

NATIONAL CENTER FOR EDUCATION RESEARCH

Assistance Listing Number (ALN): 84.305A

# Education Research Grants Program

## Request for Applications

<b>Letter of Intent</b>	June 27, 2024	<a href="https://iesreview.ed.gov/LOI/LOISubmit">https://iesreview.ed.gov/LOI/LOISubmit</a>
<b>Application Package Available</b>	May 30, 2024	<a href="https://www.grants.gov">https://www.grants.gov</a>
<b>Application Deadline</b>	11:59:59 Eastern Time on September 12, 2024	<a href="https://www.grants.gov">https://www.grants.gov</a>
<b>Possible Start Dates</b>	July 1, 2025–September 1, 2025	

See the companion IES Application Submission Guide ([https://ies.ed.gov/funding/submission\\_guide.asp](https://ies.ed.gov/funding/submission_guide.asp)) for guidance on preparing and submitting applications through Grants.gov.

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## Part I: Overview and Requirements

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### A. Purpose of the Education Research Grants Program

Through its National Center for Education Research (NCER), the Institute of Education Sciences (IES) supports a program of field-initiated research to build knowledge and understanding of education practice and policy. IES was established by the Education Sciences Reform Act of 2002 (ESRA – P.L. 107-279), in part to improve academic achievement and attainment and access to educational opportunities for all learners (ESRA, § 111.b.1.B), with a particular focus on low-performing learners (ESRA, § 115.a.1) and those lacking access to high-quality educational opportunities (ESRA, § 115.a.2.A and 115.a.2.B). In carrying out this mission, we are committed to ensuring that our work is objective, secular, neutral, and nonideological; free of partisan political influence; and free of racial, cultural, gender, or regional bias (ESRA, § 111.b.2.B).

In this request for applications (RFA), NCER invites applications for research to help improve education experiences and outcomes for learners in the United States. All applicants are expected to incorporate the IES Standards for Excellence in Education Research (SEER; <https://ies.ed.gov/seer/>) into their proposed research, as applicable. SEER encourages rigorous education research that is transparent, actionable, and focused on meaningful outcomes by recommending that researchers:

- Pre-register studies.
- Make findings, methods, and data open.
- Address inequities in learners' opportunities, access to resources, and outcomes.
- Identify interventions' components.
- Document treatment implementation and contrast.
- Analyze interventions' costs.
- Use high-quality outcome measures.
- Facilitate generalization of study findings.
- Support scaling of promising interventions.

NCER's Education Research Grants program supports both basic and applied research that builds scientific knowledge and theory of teaching, learning, and organizing education systems; yields outcomes and products that are useful to learners and the educators and education institutions that serve them; and informs stakeholders about the cost and practical benefits and effects of programs, practices, and policies on relevant outcomes for learners across the lifespan (ESRA, § 112.1).

As part of this program, NCER funds the development and validation of assessments to support education research and practice; exploratory research to build conceptual frameworks and generate hypotheses to guide future applied research; the development and pilot testing of innovative programs, practices, and policies; and impact studies—initial efficacy, replication, and follow-up studies—to determine the benefits of programs, practices, and policies for learner education outcomes (See more about the project types in [Part III](#)). Collectively, this research investment builds knowledge in the education sciences, along with practical tools necessary to lead to meaningful change in education practice.

NCER is committed to funding a broad range of research on improving learner education outcomes and reducing achievement and opportunity gaps, as described below in [Part I.B.2](#) Research Topics and Education Outcomes. We have identified three cross-cutting themes that reflect current challenges in education and could be addressed across multiple research topics for the FY 2025 competition. These cross-cutting themes are not intended to be restrictive. Applicants are welcome to propose projects appropriate for any of the research topics discussed in [Part II Research Topics](#).

- *Chronic absenteeism.* Student attendance has been a longstanding concern in the K-12 education system, and chronic absenteeism rates have soared following the COVID-19 pandemic. During this same time, there has been a similar increase in K-12 teacher absences. NCER is interested in

supporting research projects that (1) address correlates, causes, and consequences of chronic absenteeism; (2) develop programs, practices, and policies to reduce chronic absenteeism, and (3) tackle inconsistency in measurement of chronic absenteeism across schools, districts, and states. While chronic absenteeism is a specific challenge in K-12 education, there are persistent and growing concerns about similar challenges in attendance and persistence in postsecondary and adult education programs, including stopping out and dropping out of these programs. NCER welcomes projects across all topic areas and project types that will identify effective programs, practices, and policies to reduce chronic absenteeism in K-12 contexts and increase attendance and persistence in postsecondary and adult education settings.

- *Technology*. In a world of rapidly evolving technologies, including tools that rely on artificial intelligence (AI), NCER encourages applicants to propose projects that address critical questions about the uses and limitations of technology in education environments. NCER welcomes projects across all topic areas and project types that incorporate and examine the use of technology to improve education outcomes for all learners.
- *English Learners*. Improving outcomes and meeting the needs of millions of English learners (ELs) continues to be a pressing issue as the EL population in the U.S. expands rapidly across a range of geographic regions, grade levels, ages, and education settings. The experiences of ELs within rural school settings and among adult learners are especially understudied. The prevalence of ELs means that many if not all research projects have the opportunity to consider the unique circumstances associated with educating and conducting research with ELs. Proposed research should consider the needs of ELs in the sample at *all* stages of research from inception and design through analysis and dissemination. NCER welcomes projects across all topic areas and project types that will yield useful insights and effectively address education outcomes for EL populations.

IES believes that stakeholder engagement in research and dissemination efforts has the potential to increase the quality, usefulness, and use of the research it funds. As such, NCER anticipates that applicants will engage stakeholders in the design and conduct of their projects. NCER expects grantees to disseminate evidence in a way that is useful to and accessible by learners, educators, parents, policymakers, researchers, and the public (ESRA, § 112.2). To support broad access to research data and study findings, IES grantees must comply with the IES Policy Regarding Public Access to Research (<https://ies.ed.gov/funding/researchaccess.asp>) and adhere to other open science practices and SEER principles (<https://ies.ed.gov/seer/>) where applicable.

NCER program officers ([listed by research topic in Part II](#)) are available to help applicants refine their proposals. You may contact NCER program officers at any point prior to submission of your application to discuss your research idea and whether it is a good fit for this or any other IES research grant program.

## B. General Requirements

Applications to the Education Research Grants program **must** meet these requirements to be sent forward for scientific peer review.

### 1. Eligible Study Populations

NCER funds education research that addresses the needs of learners from prekindergarten through postsecondary and adult education.<sup>1</sup>

If you are proposing research that is focused *solely* on the needs of learners with or at risk for disabilities from birth through postsecondary education, you **must** apply to the separate grant programs run by the National Center for Special Education Research (NCSEER; <https://ies.ed.gov/ncser>). The only exception is

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<sup>1</sup> For the purposes of this RFA, *adult education* refers to the system and authorized providers that serve learners at least 16-years old who are not enrolled in the standard K-12 system but are or could be preparing for, transitioning into, or currently enrolled in adult literacy programs, as defined in Title II, the “Adult Education and Family Literacy Act”, of the 2015 Workforce Innovation and Opportunities Act (WIOA), such as Adult Basic Education, Adult Secondary Education, Integrated Education Training, Family Literacy, Integrated English Language and Civics.

for research focused on learners with or at risk for disabilities in adult education settings which you **must** submit to this competition.

## ***2. Research Topics and Education Outcomes***

Your application **must** be directed to one of the 11 research topics in the Education Research Grants program accepting applications in FY 2025. NCER encourages you to also identify a secondary research topic if it is appropriate for the proposed research. Topics are intentionally broad to encourage innovative ideas and research questions. Research proposed under each topic may address questions about the education outcomes of learners at any developmental or school level from prekindergarten through postsecondary and adult education. See the topic descriptions in [Part II Research Topics](#) for more about the purpose for each. Contact the program officers listed by topic for advice on which topic provides the best fit for your proposed research.

All applications to this grants program **must** propose research that measures at least one academic outcome, examples of which are provided below. Two topics, “Social, Emotional, and Behavioral Context for Teaching and Learning” and “Teaching, Teachers, and the Education Workforce,” require additional education outcomes that are described below.

### ***(a) Academic Outcomes—Required for All Applications***

IES supports research on academic outcomes that reflect **learning and achievement** in content domains, as well as learners’ **successful progression** through education systems. IES is interested in the following academic outcomes:

- For **prekindergarten**—school readiness outcomes, including pre-reading, language, vocabulary; early-STEM (science, technology, engineering, and mathematics) knowledge; English language proficiency; and digital literacy; as well as social, emotional, and behavioral competencies (including self-regulation and executive function) that prepare young children for school
- For **kindergarten through Grade 12**—learning, achievement, and higher order thinking in the academic content areas of literacy, STEM, and social studies;<sup>2</sup> English language proficiency; career and technical education (CTE) attainment;<sup>3</sup> digital literacy; and progression through education systems as indicated by course and grade completion, retention, high school graduation, and dropout. Given high levels of chronic absenteeism that have persisted since the onset of the COVID pandemic, you may propose to use chronic absenteeism as your required measure of academic outcomes of K-12 learners for FY 2025.
- For **postsecondary education**—learning, achievement, and higher order thinking in postsecondary courses; and access to, persistence in, progress through, and completion of postsecondary education, which includes developmental education and corequisite support courses, bridge programs, for-credit and non-credit programs that lead to occupational credentials and certificates, and for-credit programs that lead to associate’s or bachelor’s degrees
- For **adult education**—achievement in literacy, English language proficiency, and numeracy, as well as access to, persistence in, progress through, and completion of adult education courses and programs including the full range of course and program types described in Title II of the Workforce Innovation and Opportunity Act of 2015 (WIOA; <https://www.dol.gov/agencies/eta/wioa>)

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<sup>2</sup> Social studies outcomes are defined as a learner’s understanding of government structures and processes and how to be an engaged and knowledgeable citizen through skills and knowledge in civics, citizenship, geography, history, and economics.

<sup>3</sup> CTE attainment is defined as an indicator of mastery of CTE content or skills such as CTE course grades or credits earned, technical skills, assessment scores, industry certification, or employment outcomes in a field related to the CTE training.

*(b) Educator Outcomes—Required for Teaching, Teachers, and the Education Workforce Applications and Optional for Other Applications*

IES supports research that addresses the role of educators in improving learners' academic outcomes. If you are applying under the [Teaching, Teachers, and the Education Workforce](#) topic you **must** propose to measure educator knowledge, skills, beliefs, behaviors, and/or practices in addition to the required measures of learners' academic outcomes. If you are proposing research focused on pre-service preparation, you **must** propose to measure the outcomes of the pre-service educators as well as the outcomes of the learners they ultimately teach.

*(c) Social, Emotional, and Behavioral Competencies—Required for Social, Emotional, and Behavioral Context for Teaching and Learning Applications and Optional for Other Applications*

IES supports research on social skills, emotional skills, attitudes, behaviors, and mental health that are important to learners' success in school and beyond. If you are applying under the [Social, Emotional, and Behavioral Context for Teaching and Learning](#) topic as either a primary or secondary topic, you **must** propose to measure both learners' academic outcomes and learners' social, emotional and/or behavioral competencies.

*(d) Employment and Earnings Outcomes—As Appropriate*

IES supports research on **employment and earnings outcomes** such as hours of employment, job stability, and wages and benefits. Include these outcomes in addition to the required academic outcomes when appropriate.

### **3. Education Settings**

Proposed research **must** be relevant to education in the United States and **must** address factors under the control of U.S. education systems.

Formal education in the United States includes but is not limited to center-based prekindergarten programs, public and private K-12 schools, community colleges, technical colleges, and 4-year colleges and universities. In addition, there are also formal programs under the control of education agencies that take place out of school including after-school, distance learning, and online. Additionally, adult education programs can be operated by community-based organizations, libraries, and other entities receiving support from government education agencies and occur in a variety of settings. Contact an IES program officer [listed by research topic](#) if you have questions about the setting you have identified for your proposed research and whether it is responsive to the requirements of this program.

### **4. Project Types**

For FY 2025, your application **must** be directed to one of the following four project types:

[Measurement](#)

[Exploration](#)

[Development and Innovation](#)

[Impact](#)

See the [project type descriptions in Part III](#) for more information about the purpose of each type, requirements that you must address in your application, and recommendations for a strong application. Program officers ([listed by research topic](#)) can advise on which project type provides the best fit for your proposed project. In general, you should select the project type that most closely aligns with the purpose of the research you propose, regardless of the specific methodology you plan to use. IES encourages using a mixed methods approach that integrates quantitative and qualitative methods for all project types, as appropriate.



## 5. Engagement and Dissemination Plan

Stakeholder engagement in research and dissemination efforts has the potential to increase the quality, usefulness, and use of IES-funded research. IES expects applicants to describe (1) how input from stakeholders has informed the development of their application; (2) how, if funded, they intend to further engage stakeholders in the research process and in the dissemination of results; and (3) their history of implementing similar engagement and dissemination strategies, if any.

The plan should articulate how the applicant, if funded will, (1) elicit input from learners, educators, policymakers, researchers, parents/caregivers, and/or other relevant audiences; (2) consider its applicability for enhancing the relevance of the project, while maintaining the objectivity of the research; and (3) adapt research and dissemination activities accordingly. A wide range of engagement and dissemination strategies, techniques, and platforms may be appropriate. Depending on the goals of the project, how and when the research team engages with stakeholders and disseminates information about their project may vary. Applicants should describe their engagement and dissemination history in ways that demonstrate their ability and capacity to carry out their plan for engaging with stakeholders and disseminating research findings transparently and accessibly.

To support transparency and accessibility in scholarly dissemination, and in keeping with IES's commitment to open science best practices and the IES Policy Regarding Public Access to Research (<https://ies.ed.gov/funding/researchaccess.asp>), applicants are encouraged to plan and budget for: (1) preregistration of their research, (2) curation of data and analysis code to facilitate ease of data sharing and reanalysis, and (3) publication of findings in open access journals. IES grantees must comply with the IES Public Access Policy by ensuring that the full text of their accepted peer-reviewed scholarly publications is submitted to ERIC (Education Resources Information Center; <https://eric.ed.gov/>) immediately upon acceptance for publication and by sharing final data at time of publication or, if unpublished, five years after the IES award ends, whichever comes first.

Peer reviewers will score Engagement and Dissemination as a separate criterion in the review process.

## 6. Award Limits

Applications to the Education Research Grants program may not exceed the following limits on award duration and cost by project type and **should reflect the actual time and amount of funding necessary to conduct your proposed scope of work**, rather than the maximums allowable by IES.

IES Project Type	Maximum Duration	Maximum Cost
Measurement	4 years	\$2,000,000
Exploration	4 years	\$1,700,000
Development and Innovation	4 years	\$2,000,000
Impact	5 years	\$4,000,000

In your application, provide a detailed budget justification that explains how the requested costs are allowable, allocable, and reasonable (see 2 CFR 200, Subpart E; <https://www.ecfr.gov/current/title-2/subtitle-A/chapter-II/part-200/subpart-E>) and reflect the proposed scope of work. See the IES Application Submission Guide ([https://ies.ed.gov/funding/submission\\_guide.asp](https://ies.ed.gov/funding/submission_guide.asp)) for information about completing the SF 424 Research and Related Budget form that is included in the application package available through Grants.gov, and for information about what should be included in the budget justification.

## C. Getting Started

### 1. Technical Assistance for Applicants

We strongly encourage all applicants to contact NCER program officers (listed by research topic) during the application planning and preparation process. Applicants may do so at any time via phone or e-mail.

Program officers can offer feedback on whether your research idea is a good fit for this or any other IES research grant program and can address substantive or methodological issues concerning your specific proposal. IES program officers can work with applicants until the time the application is submitted to Grants.gov.

We strongly encourage you to submit a Letter of Intent (LOI) on the IES Peer Review website (<https://iesreview.ed.gov/LOI/LOISubmit>). If you do so, a program officer will contact you regarding your proposed project. IES also offers webinars (<https://ies.ed.gov/funding/webinars/index.asp>) and virtual office hours (<https://ies.ed.gov/funding/technicalassistance.asp>) for general guidance on grant writing and submitting your application and choosing the appropriate competition, topic, and project type.

## **2. Eligible Applicants**

Institutions that have the ability and capacity to conduct rigorous research are eligible to apply. Eligible applicants include, but are not limited to, non-profit and for-profit organizations and public and private agencies and institutions, such as colleges and universities.

**Broadening Participation in the Education Sciences**<sup>4</sup>: IES is committed to broadening institutional participation in its research grant programs. IES encourages applications from minority-serving institutions (MSIs) that meet the eligibility criteria for this RFA. MSIs include Alaska Native or Native Hawaiian-Serving Institutions, Tribal Colleges and Universities, Asian American and Native American Pacific Islander-Serving Institutions, Hispanic-Serving Institutions, Historically Black Colleges and Universities, Predominantly Black Institutions, and Native American-Serving, Nontribal Institutions.

## **3. Building Your Project Team**

All IES work benefits from diverse perspectives. Our ability to support high-quality research depends upon our ability to support talented researchers, and other project team members, from all backgrounds (<https://ies.ed.gov/aboutus/diversity.asp>).

IES research projects demand project teams with a wide variety of expertise to ensure the research is of high quality.

Team members making substantial contributions to the work should be considered as key personnel, described in the Personnel section of the Project Narrative, and have a biosketch included. The Principal Investigator (PI) is the primary point of contact with IES. The PI has the authority and responsibility for the proper conduct of the research, including the appropriate use of federal funds and the submission of required scientific progress reports. The PI is designated by the institution submitting the application. Other personnel having authority and responsibility for the research and use of grant funds should be designated as co-Principal Investigators (co-PIs). Only one PI may be identified as the PI for the purposes of making a grant award, regardless of whether more than one person will share the authority and responsibility for leading and directing the proposed research. The PI and any co-PIs will be listed on the grant award notification (GAN) when a new award is made. You may identify anyone to serve as a co-PI on a grant, including members of the project team who are at different institutions or those who may be serving as a consultant. Co-Investigators (co-Is) may also be listed on the GAN at the awardee's discretion.

Although not required at the time of application, all key personnel must have a persistent identifier (PID), such as an ORCID iD (Open Researcher and Contributor ID; <https://orcid.org/>) at the time of award. For all key personnel who have a PID at the time of application, include the PID in the biosketch and in the "Credential, e.g., agency login" field on the Research and Related Senior/Key Person Profile (Expanded)

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<sup>4</sup> Section 114 of the Education Science Reform Act of 2002 charges IES with undertaking "initiatives and programs to increase the participation of researchers and institutions that have been historically underutilized in Federal education research activities of the Institute, including historically Black colleges or universities or other institutions of higher education with large numbers of minority students."

form in the application package. See the IES Application Submission Guide ([https://ies.ed.gov/funding/submission\\_guide.asp](https://ies.ed.gov/funding/submission_guide.asp)) for more information about this form in the application package. All key personnel must have a PID as a condition of award.

#### **4. RFA Organization and the IES Application Submission Guide**

To submit a compliant, responsive, and timely application, you will need to review two documents:

1. *This RFA*, which provides information on how to prepare an application that is compliant and responsive to the requirements. [Part I](#) sets out these requirements for a grant application. [Parts II and III](#) provide further detail on two of those requirements, research topics and project types, respectively. [Part IV](#) provides information about general formatting and the other narrative content for the application, including required appendices. [Part V](#) provides general information on competition regulations and the review process. [Part VI](#) provides **a checklist that you can use to ensure you have included all required application elements to advance to scientific peer review**. [Part VII](#) provides the codes that you will enter in Item 4b of the SF 424 Application for Federal Assistance form.
2. *The IES Application Submission Guide* ([https://ies.ed.gov/funding/submission\\_guide.asp](https://ies.ed.gov/funding/submission_guide.asp)), which provides important information about submission procedures and IES-specific guidance and recommendations to help you ensure your application is complete and received without errors on time through Grants.gov.

We strongly recommend that both the PI and the authorized organization representative (AOR) read both documents, whether submitting a new or revised application.

#### **5. Ensuring Your Application is Forwarded for Scientific Peer Review**

**Only compliant and responsive applications received before the date and time deadline are peer reviewed for scientific merit and practical significance.** The PI and the AOR should work together to ensure that the application meets these criteria.

##### *(a) On-time submission*

- Received and validated by Grants.gov no later than 11:59:59 p.m. Eastern Time on September 12, 2024.
  - See the separate IES Application Submission Guide [https://ies.ed.gov/funding/submission\\_guide.asp](https://ies.ed.gov/funding/submission_guide.asp) for more information about how to submit your application on-time through Grants.gov.

##### *(b) Compliance*

- Includes the **required project narrative** (see [Part III](#))
- Adheres to all formatting requirements (see [Part IV](#))
- Adheres to all page limit maximums for the project narrative and appendices. IES will remove any pages above the maximum before forwarding an application for scientific peer review
- Includes all **required appendices** (see [Part IV](#))
  - [Appendix A: Engagement and Dissemination Plan](#) (All applications)
  - [Appendix B: Response to Reviewers](#) (Resubmissions only)
  - [Appendix F: Data Sharing and Management Plan](#) (All applications)

##### *(c) Responsiveness*

- Meets **requirements** for all applications (see Parts I, II, and III)
  - [Education Outcomes \(by Research Topic\)](#)
  - [Education Settings](#)

- [IES Project Type](#)

- Meets **Project Narrative Requirements** for the selected *IES Project Type* (see [Part III](#)).

## D. Changes in the FY 2025 Request for Applications

Everyone involved in preparing and submitting an application, whether new or revised, should carefully read all relevant parts of this RFA. Major changes to the Education Research Grants program (ALN 84.305A) competition in FY 2025 are listed below and described fully in relevant sections of the RFA.

**Engagement and Dissemination Plan**—IES has changed the Dissemination History and Plan to Engagement and Dissemination Plan. See [Part I.B.5](#) and [Part IV.C.1](#) for more information about what to include in the required Engagement and Dissemination Plan.

**Academic Outcomes**—NCER will consider measures of **chronic absenteeism** for K-12 learners as meeting the requirement that all applications to this program **must** include measures of Academic Outcomes.

### Research Topics

- **Cross-cutting themes** are those that IES has identified as of great importance and that might be addressed across multiple research topics. For FY 2025, these themes are: **chronic absenteeism, technology, and English learners**. These themes are not intended to limit the foci of applications submitted under our research topics.
- **Encouragement to identify a secondary research topic**—while it is a requirement to identify a single research topic for your application, this year NCER also encourages applicants to select a secondary topic in addition to the required primary research topic when it is appropriate for the proposed research.
- **Topic names** - we changed the names of two of our research topics to provide a more accurate description of the research each supports.
  - **Policies, Practices, and Programs to Support English Learners** is now called **English Learner Policies, Programs, and Practices**.
  - **Improving Education Systems** is now called **Improving Education Systems: Policies, Finance, Organization, Management, and Leadership**.

### IES Public Access Policy Requirements

**Where to include persistent identifiers (PIDs) for key personnel**—while optional at the time of application, all key personnel must have a PID such as an ORCID iD (Open Researcher and Contributor ID; <https://orcid.org/>) as a condition of award. If key personnel have a PID at the time of application, include it in the biosketches and in the “Credential, e.g., agency login” field on the Research and Related Senior/Key Person Profile (Expanded) form in the application package. See the IES Application Submission Guide ([https://ies.ed.gov/funding/submission\\_guide.asp](https://ies.ed.gov/funding/submission_guide.asp)) for more information about this form in the application package.

We have made changes to requirements and recommendations for sharing data and peer-reviewed publications in keeping with the U.S. Department of Education’s approved Public Access Plan posted on February 13, 2024 (<https://ies.ed.gov/funding/researchaccess.asp>).

- **Appendix F: Data Sharing and Management Plan (DSMP) required for all applications**—beginning in FY 2025, *all applicants* will be required to include a DSMP in [Appendix F](#) that describes how they will manage project data and ultimately share a final research data set. This includes a requirement to share data reported in a publication immediately upon publication, or to share all data five years after the grant ends, whichever occurs first.
- **Updated guidance for data sharing**—DSMPs should now include plans for data curation in advance of publication to ensure readiness to share upon publication and should address whether funds are being budgeted to support data sharing efforts. To increase public

accessibility, we encourage you to designate a **public repository** for data sharing that is aligned with the characteristics described in the National Science and Technology Council document entitled “Desirable Characteristics of Data Repositories for Federally Funded Research” (<https://repository.si.edu/handle/10088/113528>) whenever feasible. Housing data on the grantee institution’s website or making data available only by request is not consistent with new public access policies.

- **Requirement for grantees to submit peer-reviewed publications to the Education Resources Information Center (ERIC; <https://eric.ed.gov/>) immediately upon acceptance for publication**—IES grantees funded under this competition will be required to submit peer-reviewed manuscripts to ERIC (<https://eric.ed.gov/submit/>) immediately upon acceptance for publication and will also be required to share the data described in the paper immediately upon publication.

## Part II: Research Topics

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You **must** select at least one research topic for your application to the FY 2025 Education Research Grants program. If your proposed research has more than one research focus, you should also select a secondary research topic. IES strongly encourages the identification of a secondary topic, when appropriate, to fully describe the focus and breadth of the proposed research. This information will be particularly helpful for assigning applications to peer reviewers with the appropriate expertise to review your application.

You **must** identify your primary research topic (and, if applicable, your secondary research topic) on the Application for Federal Assistance SF 424 form (Item 4b) of the Application Package (see the IES Application Submission Guide ([https://ies.ed.gov/funding/submission\\_guide.asp](https://ies.ed.gov/funding/submission_guide.asp)) and the [topic codes in Part VII](#)) to ensure that your application is assigned appropriately for scientific peer review.

To be sent forward for scientific peer review, your application **must** meet

- **The requirements** outlined in [Part I.B. General Requirements](#).
- **The relevant project type requirements** listed under [Part III: Project Type Requirements and Recommendations](#).

Most applications to the Education Research Grants Program are reviewed by one of six standing peer review panels (<https://ies.ed.gov/director/sro/reviewers.asp>). Additional panels are developed as needed to provide the most appropriate review for the applications we receive. Standing panels include:

- Basic Processes.
- Early Intervention and Early Childhood Education.
- Education Systems and Broad Reform.
- Science, Technology, Engineering, and Mathematics (STEM).
- Reading, Writing, and Language Development.
- Social and Behavioral.

Applications are assigned to panels according to the match between the overall expertise of reviewers on each panel and the content and methodological approach proposed in each application. See the Procedures for Peer Review of Grant Applications ([https://ies.ed.gov/director/sro/application\\_review.asp](https://ies.ed.gov/director/sro/application_review.asp)) and [Part V.C.4. Scientific Peer Review Process](#) for more information.

Each topic description includes a link to the IES website where you can find more information about the topic and view abstracts of previously funded projects. Each topic also includes examples of IES-identified research needs in the field. You may consider these issues in developing your application, but you should not feel limited by them. You are encouraged to think broadly about concerns and issues faced by learners, their families, and the educators and education systems that support them. Please feel free to propose research that addresses other needs beyond those we identify under each topic.

Contact the program officer(s) listed for the research topic that seems most relevant to your proposed research project to discuss your choice of topic and project type, to determine if it would be appropriate to identify a secondary topic, and to address other questions you may have.

### A. Career and Technical Education

*Program Officer:* Dr. Corinne Alfeld (202-987-0835; [Corinne.Alfeld@ed.gov](mailto:Corinne.Alfeld@ed.gov))

Career and Technical Education (CTE; <https://ies.ed.gov/ncer/projects/program.asp?ProgID=100>) supports research on the implementation and effects of CTE programs and policies on education and career outcomes. Research on CTE is critical for determining its promise for connecting education with future career pathways. Examples of needed research in CTE include the development of reliable and valid assessments of technical and career readiness skills. There is limited research on the causal impact of curricula or pathways connected to employer needs. There is also limited research on the impact of middle school CTE programs and work-based learning (connected to [a formal education program](#)) on education outcomes. More also needs to be learned about the connection between CTE teacher

recruitment and retention and learner outcomes. Researchers are encouraged to examine CTE programs or clusters separately rather than as a whole and to include longer-term outcomes ([college completion](#), [earnings](#)) when possible.

## **B. Civics Education and Social Studies**

*Program Officer:* Dr. Vinita Chhabra (202-245-7262; [Vinita.Chhabra@ed.gov](mailto:Vinita.Chhabra@ed.gov))

Civics Education and Social Studies (<https://ies.ed.gov/ncer/projects/program.asp?ProgID=111>) supports research to improve learning and achievement in civics and government, geography, economics, and history. There is very little research to date that addresses how to increase student understanding of these topics, either taught as single subjects or within other domains. We also have much to learn about the knowledge, skills (including historical thinking and inquiry skills), and competencies (including civic awareness and engagement) that underlie successful learning and achievement in civics, government, geography, economics, history, and social studies.

## **C. Cognition and Student Learning**

*Program Officer:* Dr. Lara Faust (202-245-6532; [Lara.Faust@ed.gov](mailto:Lara.Faust@ed.gov))

Cognition and Student Learning (<https://ies.ed.gov/ncer/projects/program.asp?ProgID=5>) supports research that connects the science of how people learn with education practice to improve learner [academic outcomes](#). Research on how people learn is valuable for developing and testing innovations in study strategies, instructional approaches, curricula, education technologies, and assessments that address learners' and educators' most pressing needs. This research is also useful for identifying the cognitive and neural processes that underlie acquisition of English language proficiency, knowledge and skills in literacy and STEM, and successful progression through education systems. There is a need for research on cognitive and neural development within and across grades and the implications for student learning. There are opportunities to use neuroimaging in combination with behavioral assessments to provide insight into cognition during learning. Research is also needed to explore the role of context and cultural factors for student learning and engagement and the impact of embedding cognitive science principles into existing science education practices and programs.

## **D. Early Learning Programs and Policies**

*Program Officer:* Dr. Helyn Kim (202-987-1255; [Helyn.Kim@ed.gov](mailto:Helyn.Kim@ed.gov))

Early Learning Programs and Policies (<https://ies.ed.gov/ncer/projects/program.asp?ProgID=7>) supports research on school readiness for 3- to 5-year-olds in center-based education settings, including preschools, Head Start programs, child-care centers, nursery schools, and public prekindergarten (PreK). Early childhood experiences have immediate and lasting consequences for children's development, learning, and school achievement. Early learning programs and policies can help reduce disparities and learning opportunity gaps and address structural, contextual, and sociodemographic factors that influence children's learning and development. Through this topic, IES supports research on children's immediate and longer-term outcomes from center-based early learning programs and policies. IES also supports applications that propose to examine the associations between characteristics of the early childhood educator workforce and educator and learner outcomes.

## **E. English Learner Policies, Programs, and Practices**

*Program Officer:* Dr. Helyn Kim (202-987-1255; [Helyn.Kim@ed.gov](mailto:Helyn.Kim@ed.gov))

English Learner Policies, Programs, and Practices (<https://ies.ed.gov/ncer/projects/program.asp?ProgID=59>) supports research on how to improve [academic outcomes](#), reduce the academic achievement gap, and address inequities in education for English learners. IES uses the term *English learner* (EL) to encompass learners whose home language is not English and whose English language proficiency hinders their ability to meet learning and achievement expectations for their level of schooling. Research is needed to determine how to support the learning needs of the diverse EL population in the United States and how to support classroom teachers in providing high-quality instruction for ELs. Research is also needed to determine how policies or systems-

level approaches could reduce current achievement and opportunity gaps for ELs especially in rural districts. Applicants may opt to identify English Learner Policies, Programs, and Practices as a secondary research topic if their proposed research under a different topic includes ELs.

## **F. Improving Education Systems: Policies, Finance, Organization, Management, and Leadership**

*Program Officers:* Dr. Corinne Alfeld (202-987-0835; [Corinne.Alfeld@ed.gov](mailto:Corinne.Alfeld@ed.gov))

Dr. Haigen Huang (202-987-0371; [Haigen.Huang@ed.gov](mailto:Haigen.Huang@ed.gov))

Improving Education Systems: Policies, Finance, Organization, Management, and Leadership (<https://ies.ed.gov/ncer/projects/program.asp?ProgID=76>) supports research to understand education policies and systems and the mechanisms that support their successful implementation to benefit all learners. This topic covers a broad range of issues, including preparation of education leaders, evaluating approaches to district or school organization or funding, measuring school climate, developing strategies for re-engaging students and families, and testing wraparound service models. Applicants are encouraged to consider variations in treatment effects across contexts and learners, the conditions that support systemic improvements, and the factors that enhance or impede systems-level change.

## **G. Literacy**

*Program Officer:* Dr. Vinita Chhabra (202-245-7262; [Vinita.Chhabra@ed.gov](mailto:Vinita.Chhabra@ed.gov))

Literacy (<https://ies.ed.gov/ncer/projects/program.asp?ProgID=18>) supports research on the range of English language-based skills required for learning. Reading has been the dominant focus of literacy research for over 50 years, yet many U.S. students and adults are not proficient readers. The COVID-19 pandemic and the increasing use of AI in classrooms have made research in this area all the more urgent, including the need to accelerate the mastery of literacy skills for those whose learning was disrupted during the COVID-19 pandemic and to better understand what AI tools mean for our ideas about literacy and what specific literacy skills learners must acquire. Through this topic, research could also identify how best to teach, develop, and assess writing skills across elementary and secondary school. Research is needed to guide instruction and learning reading and writing in the disciplines in secondary school.

## **H. Postsecondary and Adult Education**

*Program Officers:* Dr. James Benson (202-245-8333; [James.Benson@ed.gov](mailto:James.Benson@ed.gov))

Dr. Meredith Larson (202-804-7451; [Meredith.Larson@ed.gov](mailto:Meredith.Larson@ed.gov))

Postsecondary and Adult Education (<https://ies.ed.gov/ncer/projects/program.asp?ProgID=15>) supports research to improve access to, persistence in, progress through, and completion of postsecondary education (sub-baccalaureate credentials, occupational and transfer-oriented associate's degrees, bachelor's degrees), and adult education (see Title II of the Workforce Innovation and Opportunity Act [WIOA]; <https://www.dol.gov/agencies/eta/wioa>). Research under this topic addresses policies, programs, or practices that provide a wide range of supports to postsecondary or adult education learners with the intent of facilitating their [academic outcomes](#) and (as appropriate) their [employment and earnings outcomes](#). Research under this topic also addresses instructional practices and professional development for educators, including tutors, instructors, and faculty, and how they lead to improved learning outcomes; curricula, practices, and policies to support adult English learners; and the ways in which adult education can support adults with disabilities<sup>5</sup>.

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<sup>5</sup> If you are proposing research that is focused solely on the needs of learners with or at risk for disabilities from birth through postsecondary education, you must apply to the separate grant programs run by the National Center for Special Education Research (NCSEER; <https://ies.ed.gov/ncser>).



## I. Science, Technology, Engineering, and Mathematics (STEM) Education

*Program Officer:* Dr. Christina Chhin (202-245-7736; [Christina.Chhin@ed.gov](mailto:Christina.Chhin@ed.gov))

STEM Education (<https://ies.ed.gov/ncer/projects/program.asp?ProgID=12>) supports research on the improvement of STEM knowledge and skills. Over the past 25 years or so, STEM education has evolved from a clustering of four overlapping disciplines (science, technology, engineering, and mathematics) toward an integrated knowledge base and set of critical skills necessary for today's workplace. There is an urgent need to improve STEM achievement in the United States to meet the needs of our current and future workplaces, particularly for learners who are historically underrepresented in STEM. In addition, as developments in generative artificial intelligence (AI) transform STEM education, new opportunities and challenges arise for supporting diverse learners in STEM. Research under this topic is needed on how to measure, develop, or implement convergent STEM education that blends knowledge and skills across multiple disciplines, with or without the use of generative AI. Similarly, there is limited research on effective and efficient learning pathways for students in data science education.

## J. Social, Emotional, and Behavioral Context for Teaching and Learning

*Program Officers:* Dr. Emily Doolittle (202-987-0795; [Emily.Doolittle@ed.gov](mailto:Emily.Doolittle@ed.gov))

Dr. Christina Chhin (202-245-7736; [Christina.Chhin@ed.gov](mailto:Christina.Chhin@ed.gov))

Social, Emotional, and Behavioral Context for Teaching and Learning (<https://ies.ed.gov/ncer/projects/program.asp?ProgID=21>) supports research on social, emotional, and behavioral competencies for educators and learners that improve learners' academic achievement and progress through the education system. **For this reason, measures of both academic outcomes and social, emotional, and behavioral (SEB) competencies must be included in all projects under this topic.** Several decades of research suggest that SEB competencies such as learners' ability to self-regulate or educators' ability to establish strong relationships with their students may be just as important as content knowledge and academic skills for success in school and work. However, the evidence base is equivocal due in part to a lack of consensus on core SEB competencies and how they are measured. To clarify their role in academic teaching and learning, applicants are encouraged to use measures that are appropriately aligned with the constructs of interest (see <https://ies.ed.gov/seer/outcomes.asp> for more information).

## K. Teaching, Teachers, and the Education Workforce

*Program Officer:* Dr. Wai-Ying Chow (202-245-8198; [Wai-Ying.Chow@ed.gov](mailto:Wai-Ying.Chow@ed.gov))

Teaching, Teachers, and the Education Workforce (<https://ies.ed.gov/ncer/projects/program.asp?ProgID=75>) supports research to understand the aspects of teaching, teachers, and the education workforce that promote academic outcomes. **For this reason, measures of educator outcomes must be included along with the required measures of student academic outcomes in all projects under this topic.** Rigorous research is needed to build our understanding of effective teaching and teachers and to inform the training, recruitment, and retention of the education workforce. Measurement of educator knowledge/practice is essential to clarify the links between teaching and learner outcomes. Limited research is available on how evidence-based educator practices could be integrated into pre-service training. Research is needed to determine how technology and other innovations can be used to ease the demands on teachers and address other factors contributing to teacher shortages. There is an ongoing need to identify the skills needed to provide effective teaching to learners from various backgrounds (sometimes referred to as "cultural and linguistic competence," "cultural proficiency," or "cultural responsiveness"). Open questions remain about the relationships between teacher certification, assessment, and compensation and learner outcomes.

## Part III: Project Type Requirements and Recommendations

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### A. Applying Under a Project Type

For the FY 2025 Education Research Grants program, you **must** submit under one of four project types: Measurement, Exploration, Development and Innovation, or Impact.

To ensure appropriate assignment of your application for peer review, you **must** specify the project type you have identified for your proposed research on the Application for Federal Assistance SF 424 (R&R) form (Item 4b) of the Application Package (see the IES Application Submission Guide [https://ies.ed.gov/funding/submission\\_guide.asp](https://ies.ed.gov/funding/submission_guide.asp) and the [project type codes in Part VII](#)).

#### For each project type—

- **See the Purpose section** for the **types of research** appropriate for a given project type. Your research questions should align with the purpose of the project type you choose.
  - IES encourages the use of mixed methods research, defined as the integration of qualitative and quantitative methodologies in a single study, for all project types. Results obtained from mixed methods studies have the potential to enrich our understanding of education research questions, issues, and outcomes.
  - IES encourages researchers to leverage widely used digital learning platforms for their projects. These platforms typically have over 100,000 users; are implemented through a device such as a computer, tablet, or smartphone; can support multiple types of learner and educator interactions; and have the capacity to collect multiple types of user data.
- **See the Award Limit section** for the maximum duration and budget that can be requested for each type of project.
- **See the Requirements section** for the specific content that you **must** address in the four sections of the project narrative (Significance, Research Plan, Personnel, Resources). **Applications lacking this specific content will not be sent forward for peer review.**
- **See the Recommendations for Strong Applications section** for recommendations to improve the quality of your application. We provide recommendations to support (1) applicants in writing proposals and (2) reviewers in evaluating proposals that align with IES's expectations of high-quality research that has scientific merit and practical significance. Reviewers are asked to use these recommendations, in conjunction with their professional judgement and expertise, to determine application quality. Many of these recommendations are aligned with the SEER standards (<https://ies.ed.gov/seer/>) to help ensure that research is transparent, actionable, and focused on meaningful outcomes that have the potential to dramatically improve education.

## **B. Measurement**

### **1. Purpose**

IES supports research to develop, refine, and/or validate measures for use by educators and education researchers. In addition to assessments of individual learners, IES encourages the development and validation of assessments of education systems and educators to understand the contexts in which learning occurs and the opportunities for learning and achievement that education systems provide.

Successful Measurement projects will produce affordable and feasible assessments with clearly specified items, procedures, and materials for intended purposes, populations, and settings whether in education research or practice contexts.

### **2. Award Limit**

No more than \$2,000,000 (direct and indirect costs) over no more than 4 years.

- The duration and budget you request should reflect the actual time and amount of funding necessary to conduct your proposed scope of work.
- **IES will not make an award under the Measurement project type that exceeds \$2,000,000 or that is for longer than 4 years.**

### **3. Requirements**

The Project Narrative **must** adhere to the formatting guidelines (see [Part IV.B](#)) and be **no more than 22 pages**. For example, the use of small type will be grounds for IES to return the application without scientific peer review. If the narrative exceeds the page limit, IES will remove any pages after the 22nd page of the narrative.

The project narrative **must** include four sections: Significance, Research Plan, Personnel, and Resources. The four sections of the project narrative **must** include the content described below to be considered responsive to the requirements of this RFA and forwarded for peer review. Applications lacking this specific content will not be forwarded for peer review.

Please see the [recommendations section](#) for additional information about what you may want to include in the Project Narrative. Recommendations reflect what IES expects as part of high-quality projects. It is the applicant's responsibility to demonstrate they have addressed the recommendations in the application.

#### **(a) Significance**

The purpose of this section is to explain why it is important to develop or refine and/or validate the assessment for the proposed purpose, context, population, and age range.

You **must** describe:

- The assessment you propose to develop, refine, and/or validate.
- The purpose(s), population(s), and context(s) for which the assessment is intended.

#### **(b) Research Plan**

The purpose of this section is to describe your research plan and demonstrate how it will allow you to address your research questions.

You **must** describe:

- The sample and setting for your project.
- The research design, methods, and data analysis plans for the assessment's
  - Development and/or refinement, as applicable.
  - Validation.

### *(c) Personnel*

The purpose of this section is to describe the members of your project team and their capacity to complete the project. This includes their training and experience, including experience working with the proposed study population, and the amount of time they will commit to the proposed research and stakeholder engagement and dissemination activities.

You **must** describe:

- The project team.

### *(d) Resources*

The purpose of this section is to describe your access to resources needed to execute a project of this size and complexity. This includes access to relevant tools, data, populations, and research infrastructure.

You **must** describe:

- The research infrastructure and capacity to conduct the project.

## **4. Recommendations for Strong Applications**

The following recommendations are included to support (1) applicants in writing proposals and (2) reviewers in evaluating proposals that align with IES's expectations of high-quality research that has scientific merit and practical significance. Reviewers are asked to use these recommendations, in conjunction with their professional judgement and expertise, to determine application quality.

Where appropriate, we provide recommendations following the Standards for Excellence in Education Research (SEER; <https://ies.ed.gov/seer>) to help ensure research is transparent, actionable, and focused on meaningful outcomes that have the potential to dramatically improve education. We also provide links to specific SEER resources that may be useful as you incorporate these recommendations into your application.

### *(a) Significance*

Strong applications will address a significant challenge in education and provide a compelling theoretical, empirical, and practical rationale for the project.

Explicitly state your research questions.

Describe the following about the assessment you propose to develop or refine and/or validate:

- The construct or education outcome it will measure.
- The assessment framework and how the proposed validation activities will produce evidence to support the claims of that framework, including the following:
  - Operational definition(s) of the construct(s) of measurement.
  - A theoretical model showing how constructs are related to each other and/or external variables.
  - A description of the rationale for how and why a respondent's score on the assessment supports inferences or judgments regarding the construct(s) being measured.
  - A description of the intended use(s) and population(s) for which the assessment is meant to provide valid information.

Describe the specific need for developing, refining, and/or validating the assessment and the potential market for it.

- Identify the target population of the assessment and importance of assessing the identified construct(s) for this population.
- Contrast the assessment with current typical measurement practices. What differentiates it and how does it address shortcomings of other assessments?

- Describe the intended users of the assessment (for example, researchers, teachers, learners) and the intended uses of the data collected with it.
- Note whether there is a potential market for the new/refined measurement tool. Discuss those markets where it will be offered and examples of how it will be used. Describe your strategy for bringing the assessment to those markets and users.
- How will the proposed assessment(s) contribute to increasing our ability to address the education needs of all learners? How might historically underserved learners benefit from the assessment?
- If relevant, describe any partnerships with education agencies to carry out the proposed work. Including education agencies as partners makes it more likely that researchers focus on assessments that are meaningful and useful to the education practitioners and policymakers who will use them.

If your target population includes historically underserved learners, discuss how the assessment will address their needs. For additional resources see <https://ies.ed.gov/seer/equity.asp>.

If you are proposing to further develop an assessment that was the focus of a previous measurement grant, provide a justification for the new measurement grant. Include any evidence of the prior assessment's use in the field.

### *(b) Research Plan*

Strong applications will demonstrate that the research plan aligns with the research questions posed in the Significance section and that the project will be able to address those questions and aims with sufficient rigor.

Include a timeline for project activities in [Appendix C: Supplemental Charts, Tables, and Figures](#).

Discuss how your project conceptualizes education equity, and how the proposed design, sample, measurement, analysis, and reporting align to that conceptualization (<https://ies.ed.gov/seer/equity.asp>).

### **Sample and Setting**

Describe the target population of learners that your sample represents.

Discuss the procedure you will use to recruit a sample(s) for item development, feasibility, reliability, and/or validation activities that represents your target population.

Through intentional sampling or other means, your proposed sample should permit generalization of your findings to your population of interest. This population need not be the U.S. population as a whole; your project may focus on a specific group of individuals. Discuss how your proposed study permits generalization to your target population, including how your inclusion and exclusion criteria influence the generalizability of study results. For additional resources see <https://ies.ed.gov/seer/generalization.asp>.

Describe strategies to increase the likelihood that participants will join the project and remain in the study (reduce attrition).

Describe the setting(s) in which item development, feasibility, reliability, and/or validation activities will take place (provide letters of agreement in [Appendix E](#)).

### **Research Design, Methods, and Data Analysis Plan**

Use a mixed methods approach whenever appropriate. Explain how the different quantitative and qualitative methods proposed are integrated and how they will reinforce each other in support of the findings.

#### *Development/Refinement Activities*

If you propose to develop a new assessment or refine an existing assessment, describe the following:

- The iterative procedures for developing, field testing, and selecting items to be used in the assessment and for obtaining representative responses to items.
- The statistical procedures for demonstrating that items adequately measure the intended

construct(s) (for example, via factor analysis) and that the items measure only the intended construct(s).

- The procedures for scoring the assessment, including justification for the scoring rubric and any weighting involved in calculating the score.
- The procedures for establishing whether the items and the assessment as a whole are biased against groups within the intended population of use (that is, tests for differential item functioning, differential test functioning, and corresponding follow-up tests for bias).
- The process of determining the administrative procedures for using the assessment, such as mode of administration, whether accommodations like alternative administrative conditions will be allowed, and whether administration is feasible in the intended context(s).
- The procedures for establishing the equivalency of the forms, if developing alternate forms.
- The procedures for establishing an assessment that is vertically equated, if the proposed assessment is used to measure growth.

#### *Validation Activities*

Describe the following:

- The proposed validation activities with enough detail to demonstrate that they will provide evidence to address the claims of the assessment framework.
- The types of validity evidence to be collected, such as construct validity, concurrent validity, and discriminant validity and justify their adequacy for the intended purpose of the assessment.
- The measures that will be used to validate the assessment. Include information about their reliability, validity, and appropriateness for the proposed sample and setting. For additional resources see <https://ies.ed.gov/seer/outcomes.asp>.
- The procedures for statistically evaluating the validity of each subscale, if subscales are part of the assessment framework.

#### *Feasibility Plan*

Provide a plan to collect information on the feasibility of implementing the fully developed assessment in the contexts in which it is intended to be used and describe how you would use that information to modify the assessment to improve its scalability. For example, provide a plan to gather information on the extent to which the assessment fits within the intended setting and the amount of time and training needed to adopt the assessment.

#### *Data Analysis Plan*

Explain how your data are appropriate, and of sufficient quality, for the proposed analyses.

Detail your data analysis procedures for all quantitative and qualitative analyses necessary to address your research questions, including the following:

- The statistical models and analyses that will be used, and how well they control for selection bias.
- How you will address missing data, if applicable. If you intend to impute missing data, describe the approach you will use to provide unbiased estimates.
- Sensitivity tests to assess the influence of key procedural or analytic decisions on the results.
- Power analyses for all proposed inferential analyses, including all the details that would be needed for someone else to replicate it.
- Subgroup analyses that will be conducted to examine variations in outcomes among learners, including groups of learners who have been historically underserved.
- How you will assess the generalizability of your findings by contrasting your analytic sample's characteristics with the characteristics of the target population. Explain how you will adjust for

any mismatch between your sample and the population. For additional resources see <https://ies.ed.gov/seer/generalization.asp>.

#### *Cost Analysis Plan*

You are encouraged to develop a cost analysis plan that describes how you will estimate the costs to implement the new fully developed, refined, and/or validated assessment. For cost analysis resources, see [https://ies.ed.gov/seer/cost\\_analysis.asp](https://ies.ed.gov/seer/cost_analysis.asp). Even if you already have an estimate of the cost of implementing the assessment, you are still encouraged to include a plan to collect this information. You should gather information about the costs of implementing your assessment even if you intend to offer the assessment free of charge.

#### *(c) Personnel*

Strong applications will demonstrate that the project team has sufficient capacity to complete all proposed activities. Describe the management structure and procedures that will be used to keep the project on track and ensure the study is of high quality. Explain how key personnel will maintain their objectivity and promote transparency in conducting the proposed research, stakeholder engagement, and dissemination activities.

Measurement projects demand a wide variety of expertise to ensure they are of high quality. Describe how the background and experience of the project team supports the conduct of the proposed study, including who will be responsible for each of the specified activities and who brings expertise specific to the population of learners that your project addresses. Identify the amount of time that team members will devote to the project.

IES is strongly committed to broadening participation in its research grant programs, including personnel from underrepresented communities and diverse institutions.

#### *(d) Resources*

Strong applications will demonstrate sufficient research infrastructure and capacity to conduct the proposed project at both the primary applicant institution and any subaward institutions.

Describe your access to specific offices and organizations that will support your plan to engage stakeholders and disseminate results as described in the required [Appendix A: Engagement and Dissemination Plan](#).

Describe your access to the education settings, data sets, and digital platforms necessary for the proposed research.

- Include letters of agreement, data licenses, or existing memoranda of understanding in [Appendix E](#) to document this access.
- Describe your plan for acquiring any resources that are not currently accessible, will require significant expenditures, and are necessary for the successful completion of the project, such as equipment, test materials, curriculum, or training materials.

## C. Exploration

### 1. Purpose

IES supports exploratory research to develop, clarify, or expand theories of action and conceptual frameworks. Exploration projects examine relationships between malleable factors at the level of learners, educators, education settings, and/or policies and meaningful education outcomes. A variety of approaches are appropriate under Exploration including one or more of the following: (1) primary data collection and analyses, (2) secondary data analyses, or (3) meta-analyses that go beyond a simple identification of the mean effect of interventions.

Successful Exploration projects will generate hypotheses about how best to improve learner, educator, or system outcomes. They should inform future work such as the development, refinement, or testing of potentially beneficial programs, practices, or policies, or the development, refinement, or validation of assessments.

### 2. Award Limit

No more than \$1,700,000 (direct and indirect costs) over no more than 4 years. If you propose research that relies on analysis of existing data sets and will not involve primary data collection, the proposed budget should be reduced commensurately. For the purposes of this RFA, primary data collection includes the collection and coding of quantitative or qualitative data as well as the coding of already collected, unstructured data such as video files, audio files, transcripts, and observations. Secondary data analysis includes analyzing structured data files that do not require coding prior to analysis.

- The duration and budget you request should reflect the actual time and amount of funding necessary to conduct your proposed scope of work.
- **IES will not make an award under the Exploration project type that exceeds \$1,700,000 or that is for longer than 4 years.**

### 3. Requirements

The Project Narrative **must** adhere to the formatting guidelines (see [Part IV.B](#)) and be **no more than 22 pages**. For example, the use of small type will be grounds for IES to return the application without scientific peer review. If the narrative exceeds the page limit, IES will remove any pages after the 22nd page of the narrative.

The project narrative **must** include four sections: Significance, Research Plan, Personnel, and Resources. The four sections of the project narrative **must** include the content described below to be considered responsive to the requirements of this RFA and forwarded for peer review. Applications lacking this specific content will not be forwarded for peer review.

Please see the [recommendations section](#) for additional information about what you may want to include in the Project Narrative. Recommendations reflect what IES expects as part of high-quality projects. It is the applicant's responsibility to demonstrate they have addressed the recommendations in the application.

#### (a) Significance

The purpose of this section is to describe the malleable factors, such as those at the level of learners, educators, education settings, and/or policies, you propose to study and their potential association with learner outcomes.

You **must** describe the following:

- The factors you propose to study.



### *(b) Research Plan*

The purpose of this section is to describe your research plan and demonstrate how it will allow you to address your research questions.

You **must** describe the following:

- The sample and setting for your project.
- The research design, methods, and data analysis plans for your project.

### *(c) Personnel*

The purpose of this section is to describe the members of your project team and their capacity to complete the project. This includes their training and experience, including experience working with the proposed study population, and the amount of time they will commit to the proposed research and dissemination activities.

You **must** describe:

- The project team.

### *(d) Resources*

The purpose of this section is to describe your access to resources needed to execute a project of this size and complexity. This includes access to relevant tools, data, populations, and research infrastructure.

You **must** describe:

- The research infrastructure and capacity to conduct the project.

## **4. Recommendations for Strong Applications**

The following recommendations are included to support (1) applicants in writing proposals and (2) reviewers in evaluating proposals that align with IES's expectations of high-quality research that has scientific merit and practical significance. Reviewers are asked to use these recommendations, in conjunction with their professional judgement and expertise, to determine application quality.

Where appropriate, we provide recommendations following the Standards for Excellence in Education Research (SEER; <https://ies.ed.gov/seer>) to help ensure research is transparent, actionable, and focused on meaningful outcomes that have the potential to dramatically improve education. We also provide links to specific SEER resources that may be useful as you incorporate these recommendations into your application.

### *(a) Significance*

Strong applications will address a significant challenge in education and provide a compelling theoretical, empirical, and practical rationale for the project.

Describe the malleable factors that you propose to study and the relationship(s) you expect them to have with learner education outcomes. Identify aspects of the education setting and characteristics of learners or educators that may mediate or moderate the nature of the relationship between the factors of interest and learner outcomes.

Explicitly state your research questions.

If your target population includes historically underserved learners, discuss how the program, practice, or policy will address their needs. For additional resources see <https://ies.ed.gov/seer/equity.asp>.

For projects that propose to analyze data from a prior impact study, describe the relationships you propose to explore and how the project will contribute to a better understanding of the program, practice, or policy's mechanisms of change; sources of heterogeneity in implementation and outcomes across different settings, educators, or learners within the sample; or how variation in business-as-usual practices relates to learner outcomes.

If relevant, describe any partnerships with education agencies to carry out the proposed work. Including education agencies as partners makes it more likely that researchers focus on factors and outcomes that are meaningful to education practitioners and policymakers.

Describe how the results of your proposed exploratory study will inform future research, including development, impact, or measurement work, as well as increase our understanding of issues of importance to learners and educators.

### ***(b) Research Plan***

Strong applications will demonstrate that the research plan aligns with the research questions posed in the Significance section and that the project will be able to address those questions and aims with sufficient rigor.

Include a timeline for study activities in [Appendix C: Supplemental Charts, Tables, and Figures](#).

Discuss how your project conceptualizes education equity, and how the proposed design, sample, measurement, analysis, and reporting align to that conceptualization (<https://ies.ed.gov/seer/equity.asp>).

IES may invite researchers funded through this competition to apply at a later date for funding to extend the data collection period in order to collect follow-up data on study participants. Applicants should plan for this possibility by proposing procedures to maintain contact with participants and ensuring IRB protocols are written to allow researchers to follow participants longitudinally.

### ***Sample and Setting***

Describe the target population of learners that your sample represents.

If you will need to recruit participants, discuss the procedure you will use to recruit a sample that represents your target population. You should account for expected attrition and include contingency plans in the case of lower than anticipated recruitment or higher than expected attrition.

- Describe how you will assess the generalizability of your findings by contrasting your sample's characteristics with the characteristics of the target population. Explain how you will adjust for any mismatch between your sample and the population. For additional resources see <https://ies.ed.gov/seer/generalization.asp>.

Describe the setting(s) in which the research will take place (provide letters of agreement in [Appendix E](#)) and discuss how they will allow you to draw conclusions about the education settings your research is intended to inform.

If you propose to analyze extant data, describe the following:

- How well the data represent the target population.
- The settings in which the data was collected. If the data was collected long ago, address the relevance of the data to current issues in education and the needs of your learner population today.

### ***Research Design, Methods, and Data Analysis Plan***

Describe the methods you will use and how they will inform your research questions. Use a mixed methods approach whenever possible. Explain how the different quantitative and qualitative methods proposed are integrated and how they will reinforce each other in support of the findings.

Describe your research design with enough detail to demonstrate how it will address your research questions.

- A wide variety of research designs are appropriate for exploratory studies, including correlational, cross-sectional, longitudinal, experimental, and meta-analytic designs.

### *Power Analyses*

For all quantitative inferential analyses, demonstrate that your proposed sample will provide enough power to address your research questions. Provide enough detail for someone else to replicate your power analysis.

### *High-quality Measures*

Clearly define the constructs of interest in the proposed study. Describe the importance, reliability, and validity of all measures proposed, including learner outcomes, educator outcomes, and educator and education system characteristics. For additional resources see <https://ies.ed.gov/seer/outcomes.asp>.

- If you need to develop a measure, describe what you will develop, why it is necessary, how it will be developed, and the process for checking its reliability and validity. It is also critical that you explain how this measurement work will not compromise your ability to answer your research questions.

### *Data Analysis Plan*

Detail your data analysis procedures for all quantitative and qualitative analyses necessary to address your research questions.

Explain how your data are appropriate, and of sufficient quality, for the proposed analyses.

- For mixed methods studies, data analysis plans should provide detailed information on the analytical and interpretive processes for both the qualitative and the quantitative data and reflect their integration.
- Describe and justify the statistical models to be used, including how they address the multilevel nature of education data and how well they control for selection bias, if appropriate.
- Discuss how exclusion from testing and missing data will be handled in your analyses. If you intend to impute missing data, describe the approach you will use to provide unbiased estimates.
- Describe sensitivity tests to assess the influence of key procedural or analytic decisions on the results.
- If you intend to link multiple datasets, provide sufficient detail for reviewers to judge the feasibility of the linking plan.
- Describe how you will identify and examine any variables that might mediate or moderate the relationship between the learner education outcomes and the malleable factors you propose to study.
- Provide separate descriptions for all analyses of factors that mediate or moderate the relationships of interest.
- Describe analyses that will be conducted to examine variations in outcomes among learners from diverse backgrounds and experiences, including historically underserved learners.
- For meta-analysis projects, define the effect-size statistics to be used, along with the associated weighting function, procedures for handling outliers, procedures for handling effect size heterogeneity, and any adjustments to be applied, such as reliability corrections.
- Describe how you will assess the generalizability of your findings by contrasting your sample's characteristics with the characteristics of the target population. Explain how you will adjust for any mismatch between your sample and the population. For additional resources see <https://ies.ed.gov/seer/generalization.asp>.

### *(c) Personnel*

Strong applications will demonstrate that the project team has sufficient capacity to complete all proposed activities. Describe the management structure and procedures that will be used to keep the project on track and ensure the study is of high quality. Explain how key personnel will maintain their objectivity

and promote transparency in conducting the proposed research, stakeholder engagement, and dissemination activities.

Exploration projects demand a wide variety of expertise to ensure they are of high quality. Describe how the background and experience of the project team supports the conduct of the proposed study, including who will be responsible for each of the specified activities and who brings expertise specific to the population of learners that your project addresses. Identify the amount of time that team members will devote to the project.

IES is strongly committed to broadening participation in its research grant programs, including personnel from underrepresented communities and diverse institutions.

*(d) Resources*

Strong applications will demonstrate sufficient research infrastructure and capacity to conduct the proposed project at both the primary applicant institution and any subaward institutions.

Describe your access to specific offices and organizations that will support your plan to engage stakeholders and disseminate results as described in the required Appendix A: Stakeholder Engagement and Dissemination Plan.

Describe your access to the education settings, data sets, and digital platforms necessary for the proposed research.

- Include letters of agreement, data licenses, or existing memoranda of understanding in [Appendix E](#) to document this access.
- Describe your plan for acquiring any resources that are not currently accessible, will require significant expenditures, and are necessary for the successful completion of the project, such as equipment, test materials, curriculum, or training materials.

## D. Development and Innovation

### 1. Purpose

IES supports research to develop or modify and pilot innovative programs, practices, or policies that can be scaled up to benefit learner education outcomes.

Successful Development and Innovation projects produce programs, practices, or policies that align to the needs of learners, educators, and/or other education stakeholders and decision-makers; are different in compelling ways from current practice; and with clearly specified core components, implementation support, cost information, and pilot data on benefits for learners' education outcomes to support future impact testing and scaling.

### 2. Award Limit

No more than \$2,000,000 (direct and indirect costs) over no more than 4 years.

The duration and budget you request should reflect the actual time and amount of funding necessary to conduct your proposed scope of work.

- **IES will not make an award under the Development and Innovation project type that exceeds \$2,000,000 or that is for longer than 4 years.**
- To ensure that Development and Innovation projects focus on the development process, **a maximum of 35 percent** of project funds (direct and indirect funds) should be used for the pilot study, including implementation of the new/modified program, practice, or policy; data collection; and analysis of pilot data.

### 3. Requirements

The four sections of the project narrative **must** include the content described below to be considered responsive to the requirements of this RFA and forwarded for peer review. Applications lacking this specific content will not be forwarded for peer review.

The Project Narrative **must** adhere to the formatting guidelines (see Part IV.B) and be **no more than 22 pages**. For example, the use of small type will be grounds for IES to return the application without scientific peer review. If the narrative exceeds this page limit, IES will remove any pages after the 22nd page of the narrative.

Please see the [recommendations section](#) for additional information about what you may want to include in the Project Narrative. Recommendations reflect what IES expects as part of high-quality projects. It is the applicant's responsibility to demonstrate they have addressed the recommendations in the application.

#### (a) Significance

The purpose of this section is to explain why it is important to develop or refine and pilot test the program, practice, or policy to benefit learner education outcomes and why it is likely to be affordable and feasible to implement at scale.

You **must** describe the following:

- The program, practice, or policy you propose to develop or refine and how it will be implemented.

#### (b) Research Plan

The purpose of this section is to describe your research plan and demonstrate how it will allow you to address your research questions.

You **must** describe the following:

- The sample and setting for your project.
- The research design, methods, and data analysis plans for:

- Developing or refining the program, practice, or policy.
- Determining its usability and feasibility.
- Determining its promise for generating beneficial learner outcomes.
- Your plan for determining the costs associated with implementing the fully developed program, practice, or policy in the context of the pilot study.

### *(c) Personnel*

The purpose of this section is to describe the members of your project team and their capacity to complete the project. This includes their training and experience, including experience working with the proposed study population, and the amount of time they will commit to the proposed research, stakeholder engagement, and dissemination activities.

You **must** describe:

- Your project team.

### *(d) Resources*

The purpose of this section is to describe your access to resources needed to execute a project of this size and complexity. This includes access to relevant tools, data, populations, and research infrastructure.

You **must** describe:

- The research infrastructure and capacity to conduct the project.

## **4. Recommendations for Strong Applications**

The following recommendations are included to support (1) applicants in writing proposals and (2) reviewers in evaluating proposals that align with IES's expectations of high-quality research that has scientific merit and practical significance. Reviewers are asked to use these recommendations, in conjunction with their professional judgement and expertise, to determine application quality.

Where appropriate, we provide recommendations following the Standards for Excellence in Education Research (SEER; <https://ies.ed.gov/seer>) to help ensure research is transparent, actionable, and focused on meaningful outcomes that have the potential to dramatically improve education. We also provide links to specific SEER resources that may be useful as you incorporate these recommendations into your application.

### *(a) Significance*

Strong applications will address a significant challenge in education and provide a compelling theoretical, empirical, and practical rationale for the new program, practice, or policy.

Explicitly state your research questions.

Describe the program, practice, or policy to be developed or refined and/or pilot tested, including the following:

- Its core features (for additional resources see [https://ies.ed.gov/seer/core\\_components.asp](https://ies.ed.gov/seer/core_components.asp)).
- How and where it is intended to be implemented.
- The population of learners and educators intended to benefit from it.
- Why it is likely to be an improvement over what already exists.
- Its potential market. What resources and organizational structure would be necessary for its wide adoption and implementation? What is its potential for commercialization?
- Its potential to be scaled to populations and contexts different from those in which it was developed or refined.

Describe the theory of change for the program, practice, or policy, including all necessary inputs and

outcomes as well as contextual factors that may influence desired changes in learner outcomes. Consider supporting the project narrative with a visual representation of the theory of change in [Appendix C: Supplemental Charts, Tables, and Figures](#).

If your target population includes historically underserved learners, discuss how the program, practice, or policy will address their needs. For additional resources see <https://ies.ed.gov/seer/equity.asp>.

If relevant, describe any partnerships with education agencies to carry out the proposed work. Including education agencies as partners makes it more likely that researchers focus on programs, practices, and policies that are meaningful and useful to education practitioners and policymakers.

If you are proposing to further develop a program, practice, or policy that was the focus of a previous development grant, provide a justification for the new development grant. Include any evidence of the prior assessment's use in the field. Note whether what was developed has been (or is being) tested for impact. Include any available results and explain their implications for the proposed project.

### *(b) Research Plan*

Strong applications will demonstrate that the research plan aligns with the research questions posed in the Significance section and that the project will be able to answer those questions and address those aims with sufficient rigor.

Include a timeline for study activities in [Appendix C: Supplemental Charts, Tables, and Figures](#).

Discuss how your project conceptualizes education equity, and how the proposed design, sample, measurement, analysis, and reporting align to that conceptualization (<https://ies.ed.gov/seer/equity.asp>).

### **Sample and Setting**

Describe the samples and settings for each component of your project (iterative development activities, usability and feasibility testing, pilot study) as applicable.

Describe the target population that your samples represent. Your target population may represent a very narrow segment of the larger U.S. population as IES does not expect individual projects to be generalizable to the entire U.S. population. Explain how your work with these samples will contribute to a larger body of knowledge on promising programs, practices, and policies for the target population by addressing the following:

- The procedure you will use to recruit a sample that represents your target population.
- The inclusion and exclusion criteria you will use and how it influences the generalizability of the results to this target population. For additional resources see <https://ies.ed.gov/seer/generalization.asp>.
- Strategies to increase the likelihood that participants will join the project and remain in the study (reduce attrition).

Describe the setting(s) in which the research will take place (provide letters of agreement in [Appendix E](#)) and discuss how they will allow you to draw conclusions about the program, practice, or policy being implemented within those education settings.

### **Research Design, Methods, and Data Analysis Plans**

Use a mixed methods approach whenever possible. Explain how the different quantitative and qualitative methods proposed are integrated and how they will reinforce each other in support of the findings.

#### *Developing/Refining the Program, Practice, or Policy*

IES recommends using an iterative process to develop or refine programs, practices, and policies. If appropriate, we also encourage you to use a digital learning platform to support this process as it may support more rapid prototyping and scaling if the intervention is shown to be efficacious. Explain why the iterative development approach you propose is appropriate. (IES does not require or endorse any specific model of iterative development or suggest an ideal number of iterations.)

Describe how you will determine which core components are critical for improving outcomes, whether

any components may be optional, and the support that will be necessary to ensure high fidelity of implementation.

#### *Determining Usability and Feasibility of the Program, Practice, or Policy*

Describe how you will collect information on the acceptability, usability, and feasibility of implementing the program, practice, or policy. Address how you will use this information to do the following:

- Make adjustments to the program, practice, or policy to improve its potential for future scaling.
- Decide if it is a good fit for the setting in which it is being implemented. How will it be integrated into current practice and/or policy?
- Identify the amount of time and training needed to adopt and sustain its implementation.

#### *Determining Promise of Benefit for Learner Education Outcomes*

Describe how you will pilot the program, practice, or policy to determine its potential benefit for learner education outcomes. Pilot studies are intended to show that a newly developed or refined program, practice, or policy is promising, not to provide evidence of efficacy for learner outcomes. IES defines “promising” to mean that findings related to learner outcomes are in the expected direction.

Provide a rationale for the research design you propose for your pilot study.

- Propose the most rigorous research design possible, including appropriate matching of your research questions with design and analyses, given what you will be piloting, with whom, and under what conditions. Pilot studies should use experimental group, within-subject, or single-case experimental designs, or quasi-experimental designs to collect pilot data. These designs are preferred because they permit a reasonable evaluation of whether or not the program, practice, or policy has sufficient potential for improving learner outcomes to merit further investment. In other words, pilot studies help to determine if there are *potentially positive outcomes* associated with exposure to the program, practice, or policy.
- If your pilot study will be underpowered given the limitations on time and money available for this type of project, describe what can be learned about the potential benefits for learner education outcomes given the known limits on statistical power. Strong applications will include confidence intervals for treatment effects (or treatment effect sizes) computed considering clusters as random effects. Indicate the limitations to your ability to draw conclusions based on this analysis.
- If using a group design, describe the comparison group and how you will monitor whether the treatment and comparison groups are different enough to expect the predicted education outcomes. For more information, see <https://ies.ed.gov/seer/implementation.asp>.

#### *Power Analyses*

Describe the procedure used to calculate either the power for detecting the minimum effect or the minimum detectable effect size, including all the details that would be needed for someone else to replicate your power analysis.

#### *High-quality Measures*

Clearly define the constructs of interest in the proposed study. Describe the importance, reliability, and validity of all measures proposed including learner outcomes, educator outcomes, educator and education system characteristics, and implementation outcomes. For additional resources see <https://ies.ed.gov/seer/outcomes.asp>.

- If you need to develop a measure, describe what you will develop, why it is necessary, how it will be developed, and the process for checking its reliability and validity. It is also critical that you explain how this measurement work will not compromise your ability to achieve the primary aims.
- Describe how you will measure implementation fidelity of the program, practice, or policy, including any training that is provided to support implementation.



### *Data Analysis Plan*

Detail your data analysis procedures for all quantitative and qualitative analyses necessary to address your research questions.

Explain how your data are appropriate, and of sufficient quality, for the proposed analyses.

- For mixed methods studies, data analysis plans should provide detailed information on the analytical and interpretive processes for both the quantitative data and the qualitative data and reflect their integration.
- Describe analyses that will be conducted to examine outcomes for learners from diverse backgrounds and experiences, including learners from historically underserved communities or populations.
- Describe and justify the statistical models to be used, including how they address the multilevel nature of education data. Address any clustering of learners within classrooms, schools, districts, colleges, states, or other relevant units.
- Discuss how exclusion from testing and missing data will be handled in your analyses. If you intend to impute missing data, describe the approach you will use to provide unbiased estimates.
- Propose to conduct sensitivity tests to assess the influence of key procedural or analytic decisions on the results.

Describe how you will measure the generalizability of your findings by contrasting your sample's characteristics with the characteristics of the target population. Explain how you will adjust for any mismatch between your sample and the population. For additional resources see <https://ies.ed.gov/seer/generalization.asp>.

### *Cost Analysis Plan*

Describe your cost analysis plan for determining the cost of implementing the program, practice, or policy within the context of your pilot study. Do not simply state what may or may not already be known about its cost. Instead, you should plan to collect data during your pilot study to determine costs. If you intend to make the program, practice, or policy available at no cost, you still need to determine costs associated with implementing and sustaining it within education settings. For additional resources see [https://ies.ed.gov/seer/cost\\_analysis.asp](https://ies.ed.gov/seer/cost_analysis.asp).

### *(c) Personnel*

Strong applications will demonstrate that the project team has sufficient capacity to complete all proposed activities. Describe the management structure and procedures that will be used to keep the project on track and ensure the study is of high quality. Explain how key personnel will maintain their objectivity and promote transparency in conducting the proposed research, stakeholder engagement, and dissemination activities.

Development projects demand a wide variety of expertise to ensure they are of high quality. Describe how the background and experience of the project team supports the conduct of the proposed study, including who will be responsible for each of the specified activities and who brings expertise specific to the population of learners that your project addresses. Identify the amount of time that team members will devote to the project.

IES is strongly committed to broadening participation in its research grant programs, including personnel from underrepresented communities and diverse institutions.

### *(d) Resources*

Strong applications will demonstrate sufficient research infrastructure and capacity to conduct the proposed project at both the primary applicant institution and any subaward institutions.

Describe your access to specific offices and organizations that will support your plan to engage stakeholders and disseminate results as described in the required [Appendix A: Stakeholder Engagement and Dissemination Plan](#).

Describe your access to the education settings, data sets, and digital platforms necessary for the proposed research.

- Include letters of agreement, data licenses, or existing memoranda of understanding in [Appendix E](#) to document this access.
- Describe your plan for acquiring any resources that are not currently accessible, will require significant expenditures, and are necessary for the successful completion of the project, such as equipment, test materials, curriculum, or training materials.

## E. Impact

### 1. Purpose

IES supports causal studies to assess the near and/or long-term impacts of programs, practices, or policies on learner education outcomes. These studies can evaluate newly developed or refined programs, practices, or policies. There is also great need to carry out impact studies that propose to evaluate widely-used programs, practices, or policies. These programs are in wide use with a large number of learners, so it is important to determine if they are having beneficial impacts on education outcomes. IES-supported causal studies also document how and where the program, practice, or policy was implemented; the resources and supports needed to ensure the fidelity of its implementation; and the costs associated with its use.

Impact projects include (a) initial efficacy studies that test a program, practice, or policy that has not been rigorously evaluated previously (newly developed, refined or in wide-use) to determine whether it has beneficial impacts on education outcomes; (b) replication studies that test a program, practice, or policy that has been rigorously evaluated previously and demonstrated beneficial impacts on education outcomes to better understand for whom it works and under what conditions; and (c) follow-up studies that test the longer-term impact of a program, practice, or policy that has been shown to have beneficial impacts on education outcomes in a previous or ongoing evaluation study. A variety of analytic approaches are appropriate for Impact projects including (a) primary data collection and analyses, (b) secondary data analyses, or (c) a combination of both.

Successful Impact projects will generate evidence necessary to support the broader adoption of programs, practices, and policies that are shown to be effective. This includes evidence about how they benefit learners, including groups of learners that have been historically underserved, as well as about the affordability and feasibility of their use.

### 2. Award Limit

No more than \$4,000,000 (direct and indirect costs) over no more than 5 years.

- The duration and budget you request should reflect the actual time and amount of funding necessary to conduct your proposed scope of work.
- **IES will not make an award under the Impact project type that exceeds \$4,000,000 or that is for longer than 5 years.**

### 3. Requirements

The Project Narrative **must** adhere to the formatting guidelines (see [Part IV.B](#)) and be **no more than 22 pages**. For example, the use of small type will be grounds for IES to return the application without scientific peer review. If the narrative exceeds the page limit, IES will remove any pages after the 22nd page of the narrative.

The project narrative **must** include four sections: Significance, Research Plan, Personnel, and Resources. The four sections of the project narrative **must** include the content described below to be considered responsive to the requirements of this RFA and forwarded for peer review. Applications lacking this specific content will not be forwarded for peer review.

Please see the [recommendations section](#) for additional information about what you may want to include in the Project Narrative. Recommendations reflect what IES expects as part of high-quality projects. It is the applicant's responsibility to demonstrate they have addressed the recommendations in the application.

#### (a) Significance

The purpose of this section is to explain why it is important to test the impact of the program, practice, or policy on learner education outcomes.

You **must** describe the following:

- The program, practice, or policy you propose to test and how it is being, will be, and/or was implemented.
- Any prior evidence of impact on learner education outcomes (or lack of evidence) for the program, practice, or policy you propose to test.

### *(b) Research Plan*

The purpose of this section is to describe your research plan and demonstrate how it will allow you to address your research questions.

You **must** describe the following:

- The sample and setting for your project.
- The research design, methods, and data analysis plans for your project.
- Your statistical power analyses, unless using a single-case experimental design.
- Your plan for documenting implementation, or a rationale for why you cannot do so.
- Your plan for determining the cost to implement the program, practice, or policy, or a rationale for why a cost analysis cannot be done.
- Your plan for determining the cost effectiveness of the program, practice, or policy, or a rationale for why a cost-effectiveness analysis cannot be done.

### *(c) Personnel*

The purpose of this section is to describe the members of your project team, their training and experience, including experience working with the proposed study population, and the amount of time they will commit to the proposed research and dissemination activities.

You **must** describe the following:

- The project team.

### *(d) Resources*

The purpose of this section is to describe your access to resources needed to execute a project of this size and complexity. This includes access to relevant tools, data, populations, and research infrastructure.

You **must** describe:

- The research infrastructure and capacity to conduct the project.

## ***4. Recommendations for Strong Applications***

The following recommendations are included to support (1) applicants in writing proposals and (2) reviewers in evaluating proposals that align with IES's expectations of high-quality research that has scientific merit and practical significance. Reviewers are asked to use these recommendations, in conjunction with their professional judgement and expertise, to determine application quality.

Where appropriate, we provide recommendations following the Standards for Excellence in Education Research (SEER; <https://ies.ed.gov/seer>) to help ensure research is transparent, actionable, and focused on meaningful outcomes that have the potential to dramatically improve education. We also provide links to specific SEER resources that may be useful as you incorporate these recommendations into your application.

### *(a) Significance*

Strong applications will address a significant challenge in education and provide a compelling theoretical, empirical, and practical rationale for the testing the program, practice, or policy.

Explicitly state the type of impact study you propose (that is, initial efficacy, replication, or follow-up) and provide a justification.

Explicitly state your research questions.

Describe any partnerships with education agencies that will be leveraged to carry out the proposed research to make it more meaningful and useful to education practitioners and policymakers.

Describe the program, practice, or policy and its readiness for evaluation, including:

- Its overall practical importance for key stakeholders.
- Its core features (for additional resources see [https://ies.ed.gov/seer/core\\_components.asp](https://ies.ed.gov/seer/core_components.asp)).
- the extent to which it is ready to be implemented.
- The extent to which it is already in use in real-world settings.
- The characteristics of the setting and the type of implementation support necessary for the desired change in education outcomes to occur.
- The potential market for the program, practice, or policy, including the resources and organizational structure necessary for its wider adoption and implementation and potential for commercialization.

Describe the theory of change for the program, practice, or policy, including all necessary inputs and outcomes as well as contextual factors that may shape its effectiveness. Although widely-used programs, practices, or policies may not have an explicit theory of change, IES expects applicants to propose an appropriate theory of change to guide the design of their study and plan for measurement, and to inform a clear description of high-fidelity implementation. Consider supporting the project narrative with a visual representation of the theory of change in [Appendix C: Supplemental Charts, Tables, and Figures](#).

Describe your target population and note whether it differs from any prior studies of the program, practice, or policy. If your target population includes historically underserved learners, discuss how the program, practice, or policy will address their needs. For additional resources see <https://ies.ed.gov/seer/equity.asp>.

Describe what is known about the program, practice, or policy in terms of acceptability to stakeholders, feasibility and fidelity of implementation, cost, and benefits to learners.

- IES strongly values impact research that can address such gaps in knowledge among interventions in wide use. If you propose to test the impact of a widely used program, practice, or policy, justify how your study will contribute to the base of evidence describing its efficacy, usability, feasibility, or cost.
- For replication studies, describe what is known about the implementation of the program, practice, or policy in at least one previous rigorous evaluation and impact on learner education outcomes (including effect sizes), how your proposed study will differ, and why those variations are important for understanding what works for whom and under what conditions.
- For follow-up studies, describe the program, practice, or policy's beneficial impact on education outcomes for the sample from the previous rigorous evaluation and the extent to which those benefits would be expected to persist.
  - If you propose to study potential longer-term benefits of a program, practice, or policy for which no immediate impacts have been found, provide a theory of change that justifies further investigation.
  - Explain how you will follow sample members, including educators and learners, in the proposed follow-up. In [Appendix C](#), include a diagram showing the number of participants at each stage of the prior study.
- For Impact studies that involve solely secondary data analysis, describe how widespread the program, practice, or policy currently is and address the importance of evaluating it and its implications for current education practice and policy. Justify the value of the proposed study should little information on implementation or cost be available.

- For Impact studies that involve implementation of the program, practice, or policy and primary data collection, provide a detailed description of the implementation procedures that are expected in the proposed study. The goal of this description is to provide information on the processes, strategies, and materials needed to implement the program, practice, or policy with fidelity. Note whether your project team will take an active role in supporting implementation as part of the proposed Impact study.

### *(b) Research Plan*

Strong applications will demonstrate that the research plan aligns with the research questions posed in the Significance section and that the project will be able to answer those questions and address those aims with sufficient rigor.

Include a timeline for study activities in [Appendix C: Supplemental Charts, Tables, and Figures](#).

Discuss how your study conceptualizes education equity, and how the proposed design, sample, measurement, analysis, and reporting align to that conceptualization as discussed at <https://ies.ed.gov/seer/equity.asp>.

IES encourages you to identify and use education outcomes that could be measured beyond the implementation period of the program, practice, or policy to determine if short-term changes in education outcomes are sustained over time.

- Depending on your design, you may be able to include additional follow-up data collection within your current study or, if that is not possible, you may be able to include activities that will help you do additional follow-up outside of the current study.
- IES may invite researchers funded through this competition to apply at a later date for funding to extend the data collection period in order to collect follow-up data on study participants. Plan for this possibility by proposing a sample size that accounts for attrition, procedures to maintain contact with participants, and ensuring IRB protocols are written to allow researchers to follow participants longitudinally.

### **Sample and Setting**

Describe the population of learners that your sample represents. Explain how your work with this sample will contribute to a larger body of knowledge on what works for the target population.

Through intentional sampling or other means, your proposed study should permit ready generalization of its findings to your population of interest. IES does not expect individual projects to be generalizable to the U.S. population as a whole. Your target population may represent a very narrow segment of the larger U.S. population. For additional resources see <https://ies.ed.gov/seer/generalization.asp>.

Describe the setting(s) in which the research will take place (provide letters of agreement in [Appendix E](#)) and why they are appropriate for your research questions.

If you will need to recruit participants for your Impact study, consider building in a planning year to allow ample time for recruitment. Describe the procedure you will use to recruit a sample that represents your target population. Present a contingency plan that addresses how you will recruit additional participants if the original recruitment plan falls short or if attrition is higher than planned.

If applicable, describe strategies to increase the likelihood that participants will join the study and remain in the study (reduce attrition) over the course of the evaluation.

- For a follow-up study, discuss what steps you will take to minimize attrition of learners from the original study. For follow-up studies of education personnel, explain how you will determine whether the learners in the follow-up study are like the learners in the original study.

### ***Research Design, Methods, and Data Analysis Plans***

Provide a rationale for the research design you propose. IES expects Impact studies to use designs that are eligible to meet the IES What Works Clearinghouse (WWC) design standards that are in effect at the time of RFA publication (<https://ies.ed.gov/ncee/wwc/Handbooks>).

IES recommends using randomized controlled trials (RCTs) for impact studies because they have the strongest internal validity for causal conclusions. We recognize that RCTs are not always the best design choice because they may be difficult to implement (for example, to test the impact of policies that are implemented state-wide). However, IES expects applicants to use the strongest research design available to address their proposed research questions. The WWC currently only reviews studies that use group RCTs; sequential, multiple assignment, randomized trials (SMARTs); regression discontinuity designs (RDDs); quasi-experimental designs (QEDs) including cross-sectional group designs, comparative interrupted time series, and difference-in-difference designs; and single case experimental designs (SCDs).

When feasible, choose a study design that allows valid estimates to be calculated for different settings or groups within your proposed sample, particularly those who have been historically underserved.

If you propose an RCT, describe:

- The unit of randomization, your rationale for randomizing at that level, and the procedures for implementing and maintaining random assignment to condition.
- How you will document overall and differential attrition rates, and baseline equivalence of the treatment and control groups if differential attrition is high.

If you propose a SMART design:

- Identify and provide a rationale for each stage of the SMART, including the critical decision point for each stage and the randomization process that subsequently takes place at each critical decision point.

If you propose an RDD, describe:

- The appropriateness of the assignment variable, the assignment variable's resistance to manipulation, the level of independence of the cutoff point from the assignment variable, and the policy relevance of the cutoff point.
- The sensitivity analyses and robustness checks you will use to assess the influence of key procedural or analytic decisions such as functional forms and bandwidths on the results.
- How you will determine that there is a true discontinuity at the cutoff point and not at other points where a discontinuity would not be expected.
- How you will document overall and differential attrition rates, and baseline equivalence between treatment and comparison groups, especially around the cutoff point, if differential attrition is high.
- How you will demonstrate high levels of compliance to assignment with most treatment group members receiving the program, practice, or policy and most comparison group members not.

If you propose a QED, describe:

- To what extent the proposed design will permit drawing causal conclusions about the effect of the program, practice, or policy on the intended outcomes.
- How you will document baseline equivalence between treatment and comparison groups.
- The procedure for minimizing selection bias and the plan to address threats to internal validity.

If you propose a SCD, describe:

- The type of SCD you propose to use with at least three demonstrations of an intervention effect at three different points in time.

- Quantitative analyses, in addition to visual analysis, for analyzing the resulting data.
- How you would compute a design-comparable effect size, if feasible.
- How the independent variable will be systematically manipulated by the researcher.
- How you will confirm that there are no residual treatment effects.

For mixed methods research using any of these designs, describe:

- The benefits of the mixed methods approach you will use.
- The types of data to be collected.
- Research questions that reflect a mixed methods approach.
- The qualitative and quantitative approaches used and how they complement one another.
- Management of quantitative and qualitative data, including codebook development and procedures for determining intercoder reliability.

### **Plan for Documenting Implementation**

If applicable, describe your plan for assessing implementation strategies and fidelity to core components in the treatment group and the identification of similar components in the comparison group. Your plan for documenting the treatment implementation and contrast

(<https://ies.ed.gov/seer/implementation.asp>) should describe the following:

- How you will compare implementation of core components in the treatment and comparison groups, how you will respond if fidelity to core components in the treatment group is low, and what you will do if you find that the treatment and comparison groups are highly similar on core components.
- The measures you will use to document and understand strategies to support implementation and fidelity to core components, including any training or coaching provided to implementers or any other resources required, and other relevant implementation measures of interest.
- Potential moderators of implementation including characteristics of those who implement the program, practice, or policy; adaptations made in response to local context; and organizational factors at the classroom, school, and district levels.
- How you will document, and identify opportunities to learn from, adaptations of the program, practice, or policy that were observed during implementation and their relationship to education outcomes.

### *Power Analyses*

Provide a separate power analysis for each causal analysis you propose and for those considered exploratory or secondary. Each power analysis should demonstrate the statistical power of the research design to detect a reasonably expected and minimally important effect of the program, practice, or policy on the focal learner outcomes. Justify why this level of effect would be expected and explain why this would be a practically important effect.

For each power analysis, describe the assumptions used to calculate either the power for detecting the minimum effect or the minimum detectable effect size, including all the details that would be needed for someone else to replicate it. The power analysis assumptions should be aligned with the unit of randomization or assignment.

### *High-quality Measures*

Clearly define the outcome constructs of interest (<https://ies.ed.gov/seer/outcomes.asp>). For all proposed measures, including those of mediators or moderators, describe their reliability, validity, sensitivity to change, appropriateness for the proposed sample and setting, and practical importance to stakeholders.

Include state assessment scores or measures of successful progression through education systems such as



attendance, progression, or degree completion when they are available, accessible, and appropriate for both the construct(s) and learners being assessed.

For programs, practices, or policies that are designed to directly change the teaching and learning environment and, in doing so, affect learner outcomes, provide measures of those intermediate outcomes (e.g., educator or leader behaviors or education system characteristics) that are hypothesized to be directly linked to the program, practice, or policy.

Consider the What Works Clearinghouse (WWC) outcome measure standards when selecting assessments for your proposed impact study. Avoid relying solely on outcome measures that are overly aligned to the program, practice, or policy being studied, or that are not independent (that is, researcher-developed measures or those that are not in broader use). Measures that are overly aligned are not eligible for WWC review and nonindependent measures in mathematics and literacy may not be eligible to be assigned an evidence tier by the WWC. For more information, see the WWC Standards Handbook, <https://ies.ed.gov/ncee/wwc/Handbooks>.

For replication studies, to the extent possible, use outcome measures that align with those used in the prior impact study (or studies). Variations in outcome measures from the prior studies should be identified and discussed in relation to replicability.

If you need to develop a measure, describe what you will develop, why it is necessary, how it will be developed, how you will avoid overalignment and nonindependence (see above), and the process for checking its reliability and validity. Consider including established measures to confirm the newly developed measure is moving in the same direction and capturing the same construct as additional means to justify its validity. It is also critical that you explain how this measurement work will not compromise your ability to answer your research questions.

### ***Data Analysis Plan***

Detail your data analysis procedures for all quantitative and qualitative analyses necessary to address your research questions, including, if applicable, those related to mediation and moderation, baseline equivalence, and implementation fidelity.

Explain how your data are appropriate, and of sufficient quality, for the proposed analyses.

If you intend to link multiple datasets, provide sufficient detail for reviewers to judge the feasibility of the linking plan.

- For mixed methods studies, data analysis plans should provide detailed information on the analytical and interpretive processes for both quantitative and qualitative data and reflect the integration of qualitative and quantitative data.
- As appropriate, describe any moderator analyses that will be conducted to examine variation in impact by sample demographic factors such as gender, race/ethnicity, and socioeconomic status or setting characteristics, including implementation.
- Describe how you will measure the generalizability of your findings and adjust for any mismatch between your sample and the population. For additional resources see <https://ies.ed.gov/seer/generalization.asp>.
- For replication studies, describe the plan for comparing the results of the proposed study to those from prior impact studies in order to determine whether the proposed study replicated the findings from prior studies.

### **Cost Analysis and Cost Effectiveness Analysis Plans**

Describe your cost analysis and cost effectiveness analysis plans for determining the cost and cost effectiveness of the program, practice, or policy. Do not simply state what may or may not already be known about its cost. Instead, you should plan to collect data during your impact study to determine costs. If the program, practice, or policy is intended to be made available at no cost, you still need to determine costs associated with implementing and sustaining it within education settings. For additional resources, see [https://ies.ed.gov/seer/cost\\_analysis.asp](https://ies.ed.gov/seer/cost_analysis.asp).

For follow-up studies, if a rigorous cost analysis has already been completed for the same program, practice, or policy in a similar context, you may rely on that cost analysis rather than completing a new one. In such a case, describe the findings of the previous cost analysis and show that the cost information from the original study is applicable.

If you are not able to conduct a cost analysis or a cost effectiveness analysis, you **must** explain why (see [Requirements for the Research Plan](#)). For example, cost information may not be available in a secondary data set or from the original study that is the basis of a proposed follow-up study. In such cases, explain why the Impact study would still be important to conduct despite the lack of information about cost.

### *(c) Personnel*

Strong applications will demonstrate that the project team has sufficient capacity to complete all proposed activities. Describe the management structure and procedures that will be used to keep the project on track and ensure the study is of high quality. Explain how key personnel will maintain their objectivity and promote transparency in conducting the proposed research, stakeholder engagement, and dissemination activities. Program, practice and/or policy developers may serve as Principal Investigators or other key personnel as long as the necessary safeguards are in place and their involvement does not jeopardize the objectivity of the evaluation. Similarly, evaluation teams should describe what safeguards they have in place to ensure objectivity and transparency.

Impact projects demand a wide variety of expertise to ensure they are of high quality. Describe how the experience of the project team supports the conduct of the proposed study, including who will be responsible for each of the specified activities and who brings expertise specific to the population of learners that your project addresses. Identify the amount of time that team members will devote to the project.

In its research grant programs, IES is strongly committed to broadening participation, including personnel from underrepresented communities and diverse institutions.

### *(d) Resources*

Strong applications will demonstrate sufficient research infrastructure and capacity to conduct the proposed project at both the primary applicant institution and any subaward institutions.

Describe your access to specific offices and organizations that will support your plan to engage stakeholders and disseminate results as described in the required [Appendix A: Stakeholder Engagement and Dissemination Plan](#).

Describe your access to the education settings, data sets, and digital platforms necessary for the proposed research.

- Include letters of agreement, data licenses, or existing memoranda of understanding in [Appendix E](#) to document this access.
- Describe your plan for acquiring any resources that are not currently accessible, will require significant expenditures, and are necessary for the successful completion of the project, such as equipment, test materials, curriculum, or training materials.

## Part IV: Preparing Your Application

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### A. Overview

The application contents—individual forms and their PDF attachments—represent the body of an application to IES. Read the IES Application Submission Guide ([https://ies.ed.gov/funding/submission\\_guide.asp](https://ies.ed.gov/funding/submission_guide.asp)) to learn how to prepare a complete application that is submitted on time through Grants.gov (<https://www.grants.gov/>).

### B. General Formatting

To ensure that reviewers can read your application and that all applicants have similar expectations for length and space, IES specifies the following formatting conventions. Adherence to type size and line spacing requirements is necessary so that no applicant will have an unfair advantage by using small type or by providing more text in their applications. These requirements apply to the PDF file as submitted, unless otherwise specified. In order for an application to be compliant and sent forward for review, the applicant should ensure that each narrative section follows both the page limit maximums and the formatting guidelines below unless otherwise specified.

#### 1. Page and Margin Specifications

For all IES grant applications, a “page” is 8.5 in. x 11 in. on one side only with 1-inch margins at the top, bottom, and both sides.

#### 2. Page Numbering

Add page numbers using the header or footer function and place them at the bottom or upper right corner for ease of reading.

#### 3. Spacing

Text must be single spaced.

#### 4. Type Size (Font Size)

Type must conform to the following three requirements:

- The height of the letters must not be smaller than a type size of 12-point.
- Type density, including characters and spaces, must be no more than 15 characters per inch (cpi). For proportional spacing, the average for any representative section of text must not exceed 15 cpi.
- Type size must yield no more than 6 lines of type within a vertical inch.

You should check the type size using a standard device for measuring type size, rather than relying on the font selected for a particular word processing/printer combination. Small type size makes it difficult for reviewers to read the application; consequently, the use of small type will be grounds for IES to return the application without scientific peer review.

As a practical matter, if you use a 12-point Times New Roman font without compressing, kerning, condensing, or other alterations, and use footnotes sparingly, if at all, the application will typically meet these requirements. Readability should guide your selection of an appropriate font and your use of footnotes.

#### 5. Citations

Use the parenthetical author-date style for citations rather than numeric citations that correspond to the reference list.

## 6. *Graphs, Diagrams, and Tables*

Use black and white in graphs, diagrams, tables, and charts. If color is used, check that the material reproduces well if printed or photocopied in black and white.

Text in figures, charts, and tables, including legends, may be in a type size smaller than 12-point but must be readily legible.

## C. Required and Optional Appendices

The required project narrative (Significance, Research Plan, Personnel, and Resources) that is described for each project type (see [Part III: Project Type Requirements and Recommendations](#)) is followed by several appendices. Some of these appendices are required, and some are optional. When you submit your application through Grants.gov, you will create a single PDF file that contains the project narrative and all appendices and include it as an attachment in the application package. Include appendices in alphabetical order and simply skip an appendix if it is not required for your application or if you choose not to include one of the optional appendices. See the IES Application Submission Guide ([https://ies.ed.gov/funding/submission\\_guide.asp](https://ies.ed.gov/funding/submission_guide.asp)) for more information about preparing and submitting your application using the required application package for this competition through Grants.gov (<https://www.grants.gov/>).

The project narrative and appendices are critical parts of the IES application because they include the substantive content that the peer reviewers will evaluate for theoretical and practical significance and scientific merit.

### 1. *Appendix A: Engagement and Dissemination Plan (Required)*

You **must** include Appendix A after the project narrative. Appendix A must meet the general formatting guidelines and be **no more than three pages**. If Appendix A exceeds this three-page limit, IES will remove any pages after the 3<sup>rd</sup> page of the appendix before it is forwarded for scientific peer review.

Your Engagement and Dissemination plan is intended to demonstrate (1) how your proposed research reflects engagement with relevant stakeholders throughout the research process, including in the development of your application; (2) how your proposed approach is grounded in current needs; and (3) how you will, in practical and accessible ways, disseminate findings to relevant stakeholders. Applicants should describe their engagement and dissemination history in ways that demonstrate their ability and capacity to carry out their plan of engaging with stakeholders and disseminate research findings transparently and accessibly.

You should describe your plan to engage relevant stakeholders at various junctures in the research and dissemination process. Be sure to identify the specific groups most relevant for your research context, such as learners, educators, policymakers, researchers, parents/caregivers, or other relevant audiences. Your plan should be tailored to those groups who will benefit from the findings and reflect the unique purposes of the project type (see [Part III](#)). Engagement and dissemination activities may include, but are not limited to:

- Identifying researchable topics of interest to stakeholders that, if rigorously addressed, could generate evidence that improves learner outcomes.
- Adapting research goals and procedures to the settings in which the study will be conducted to improve the likelihood of its successful execution.
- Operationalizing key constructs to strengthen and better characterize their internal and external validity.
- Identifying relevant moderating or mediating contexts that may affect implementation, heterogeneity of impacts, or other research findings.
- Gathering feedback on study findings related to their potential interpretations and implications.

- Increasing the likelihood that stakeholders act upon study findings to improve teaching and learning, strengthen education systems, and further contribute to fundamental knowledge and understanding of education and the education sciences.

The specific ways in which you involve stakeholders in the research and dissemination endeavor, and when you do so, will vary depending on the goals of the project. Your engagement and dissemination plan should also reflect the specific purpose of your project type. Describe what guardrails or mechanisms you will put in place to maintain the independence and objectivity of the research and findings while also engaging with stakeholders.

**The Engagement and Dissemination Plan is the only information that may be included in Appendix A; all other materials will be removed prior to review of the application.**

## ***2. Appendix B: Response to Reviewers (Required for Resubmissions)***

If your application is a resubmission, you **must** include Appendix B. If your application is one that you consider to be new but that is similar to a previous application, you should include Appendix B. Appendix B **must** meet the general formatting guidelines and be **no more than three pages**. If Appendix B exceeds this page limit, IES will remove any pages after the third page of the appendix before it is forwarded for scientific peer review. Note that an application that was previously submitted to a different topic within this competition or to another IES grant competition is still considered a resubmission.

Use Appendix B to describe how the revised application is responsive to prior reviewer comments. If you have submitted a somewhat similar application in the past but are submitting the current application as a new application, you should use Appendix B to provide a rationale explaining why the current application should be considered a “new” application rather than a “resubmitted” application.

**This response to the reviewers is the only information that may be included in Appendix B; all other material will be removed prior to review of the application.**

## ***3. Appendix C: Supplemental Charts, Tables, and Figures (Optional)***

Appendix C **must** meet the general formatting guidelines and be **no more than 15 pages**. If Appendix C exceeds this page limit, IES will remove any pages after the 15<sup>th</sup> page of the appendix before it is forwarded for scientific peer review. In Appendix C, you may include figures, charts, or tables with supplementary information like a timeline for your research project, a diagram of the management structure of your project, or examples of measures used to collect data for your project such as individual test items, tests, surveys, and observation and interview protocols.

**These are the only materials that may be included in Appendix C; all other material will be removed prior to review of the application.**

## ***4. Appendix D: Examples of Program, Practice, Policy, or Assessment Materials (Optional)***

Appendix D **must** meet the general formatting guidelines and be **no more than 10 pages**. If Appendix D exceeds this page limit, IES will remove any pages after the 10<sup>th</sup> page of the appendix before it is forwarded for scientific peer review. If you are proposing to explore, develop, evaluate, or validate a program, practice, policy, or assessment you may include examples of it such as curriculum materials, computer screen shots, assessment items, or other materials used in the program, practice, policy, or assessment to be explored, developed, evaluated, or validated.

**These are the only materials that may be included in Appendix D; all other material will be removed prior to review of the application.**

## ***5. Appendix E: Letters of Agreement (Optional)***

There is **no recommended page length** for Appendix E. Use this appendix to provide copies of letters of agreement from schools, colleges, districts, platform developers, and/or other settings or data sources that will be a part of or will provide data for the proposed research and/or individuals who will serve as consultants. Ensure that the letters reproduce well so that reviewers can easily read them. Do not reduce

the size of the letters. See the IES Application Submission Guide ([https://ies.ed.gov/funding/submission\\_guide.asp](https://ies.ed.gov/funding/submission_guide.asp)) for guidance regarding the size of file attachments.

Letters of agreement should include enough information to make it clear that the author of the letter understands the nature of the time commitment and timing of participation, as well as the required space and personnel resources that the organization is prepared to contribute to the research project and the ways that organization personnel will be expected to coordinate with the research team (e.g., quarterly meetings with administrative staff, weekly research team observations in classrooms) if the application is funded. A common reason for projects to fail is loss of participants. Letters of agreement regarding the provision of data should make it clear that the author of the letter will provide the data described in the application for use in the proposed research and in time to meet the proposed schedule.

**These are the only materials that may be included in Appendix E; all other material will be removed prior to review of the application.**

### ***6. Appendix F: Data Sharing and Management Plan (Required)***

All applications **must** include Appendix F. Appendix F must meet the general formatting guidelines and be **no more than five pages**. If Appendix F exceeds this page limit, IES will remove any pages after the fifth page of the appendix before it is forwarded for scientific peer review.

See the IES Public Access Guidance (<https://ies.ed.gov/funding/researchaccess.asp>) for additional tools and materials to assist with developing a DSMP and adherence with existing policies.

The costs associated with implementation of the DSMP may be covered by the grant and should be included in the budget and explained in the budget narrative.

IES program officers will be responsible for reviewing the completeness of the proposed DSMP. The scientific peer reviewers do not evaluate the DSMP in their review of applications. If your application is being considered for funding based on the scores received during the scientific review process but your DSMP is determined incomplete or insufficient, you will be required to provide additional detail regarding your DSMP.

When the principal investigator (PI) and authorized organization representative (AOR) sign the cover page of the grant application, they will be assuring compliance with the IES Policy Regarding Public Access to Research (<https://ies.ed.gov/funding/researchaccess.asp>) as well as other policies and regulations governing research awards. This entails immediately uploading full text of accepted or published manuscripts to ERIC that are based on IES-funded data, as well as the sharing of data no later than either immediately upon publication or five years after the end date of the grant, whichever occurs first.

Once the DSMP is approved by IES, the PI and the institution are required to carry it out and to report progress and problems and requests to amend through the regular reporting channels. Compliance with IES data sharing requirements is expected even if the final dataset may not be completed and prepared for data sharing until after the grant has been completed. In cases where the PI/grantee is non-compliant with the requirements of the data sharing policy or DSMP, subsequent awards to individuals or institutions may be affected. By addressing the items identified below, your DSMP describes how you will meet the requirements of the IES policy for data sharing and adopt best practices for adherence to open science principles.

The DSMP should include the following:

- Sharing Platforms
  - The pre-registration repository where you will pre-register your study, and the timeline for preregistering (within the first year of the project), following the Standards for Excellence in Education Research (SEER; <https://ies.ed.gov/seer/preregistration.asp>).
  - The data repository where you plan to share your data, and an indication of the selected repository's adherence with the National Science and Technology Council document entitled "Desirable Characteristics of Data Repositories for Federally Funded Research"

(<https://repository.si.edu/handle/10088/113528>). IES discourages sharing on a personal/institutional website or by request.

- If there are data that cannot be shared, the repository or location where you will share information about how you obtained or accessed the data source(s), along with codes and analytic approach utilized.
- Data Description.
  - The type of data to be shared.
  - Any data that will not be shared, and grounds for exclusions which may include privacy protections, proprietary data, and/or indigenous data sovereignty. See section 7.2 of the ED Public Access Plan (<https://ies.ed.gov/funding/researchaccess.asp>) for additional information regarding potential restrictions on data sharing.
  - Procedures for managing and for maintaining the confidentiality of Personally Identifiable Information.
  - How the data set will be formatted and configured and your approach to curating, cleaning, and preparing data for sharing, taking into consideration guidance from IES's Sharing Study Data: A Guide for Education Researchers (<https://ies.ed.gov/ncee/pubs/2022004/>).
  - Your dataset documentation including code books and any decisions made about the data that would be important for replicating the results.
  - Your intentions to share statistical/analysis code to support reproducibility, including format and location.
- Administrative Plan.
  - Management plan designating roles and responsibilities of project or institutional staff in the management and retention of research data, including a discussion of any changes that will occur should the project director/principal investigator and/or others with key responsibilities for data sharing and management leave the project or their institution.
  - Expected schedule for data sharing (no later than immediately upon publication or 5 years after the award end date, whichever is sooner), how long the data will remain accessible (available for at least 10 years), and acknowledgement that the timeframe of data accessibility will be reviewed at the annual progress reviews and revised as necessary.
  - Anticipated costs associated with implementing the DSMP (including resource and labor costs) that are reflected in the application's budget and budget justification.
  - Whether re-use of data will require a data use agreement and, if so, what conditions users must meet to access the data.
  - Approaches to disseminating the availability and location of data to support discoverability for reuse purposes.

**This is the only material that may be included in Appendix F; all other material will be removed prior to review of the application.**

## **D. Other Narrative Content**

In addition to the project narrative (see [Part III: Project Type Requirements and Recommendations](#)) and required and optional appendices (see above), you will also prepare a project summary/structured abstract, a bibliography and references cited, an exempt or non-exempt research on human subjects narrative, and biosketches for key personnel and consultants to include as file attachments in your application. See the IES Application Submission Guide ([https://ies.ed.gov/funding/submission\\_guide.asp](https://ies.ed.gov/funding/submission_guide.asp)) for more information about preparing and

submitting your application using the required application package for this competition on Grants.gov (<https://www.grants.gov/>).

## **1. Project Summary/Structured Abstract**

You **must** submit the project summary/structured abstract as a separate PDF attachment in the application package. If your project is recommended for funding, IES will use this abstract as the basis for the online abstracts that we post when new awards are announced. We recommend that the project summary/structured abstract be two-pages long and follow the format used for IES online abstracts (<https://ies.ed.gov/funding/grantsearch/>).

### *(1) Title*

- **Title:** Distinct, descriptive title of the project.
- **Topic and Project Type:** Identify the topic and project type to which you are applying (see [Parts II](#) and [III](#)). This information should match the topic and project type codes entered for Item 4b: Agency Routing Number on the SF 424 Application for Federal Assistance form (see the IES Application Submission Guide [https://ies.ed.gov/funding/submission\\_guide.asp](https://ies.ed.gov/funding/submission_guide.asp) and [the topic and project type codes in part VII](#) for more information).

### *(2) Project Summary*

The purpose of the project summary is to provide a high-level overview of the research that is accessible to a range of audiences, such as policymakers, practitioners, and the general public. This section should use short, active sentences to briefly describe the significance of the project, project activities, and the intended outcomes.

- **Purpose:** A brief description of the purpose of the project and its significance for improving education in the United States. This should include why the research is important, what this project will do to address the need, and the general expected outcomes of the project.
- **Project Activities:** An overview of the sample, research design, and methods
- **Products:** A brief description of the expected products of the project, including the program, practice, policy, or assessment to be developed and the information that will be learned and disseminated

### *(3) Structured Abstract*

The purpose of the structured abstract is to provide key details about the project activities. This section is most likely to be used by other researchers but should be written in a way that is accessible to anyone who wants more information about the project.

- **Setting:** A brief description of the location (identified at the state level) where the research will take place and other important characteristics of the locale, such as whether it is rural or urban
- **Population/Sample:** A brief description of the sample including number of participants; the composition of the sample including age or grade level, race/ethnicity, or disability status as appropriate; and the population the sample is intended to represent
- **Malleable Factor/Program/Practice/Policy/Assessment:**
  - For Measurement, Development and Innovation, and Impact projects, a brief description of the program, practice, policy, or assessment the research team will develop, evaluate, or validate
  - For Exploration projects, a brief description of the malleable factors that will be examined in relation to learner outcomes
- **Research Design and Methods:** A brief description of the major features of the design and methodology (for example—whether you will use a randomized controlled trial or a quasi-experimental design for an Impact study, information about the qualitative methods you will use



to inform the design process for a Development project), describing the design and methods year by year, in terms of steps or phases as applicable

- **Control Condition:** If applicable, a brief description of the control or comparison condition, including the participants and what they will experience. State that there is no treatment contrast, when relevant.
- **Key Measures:** A brief description of key measures, including what constructs the measures assess and whether those constructs are education outcomes
- **Data Analytic Strategy:** A brief description of the data analytic strategies that the research team will use to answer the research questions
- **Cost Analysis:** If applicable, a brief description of the cost and/or cost-effectiveness analyses planned
- **Related IES Projects:** A list of the IES-issued award number and/or corresponding online abstract link (URLs) to completed or ongoing IES-funded projects that are related to the proposed project (for example, if you submit an Impact application to test a program, practice, or policy developed with IES funding, list that Development and Innovation grant number here)

See our online search engine of funded research grants (<https://ies.ed.gov/funding/grantsearch/>) for examples of the content to be included in your project summary/structured abstract and to search for award numbers and URLs.

## ***2. Bibliography and References Cited***

You **must** submit the bibliography and references cited as a separate PDF attachment in the application package. There is **no recommended page length** for the bibliography and references cited. You should include complete citations, including the names of all authors (in the same sequence in which they appear in the publication), titles of relevant elements such as the article/journal and chapter/book, page numbers, and year of publication for literature cited in the project narrative. As a reminder, you should use the author-date style for citations in the project narrative (see [Part VI B.5 Citations](#) for more information).

## ***3. Human Subjects Narrative***

You **must** submit an exempt or non-exempt human subjects narrative as a separate PDF attachment in the application package. We do not recommend a page length for the human subjects narrative. See *Information About the Protection of Human Subjects in Research Supported by the Department of Education* (<https://www2.ed.gov/policy/fund/guid/humansub/hrsnarrative1.html>) for a brief overview of principles, regulations, and policies which affect research involving human subjects in research activities supported by the Department of Education.

The U.S. Department of Education does not require certification of IRB approval at the time you submit your application. However, if an application that involves non-exempt human subjects research is recommended for funding, the designated U.S. Department of Education official will request that you obtain and send the certification to the Department within 30 days of the formal request from the Department.

## ***4. Biographical Sketches for Key Personnel***

You **must** submit a biographical sketch for each person named as key personnel in your application. You may also submit biographical sketches for consultants (optional). Each biographical sketch (an abbreviated CV plus current and pending support information) **must be no more than five pages in length, and this five-page limit includes current and pending support information**. If a biographical sketch exceeds this page limit, IES will remove any pages after the fifth page before it is forwarded for scientific peer review.

Biographical sketches are submitted as separate PDF attachments in the application package. **IES strongly encourages applicants to use SciENcv** (<https://www.ncbi.nlm.nih.gov/sciencv/>) where you will find an IES biosketch format. After logging in to SciENcv, you will be able to select the IES

Biosketch format after selecting the “Create a New Document” option. You can download your IES Biosketch as a Word document to allow you to change the formatting to meet the [general IES formatting guidelines](#). You may also develop your own biosketch format. If you use SciENCv, the information on current and pending support will be entered into the IES biosketch template. If you use your own format, you will need to provide this information in a separate table.

The biographical sketch for the principal investigator, each co-principal investigator, other key personnel, and consultants (if included) should show how members of the project team possess training and expertise commensurate with their specified duties on the proposed project, for example, by describing relevant publications, grants, and research experience, including experience working with the study population as applicable.

Provide a list of current and pending grants for the principal investigator, each co-principal investigator, and other key personnel, along with the proportion of their time, expressed as percent **effort over a 12-month calendar year**, allocated to each project. Include the proposed IES grant as one of the pending grants in this list.

While not required at the time of application, all key personnel must have a persistent identifier (PID), such as an ORCID iD (Open Researcher and Contributor ID; <https://orcid.org/>) at the time of award. For all key personnel who have a PID at the time of application, include the PID in the biosketch and in the “Credential, e.g., agency login” field on the Research and Related Senior/Key Person Profile (Expanded) form in the application package. See the IES Application Submission Guide ([https://ies.ed.gov/funding/submission\\_guide.asp](https://ies.ed.gov/funding/submission_guide.asp)) for more information about this form in the application package.

If you or any key member of your project team does not yet have a PID, IES encourages you to establish one as soon as possible, given the requirement that **all key personnel are required to have a PID in place before an award will be made.**

## Part V: Competition Regulations and Review Criteria

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### A. Funding Mechanisms and Restrictions

#### 1. Mechanism of Support

IES intends to award grants pursuant to this Request for Applications.

#### 2. Funding Available

Although IES intends to support the topics and project types described in this announcement, all awards pursuant to this Request for Applications are contingent upon the availability of funds and the receipt of meritorious applications. IES makes its awards to the highest quality applications, as determined through scientific peer review, regardless of topic or project type.

**The size of the award depends on the project type and scope of the project.** Please attend to the duration and budget maximums set for each project type in [Part III Project Type Requirements and Recommendations](#).

#### 3. Special Considerations for Budget Expenses

##### (a) Indirect Cost Rate

Applicants are expected to apply their institution's federally negotiated indirect cost rate when developing a budget for the proposed research project.

If your institution does not have an indirect cost rate and you receive a grant from IES, the Indirect Cost Group (ICG) in the U.S. Department of Education's Office of the Chief Financial Officer (<https://www2.ed.gov/about/offices/list/ocfo/fipao/faq.html>) can help with obtaining an indirect cost rate once the grant is awarded. Please note that the ICG is not available for assistance during the application preparation process.

Most institutions that do not have a current negotiated rate may use a de minimis rate of 15 percent of modified total direct costs (see 2 CFR §200.414 <https://www.ecfr.gov/current/title-2/subtitle-A/chapter-II/part-200/subpart-E/subject-group-ECFRd93f2a98b1f6455/section-200.414> for more information). This de minimis rate may be used indefinitely and no documentation is required to justify its use.

Institutions, both primary grantees and subawardees, not located in the territorial United States may not charge indirect costs.

##### (b) Meetings and Conferences

If you are requesting funds to cover expenses for hosting meetings or conferences, please note that there are statutory and regulatory requirements in determining whether costs are reasonable and necessary. Please refer to the Office of Management and Budget's (OMB's) Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (Uniform Guidance), 2 CFR, §200.432 Conferences (<https://www.ecfr.gov/current/title-2/subtitle-A/chapter-II/part-200/subpart-E/subject-group-ECFRd1f39f9b3d4e72/section-200.432>).

Federal grant funds cannot be used to pay for alcoholic beverages or entertainment, which includes costs for amusement, diversion, and social activities. In general, federal funds may not be used to pay for food. A grantee hosting a meeting or conference may not use grant funds to pay for food for conference attendees unless doing so is necessary to accomplish legitimate meeting or conference business. You may request funds to cover expenses for working meetings, such as working lunches; however, IES will determine whether these costs are allowable in keeping with the Uniform Guidance Cost Principles. Grantees are responsible for the proper use of their grant awards and may have to repay funds to the Department if they violate the rules for meeting- and conference-related expenses or other disallowed expenditures.

#### **4. Program Authority**

“Education Sciences Reform Act of 2002,” Title I of Public Law 107-279, November 5, 2002. This program is not subject to the intergovernmental review requirements of Executive Order 12372.

#### **5. Applicable Regulations**

Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (Uniform Guidance) codified at CFR Part 200. The Education Department General Administrative Regulations (EDGAR) in 34 CFR parts 77, 81, 82, 84, 86 (part 86 applies only to institutions of higher education), 97, 98, and 99. In addition 34 CFR part 75 is applicable, except for the provisions in 34 CFR 75.100, 75.101(b), 75.102, 75.103, 75.105, 75.109(a), 75.200, 75.201, 75.209, 75.210, 75.211, 75.217, 75.219, 75.220, 75.221, 75.222, and 75.230.

### **B. Additional Requirements**

#### **1. Pre-Award**

##### *(a) Clarification and Budget Questions*

IES uses the scientific peer review process as the first step in making funding decisions. If your application is recommended for funding based on the outcome of the scientific peer review, an IES program officer will contact you to clarify (1) any issues of concern to IES or the peer reviewers, (2) your plans for sharing final data, and (3) the adequacy of the proposed budget to support the proposed scope of work within federal guidelines (see Uniform Guidance Cost Principles <https://www.ecfr.gov/current/title-2/subtitle-A/chapter-II/part-200/subpart-E>).

##### *(b) Demonstrating Access to Data and Education Settings*

The research you propose to conduct under a specific topic and project type will most likely require that you have (or will obtain) access to education settings such as classrooms, schools, districts, colleges/universities; secondary datasets; or studies currently under way. In such cases, you will need to provide evidence that you have access to these resources prior to receiving funding. Whenever possible, include letters of agreement in [Appendix E](#) from those who have responsibility for or access to the data or settings you wish to incorporate when you submit your application. Even in circumstances where you have included such letters with your application, **IES will require additional supporting evidence prior to the release of funds**. If you cannot provide such documentation, IES may not award the grant or may withhold funds.

You will need supporting evidence of partnership or access if you are doing any of the following:

#### **Conducting research in or with education settings**

If your application is being considered for funding based on scientific merit scores from the scientific peer review panel and your research relies on access to education settings, you will need to provide documentation that you have access to the necessary settings in order to receive the grant. This means that if you do not have permission to conduct the proposed project in the necessary number of settings at the time of application, you will need to provide documentation to IES indicating that you have successfully recruited the necessary number of settings for the proposed research before the full first-year costs will be awarded. If you recruited sufficient numbers of settings prior to the application, IES will ask you to provide documentation that the settings originally recruited for the application are still willing to partner in the research.

#### **Using secondary datasets**

If your application is being considered for funding based on scientific merit scores from the scientific peer review panel and your research relies on access to secondary datasets (such as federally collected datasets, state or district administrative data, or data collected by you or other researchers), you will need to provide documentation that you have access to the necessary datasets in order to receive the grant. This means that if you do not have permission to use the proposed datasets at the time of application, you must provide documentation to IES from the entity controlling the dataset(s) before the grant will be awarded. This documentation must indicate that you have permission to use the data for the proposed research for

the time period discussed in the application. If you obtained permission to use a proposed dataset prior to submitting your application, IES will ask you to provide updated documentation indicating that you still have permission to use the dataset to conduct the proposed research during the project period.

### **Building on existing studies**

You may propose studies that piggyback onto an ongoing study, which will require access to those subjects and data. In such cases, the principal investigator of the existing study should be one of the members of the research team applying for the grant to conduct the new project.

In addition to obtaining evidence of access, IES strongly advises applicants to establish a written agreement, within 3 months of receipt of an award, among all key collaborators and their institutions (including principal and co-principal investigators) regarding roles, responsibilities, access to data, publication rights, and decision-making procedures.

### *(c) Assessment of Past Performance*

IES considers the applicant's performance and use of funds under a previous federal award as part of the criteria for making a funding decision. IES also determines the PI's compliance with the IES Policy Regarding Public Access to Research if they were the PI on previous IES grants awarded in 2012 or later (<https://ies.ed.gov/funding/researchaccess.asp>).

### *(d) Persistent Identifiers (PIDs) for Key Personnel*

**All key personnel are required to have a PID**, such as ORCID iD (Open Researcher and Contributor Identification; <https://orcid.org/>) **in place before an award will be made.**

### *(e) Access to final research data*

If your application is being considered for funding, IES program officers will review the completeness and acceptability of the Data Sharing and Management Plan (DSMP) prior to making the new award.

## **2. Post-Award**

### *(a) Compliance with IES Policy Regarding Public Access to Research*

#### **Access to research results: Grantee submissions to ERIC**

IES requires all grantees to submit the electronic version of peer-reviewed scholarly publications to ERIC (<https://eric.ed.gov/>), a publicly accessible and searchable electronic database of education research that makes available full-text documents to the public for free. This public access requirement (<https://ies.ed.gov/funding/researchaccess.asp>) applies to peer-reviewed, original scholarly publications that have been supported (in whole or in part) with direct funding from IES. The public access requirement does not apply to book chapters, editorials, reviews, or non-peer-reviewed conference proceedings. **As the designated representative for the grantee institution, IES holds the PI responsible** for ensuring that authors of publications stemming from the grant comply with this requirement.

The author's final manuscript is defined as the final version accepted for journal publication and includes all modifications from the peer review process. Submission of accepted manuscripts for public accessibility through ERIC **must** occur immediately upon acceptance for publication.

The ERIC website includes a homepage for the Grantee and Online Submission System (<https://eric.ed.gov/submit/>), as well as a Frequently Asked Questions page (<https://eric.ed.gov/?granteefaq>). During the submission process, authors are asked to submit bibliographic information from the publication, including the Digital Object Identifier (DOI), title, authors' names and Persistent Digital Identifiers (PIDs such as ORCID ID), publication date, journal title and International Standard Serial Number (ISSN), and associated IES award number(s).

#### **Access to research results: Sharing final research data**

IES program officers will review DSMPs annually to ensure grantees are on track for being in compliance with this public access requirement.

### *(b) Pre-Registration*

Grantees **must** register their studies on a suitable pre-registration platform within the first year of receiving a new award. There are several options for pre-registration including but not limited to the Registry of Efficacy and Effectiveness Studies (REES; <https://sreereg.icpsr.umich.edu/sreereg/>), the Open Science Framework (OSF; <https://osf.io/>), ClinicalTrials.gov (<https://clinicaltrials.gov/>), AEA Registry (<https://www.socialscienceregistry.org/>), EGAP (<https://egap.org/content/registration>), Uri Simonsohn's *AsPredicted* (<https://aspredicted.org/>), and trial registries in the WHO Registry Network (<https://www.who.int/ictrp/network/en/>).

### *(c) Special Conditions on Grants*

IES may impose special conditions on a grant pertinent to the proper implementation of key aspects of the proposed research design or to reaching timely targeted participant recruitment or data access goals, or if the grantee is not financially stable, has a history of unsatisfactory performance, has an unsatisfactory financial or other management system, has not fulfilled the conditions of a prior grant, or is otherwise not responsible.

### *(d) Attendance at the Annual IES Principal Investigators Meeting*

The principal investigator (PI) is required to attend one meeting each year (for up to 3 days) in Washington, DC with other IES grantees and IES staff. The project's budget should include this meeting. PIs who are not able to attend the meeting may designate another person who is key personnel on the research team to attend.

## **C. Overview of Application and Scientific Peer Review Process**

### ***1. Submitting Your Letter of Intent***

Submit your letter of intent (LOIs) online using the IES Peer Review Information Management Online (PRIMO) system (<https://iesreview.ed.gov/LOI/LOISubmit>). **Select the Letter of Intent form for the competition under which you plan to submit your application.** The online submission form contains fields for each of the eight content areas listed below. Use these fields to provide the following information:

- Descriptive title for the proposed project.
- Primary topic, secondary topic (if applicable), and project type that you will address.
- Brief description of the proposed project (single spaced, about 3,500 characters).
- New or resubmitted application.
- Name, institutional affiliation, address, telephone number, and email address of the principal investigator and any co-principal investigators.
- Name and institutional affiliation of any key collaborators and contractors.
- Duration of the proposed project (attend to the Duration maximums for each project type).
- Estimated total budget request (attend to the Budget maximums for each project type).

The LOI is non-binding and optional but strongly recommended. If you submit an LOI, a program officer will contact you regarding your proposed research. IES also uses the information in the LOI to identify the expertise needed for the scientific peer review panels and to secure a sufficient number of reviewers to handle the anticipated number of applications.

### ***2. Resubmissions and Multiple Submissions***

*Resubmissions:* If you intend to revise and resubmit an application that was submitted to a previous IES competition but that was not funded, you **must** indicate on the SF 424 Application for Federal Assistance Form in the application package (see the IES Application Submission Guide ([https://ies.ed.gov/funding/submission\\_guide.asp](https://ies.ed.gov/funding/submission_guide.asp))) that the FY 2025 application is a resubmission (Item

8) and include the application number of the previous application (an 11-character alphanumeric identifier beginning “R305” entered in Item 4a). Prior reviews will be sent to this year’s reviewers along with the resubmitted application.

You **must describe** your response to the prior reviews using [Appendix B: Response to Reviewers](#). Revised and resubmitted applications will be reviewed according to this FY 2025 Request for Applications.

If you submitted a somewhat similar application in the past and did not receive an award but are submitting the current application as a new application, you should indicate on the application form (Item 8) that your FY 2025 application is a new application. In Appendix B, you should provide a rationale explaining why your FY 2025 application should be considered a new application rather than a revision. If you do not provide such an explanation, then IES may send the reviews of the prior unfunded application to this year’s reviewers along with the current application.

*Multiple Submissions:* You may submit applications to more than one of the FY 2025 research grant programs offered through the Department, including those offered through IES as well as those offered through other offices and programs within the Department. You may submit multiple applications to this grant program as long as they address different key issues, programs, or policies. However, you may submit a given application only once for the IES FY 2025 grant competitions, meaning you may not submit the same application or similar applications to multiple grant programs within IES, to multiple topics within a grant competition, or multiple times within the same topic. If you submit multiple similar applications, IES will determine whether and which applications will be accepted for review and/or will be eligible for funding.

In addition, if you submit the same or similar application to IES and to another funding entity within or external to the Department and receive funding for the non-IES application prior to IES scientific peer review of applications, you must withdraw the same or similar application submitted to IES, or IES may otherwise determine you are ineligible to receive an award. If reviews are happening concurrently, IES staff will consult with the other potential funder to determine the degree of overlap and which entity will provide funding if both applications are being considered for funding.

If you submit the same or similar application to IES and to another funding entity as described above, indicate this on the Application for Federal Assistance SF 424 (R&R) form in the application package in the “Submission to Other Agencies” field by checking “Yes” and including the name of the other agency or agencies. See the IES Application Submission Guide ([https://ies.ed.gov/funding/submission\\_guide.asp](https://ies.ed.gov/funding/submission_guide.asp)) for more information about this form.

### ***3. Application Processing***

**Applications must be submitted electronically and received no later than 11:59:59 p.m. Eastern Time on September 12, 2024** using the Grants.gov Workspace (<https://www.grants.gov/applicants/workspace-overview.html>). You must follow the application procedures and submission requirements described in the IES Application Submission Guide ([https://ies.ed.gov/funding/submission\\_guide.asp](https://ies.ed.gov/funding/submission_guide.asp)) and on Grants.gov (<https://www.grants.gov/web/grants/applicants.html>).

After applications are fully uploaded and validated at Grants.gov, the U.S. Department of Education receives the applications for processing and transfer to the IES PRIMO system (<https://iesreview.ed.gov/>). PRIMO allows applicants to track the progress of their application via the Applicant Notification System (ANS).

Approximately one to two weeks after the application deadline, invitation emails are sent to applicants who have never applied to IES before to create their individual PRIMO ANS accounts. Both the PI and the AOR will receive invitation emails. Approximately four to six weeks after the application deadline, all applicants (new and existing ANS users) will begin to receive a series of emails about the status of their application. See the IES Application Submission Guide ([https://ies.ed.gov/funding/submission\\_guide.asp](https://ies.ed.gov/funding/submission_guide.asp)) for additional information about ANS and PRIMO.

**Once an application has been submitted and the application deadline has passed, you may not submit additional materials or information for inclusion with your application.**

#### **4. Scientific Peer Review Process**

IES will forward all applications that are compliant and responsive to this Request for Applications to be evaluated for scientific and technical merit. Scientific reviews are conducted in accordance with the review criteria stated below and the review procedures posted on the IES website

([https://ies.ed.gov/director/sro/application\\_review.asp](https://ies.ed.gov/director/sro/application_review.asp)) by a panel of experts who have substantive and methodological expertise appropriate to the program of research and Request for Applications.

Each compliant and responsive application is assigned to an IES review panel. Most applications to the Education Research Grants Program are reviewed by one of six standing peer review panels (<https://ies.ed.gov/director/sro/reviewers.asp>). Additional panels are developed as needed to provide the most appropriate review for the applications we receive. Standing panels include:

- Basic Processes.
- Early Intervention and Early Childhood Education.
- Education Systems and Broad Reform.
- Science, Technology, Engineering, and Mathematics (STEM).
- Reading, Writing, and Language Development.
- Social and Behavioral.

Applications are assigned to panel according to the match between the overall expertise of reviewers on each panel and the content and methodological approach proposed in each application. See the Procedures for Peer Review of Grant Applications ([https://ies.ed.gov/director/sro/application\\_review.asp](https://ies.ed.gov/director/sro/application_review.asp)) and [Part V.C.4. Scientific Peer Review Process](#) for more information.

At least two primary reviewers will complete written evaluations of the application, identifying strengths and weaknesses related to each of the review criteria. Primary reviewers will independently assign a score for each criterion, as well as an overall score, for each application they review. Based on the overall scores assigned by primary reviewers, IES calculates an average overall score for each application and prepares a preliminary rank order of applications before the full peer review panel convenes to complete the review of applications.

The full panel will consider and score only those applications deemed to be the most competitive and to have the highest merit, as reflected by the preliminary rank order. A panel member may nominate for consideration by the full panel any application that they believe merits full panel review but that would not have been included in the full panel meeting based on its preliminary rank order.

#### **5. Review Criteria for Scientific Merit**

The purpose of IES-supported research is to help solve education problems by generating reliable information about education programs, practices, policies, and assessments that support learning and improve academic achievement and education access for all learners. IES expects reviewers to assess the scientific rigor and practical significance of the research proposed in order to judge the likelihood that it will make a meaningful contribution to the larger IES mission. Information about each of these criteria is described in [Part III Project Type Requirements and Recommendations](#).

##### ***(a) Significance***

Does the proposed research address a significant challenge in education and does the applicant provide a compelling theoretical and empirical rationale for the project? Does the applicant thoughtfully address relevant recommendations described in the Significance section for the project type under which the applicant is submitting the application? For resubmissions, does the applicant adequately address the comments/concerns of prior reviewers?



*(b) Research Plan*

Do the research design and methods, sample and setting, and data analysis plans align with the research questions and aims posed in the Significance section and indicate that the project will be able to answer those questions with sufficient rigor? Does the applicant thoughtfully address relevant recommendations described in the Research Plan section for the project type under which the applicant is submitting the application? For resubmissions, does the applicant adequately address the comments/concerns of prior reviewers?

*(c) Personnel*

Does the project team possess the appropriate skills and qualifications to carry out the proposed research project? Do the principal investigator and other key personnel possess the appropriate training and experience for their roles and responsibilities and will they commit sufficient time to competently implement the proposed research, engagement, and dissemination activities? Does the applicant thoughtfully address relevant recommendations described in the Personnel section for the project type under which the applicant is submitting the application? For resubmissions, does the applicant adequately address the comments/concerns of prior reviewers?

*(d) Resources*

Does the applicant have sufficient research infrastructure and institutional capacity to carry out the proposed research? Do the commitments of each partner show support for the implementation and success of the project? Does the applicant thoughtfully address relevant recommendations described in the Resources section for the project type under which the applicant is submitting the application? For resubmissions, does the applicant adequately address the comments/concerns of prior reviewers?

*(e) Engagement and Dissemination*

Does the proposed research reflect engagement with relevant stakeholders throughout the research process? Is the plan to disseminate findings practical and accessible for relevant stakeholders? Is the approach to engagement and dissemination grounded in current needs? For resubmissions, does the applicant adequately address the comments/concerns of prior reviewers?

**6. Award Decisions**

The following will be considered in making award decisions for responsive and compliant applications:

- Scientific merit as determined by scientific peer review.
- Performance and use of funds under a previous federal award.
- Compliance with the IES Public Access Policy on previous IES awards.
- Persistent identifiers (PIDs) for all key personnel.
- Contribution to the overall program of research described in this request for applications.
- Ability to carry out the proposed research within the maximum award and duration requirements.
- Availability of funds.

## Part VI: Compliance and Responsiveness Checklist

Only compliant and responsive applications will be forwarded for scientific peer review. Use this checklist to better ensure you have included all required components for compliance and that you have addressed all general and project narrative requirements for responsiveness.

See the IES Application Submission Guide ([https://ies.ed.gov/funding/submission\\_guide.asp](https://ies.ed.gov/funding/submission_guide.asp)) for an application checklist that describes the forms in the application package that must be completed and the PDF files that must be attached to the forms for a successful submission through Grants.gov.

Compliance
Have you included a project narrative?
Do the project narrative and other narrative content adhere to all formatting requirements?
Do the project narrative and other narrative content adhere to all page maximums as described in the RFA? IES will remove any pages above the maximum before forwarding an application for scientific peer review.
Have you included Appendix A: Engagement and Dissemination Plan?
If you are resubmitting an application, have you included Appendix B: Response to Reviewers?
Have you included Appendix F: Data Sharing and Management Plan?
General Requirements for Responsiveness
Have you met all of the General Requirements for an application?
Does your proposed research include measures of academic outcomes? <ul style="list-style-type: none"> <li>• If you are applying under the Teaching, Teachers, and the Education Workforce topic, does your proposed research include the additional required measures of educator outcomes?</li> <li>• If you are applying under the Social, Emotional, and Behavioral Context for Teaching and Learning topic, does your proposed research include the additional required measures of social, emotional, and behavioral competencies?</li> </ul>
Is the proposed research relevant to education in the United States, and does it address factors under the control of U.S. education systems?
Have you indicated a single topic for your application?
Have you indicated a single project type for your application?
Does your project narrative include the four required sections and the associated requirements for the selected IES Project Type? Did you describe the elements required for each section as listed below?

*This checklist continues on the next page.*

Project Narrative Requirements for Responsiveness				
	<u>Measurement</u>	<u>Exploration</u>	<u>Development and Innovation</u>	<u>Impact</u>
Significance	<p>You must describe:</p> <ul style="list-style-type: none"> <li>The assessment you propose to develop, refine, and/or validate.</li> <li>The purpose(s), population(s), and context(s) for which the assessment is intended.</li> </ul>	<p>You must describe:</p> <ul style="list-style-type: none"> <li>The factors you propose to study.</li> </ul>	<p>You must describe:</p> <ul style="list-style-type: none"> <li>The program, practice, or policy you propose to develop or refine and how it will be implemented.</li> </ul>	<p>You must describe:</p> <ul style="list-style-type: none"> <li>The program, practice, or policy you propose to test and how it is being, will be, and/or was implemented.</li> <li>Any prior evidence of impact on learner education outcomes (or lack thereof) for the program, practice, or policy you propose to test.</li> </ul>
Research Plan	<p>You must describe:</p> <ul style="list-style-type: none"> <li>The sample and setting for your project.</li> <li>The research design, methods, and data analysis plans for the assessment's                             <ul style="list-style-type: none"> <li>Development or refinement, as applicable.</li> <li>Validation.</li> </ul> </li> </ul>	<p>You must describe:</p> <ul style="list-style-type: none"> <li>The sample and setting for your project.</li> <li>The research design, methods, and data analysis plans for your project.</li> </ul>	<p>You must describe:</p> <ul style="list-style-type: none"> <li>The sample and setting for your project.</li> <li>The research design, methods, and data analysis plans for:                             <ul style="list-style-type: none"> <li>Developing or refining the program, practice, or policy.</li> <li>Determining its usability and feasibility.</li> <li>Determining its promise for generating beneficial learner outcome.</li> </ul> </li> <li>Your plan for determining the costs associated with implementing the fully developed program, practice, or policy in the context of the pilot study.</li> </ul>	<p>You must describe:</p> <ul style="list-style-type: none"> <li>The sample and setting for your project.</li> <li>The research design, methods, and data analysis plans for your project.</li> <li>Your statistical power analyses, unless using a single-case experimental design.</li> <li>Your plan for documenting implementation, or rationale for why you cannot do so.</li> <li>Your plan for determining the cost to implement the program, practice, or policy, or a rationale for why a cost analysis cannot be done.</li> <li>Your plan for determining the cost effectiveness of the program, practice, or policy, or a rationale for why a cost-effectiveness analysis cannot be done.</li> </ul>
Personnel	<p>You must describe:</p> <ul style="list-style-type: none"> <li>The project team.</li> </ul>	<p>You must describe:</p> <ul style="list-style-type: none"> <li>The project team.</li> </ul>	<p>You must describe:</p> <ul style="list-style-type: none"> <li>The project team.</li> </ul>	<p>You must describe:</p> <ul style="list-style-type: none"> <li>The project team.</li> </ul>
Resources	<p>You must describe:</p> <ul style="list-style-type: none"> <li>The research infrastructure and capacity.</li> </ul>	<p>You must describe:</p> <ul style="list-style-type: none"> <li>The research infrastructure and capacity.</li> </ul>	<p>You must describe:</p> <ul style="list-style-type: none"> <li>The research infrastructure and capacity.</li> </ul>	<p>You must describe:</p> <ul style="list-style-type: none"> <li>The research infrastructure and capacity.</li> </ul>

## Part VII: Required Codes for Item 4b of the SF 424 Cover Sheet

Applications to the **Education Research Grants Program (ALN 84.305A)** are submitted under a single topic and a single project type. Applicants are encouraged to select a secondary topic as well if it is appropriate for the research proposed.

You **must** enter the appropriate topic and project type codes *as a single line* in Item 4b of the SF 424 Application for Federal Assistance form (see the IES Application Submission Guide [https://ies.ed.gov/funding/submission\\_guide.asp](https://ies.ed.gov/funding/submission_guide.asp) for more information about this form). For example, an application with Science, Technology, Engineering, and Mathematics (STEM) Education as the primary research topic and Social, Emotional, and Behavioral Context for Teaching and Learning as a secondary topic under the Exploration project type, you **must** enter **NCER-STEM-SocBeh-Exploration** in the field for Item 4b.

Topics	Codes
Career and Technical Education	NCER-CTE
Civics Education and Social Studies	NCER-SocStu
Cognition and Student Learning	NCER-CASL
Early Learning Programs and Policies	NCER-ELPP
Improving Education Systems: Policies, Finance, Organization, Management, and Leadership	NCER-SYS
Literacy	NCER-Literacy
Postsecondary and Adult Education	NCER-PostsecAdult
English Learner Policies, Programs, and Practices	NCER-EL
Science, Technology, Engineering, and Mathematics (STEM) Education	NCER-STEM
Social, Emotional, and Behavioral Context for Teaching and Learning	NCER-SocBeh
Teaching, Teachers, and the Education Workforce	NCER-Teach

Project Types	Codes
Measurement	Measurement
Exploration	Exploration
Development and Innovation	Development
Impact	Impact