the Education Sciences

**Erin Higgins, Ph.D. & Emily Doolittle, Ph.D.**

National Center for Education Research

# Importance of Innovation

- Project should result in new scientific paradigms, novel and more effective approaches to education practice or policy, or transformative technologies that substantially increase learner outcomes.
- Innovation may be technical, conceptual, or a combination of both.

# Potential for a Major Impact

- Applications must address the idea's potential for producing a *major impact* in an area relevant to the IES mission through innovative or unconventional research.
- For this competition, IES defines *major impact* as an unusually broad and meaningful improvement in learner outcomes.

# Budget and Duration of a Transformative Research Project

- 3 year maximum duration
  - Possibility of follow up funding at a later date
- \$3 million maximum budget

# Requirements

- Education Outcomes – Your proposed research must address and measure outcomes of learners at any grade or education level between prekindergarten through postsecondary and adult education that are meaningful for education stakeholders.
- Project Narrative – Your application must not exceed 18 pages and must include 5 sections: Significance of the Transformative Idea, Research Approach, Deliverables and Metrics, Personnel, Resources
- Dissemination History and Plan must be included in Appendix A.

# Deliverables and Metrics Plan

- Identify and describe a set of project deliverables and high quality qualitative and quantitative metrics that can be generated by the final year of the grant to inform the extent to which the project is achieving its intended objectives.
- If the research team decides to apply for another round of funding, this set of deliverables and metrics will be used as evidence that the project is meeting its objectives and has the potential to make an unusually broad and meaningful impact on learner outcomes.

# Follow the SEER Principles When Applicable

- Pre-register studies
- Make findings, methods, and data open
- Identify interventions' core components
- Document treatment implementation and contrast
- Analyze interventions' costs
- Focus on meaningful outcomes
- Facilitate generalization of study findings
- Support scaling of promising results

# Review Process

- Step 1: Primary reviewers complete written evaluations of the application.
- Step 2: IES calculates an average Significance of the Transformative Idea score and rank orders applications.
- Step 3: For those applications with the most competitive Significance of the Transformative Idea scores, IES will prepare a preliminary rank order of applications based on overall scientific merit.

# Review Process (continued)

- Step 4: Full panel will discuss the applications deemed to have the most transformative potential and to have the highest scientific merit as determined by preliminary rank ordering.
  - Panelists may nominate any application that merits full panel review but that would not have been included in the full panel meeting based on its preliminary rank order

Please submit your questions using the Teams chat