

# Statistical and Research Methodology in Education

ALN: 84.305D

*A Product of the National Center for Education Research*

<b>Letter of Intent Due:</b>	October 26, 2023	<a href="https://iesreview.ed.gov/LOI/LOISubmit">https://iesreview.ed.gov/LOI/LOISubmit</a>
<b>Application Package Available:</b>	September 28, 2023	<a href="https://www.grants.gov/">https://www.grants.gov/</a>
<b>Application Deadline:</b>	11:59:59 p.m. Eastern Time on January 11, 2024	<a href="https://www.grants.gov/">https://www.grants.gov/</a>
<b>Possible Start Dates:</b>	August 1 – September 1, 2024	

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 General Requirements

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### A. Purpose of the Statistical and Research Methodology in Education 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 projects that will contribute to its [Statistical and Research Methodology in Education \(Methods\) grants program](#). The specific purpose of the Methods grants program is to develop and disseminate statistical and methodological products for use by education researchers as they carry out the type of education research IES supports.

For FY 2024, IES is accepting Methods applications under two topics:

- Core Grants
- Toolkits, Guidelines, Compendia, and Review Papers

The Methods grants program supports the development of a wide range of statistical and methodological products, including new or improved methods, toolkits, guidelines, compendia, review papers, and software, to better enable education scientists to conduct rigorous education research.

Researchers should plan to widely disseminate their products to education researchers working in a wide variety of institutions (such as public and private colleges and universities; federal, state and local agencies; and non-profit and for-profit organizations).

Separate funding announcements are available on the IES website (<https://ies.ed.gov/funding>) that pertain to other discretionary grant competitions funded through the National Center for Education Research (<https://ncer.ed.gov>) and the National Center for Special Education Research (<https://ncser.ed.gov>). An overview of IES research grants programs is available at <https://ies.ed.gov/funding/overview.asp>.

### B. Needed Research

There are a wide range of methodological needs in applied education research and IES depends upon the field to identify and meet those needs. At the same time, IES is interested in applications that propose to develop new and improved methods; toolkits and guidelines to use existing methods; and compendia and reviews of available information on existing methods regarding the following.

- *Supporting the Standards for Excellence in Education Research (SEER)*, (<https://ies.ed.gov/seer>): As IES promotes SEER, new and improved methods, toolkits, guidelines, compendia, and reviews would help education researchers apply the SEER principles in their work.
- *Artificial Intelligence (AI)*: Products that leverage artificial intelligence (AI) are in high demand from students, educators, and education scientists for personalizing interventions, generating automated feedback, and supporting educators in lesson planning and other tasks. However, the development of AI capabilities raises a set of questions about its use in education and education research. When applying AI to measurement, methods are needed to identify biases in AI, including by developing fairness metrics, explainable AI methods, and fairness-constrained models. When evaluating AI interventions that produce personalized treatments for learners, methods are needed for causal inference of AI treatment decisions.
- *Quasi-experimental Designs (QEDs)*: Matching, regression discontinuity designs and other QEDs are

typically employed when random assignment is not feasible to evaluate the impact of an intervention. QEDs are often the only feasible methods for evaluating the impact of systemic and structural-level reforms, which are of great public interest and so demand rigor. Work is needed to increase the rigor of these methods and confidence in the potential causal implications of the results.

- *Variability in Effects:* Evaluations of program and policy interventions all too often focus on average effects, neglecting variation in effects, which is often substantial. Research is needed to improve or expand methods to identify factors such as neighborhood context, school or organizational characteristics, and student or family characteristics that may account for such variation. Work is needed to develop approaches and tools to account for and analyze variation, including, for example, frequentist or Bayesian strategies to synthesize evidence from multiple, statistically dependent effects.
- *Interpreting and Comparing Effect Sizes.* Researchers are increasingly concerned that effect sizes may not be comparable across studies, and the degree of uncertainty and heterogeneity in effect sizes is often downplayed. Researchers have increasingly pointed to approaches that consider the uncertainty in and likelihood of impacts, and cautioned against relying on impacts from a single study or meta-analyses that simply average impacts across studies. Moreover, psychometricians have raised concerns that while much attention has been given to the methods used for conducting statistical analyses, not enough attention has been given to the properties of the outcome measures. More research is needed to propose best practices for comparing the relative effectiveness of interventions across studies.
- *Single-case Designs:* Single-case experimental designs (SCDs) are critically important for research with low-incidence disability populations. Education researchers need guidelines for designing and planning WWC-aligned SCDs, and synthesizing the growing body of high-quality SCDs requires defining effect sizes. While there are design-comparable effect sizes for two kinds of SCDs, reversal and multiple baseline designs, there is not a clear approach for calculating design-comparable effect sizes for other common SCD types. Further research is also needed to address other analytical challenges, such as lack of independence between observations, low numbers of participants, phase shifts, and baseline trend, all of which impact effect size calculation for all SCDs and parameter estimation in those SCDs that use statistical approaches such as multilevel modeling. There are also opportunities for review papers and compendia that synthesize SCDs with related econometric methods for quasi-experimental designs, increasing research effectiveness through collaboration and creative re-use of existing analytic tools.
- *Data Science Tools for Education Researchers:* With the high rate of adoption of new education technology products as well as with the digitization of school-, district-, and State-level datasets, there are increasing opportunities for education researchers to collect large amounts of different types of data as well as merge data from multiple sources. There is a need for innovative tools to enable education researchers to tap into the insights from working with large, high-dimensional data sets that come out of data science, artificial intelligence, and machine learning. This could include tools (and guidelines) to streamline the process of merging multiple datasets; tools to facilitate the collection and organization of a variety of data from multiple levels, for example, student microdata from learning platforms; data from classroom or school observations or survey and administrative data; tools to facilitate data analysis; or tools to identify and correct for biases or discrimination reflected in the data, all the while protecting personal privacy.
- *Synthetic Datasets:* Synthetic datasets represent a promising approach to balancing the need to guarantee the privacy of study participants with the increasing emphasis on making research and evaluation data fully open. Work is needed to improve methods for generating synthetic datasets that reliably maintain both the distributional characteristics of key variables in a dataset as well as the relationships among them and their patterns of missing values.

IES seeks to support the development of new and improved methods, toolkits, guidelines, compendia, and reviews across a wide range of statistical and methodological areas, and you are not limited to the ones described above.

## C. General Requirements

Applications to the Statistical and Research Methodology in Education (Methods) grants program must meet these requirements to be sent forward for scientific peer review.

### 1. Topics

Your application **must** be directed to one of the following Methods topics listed below and meet the requirements set out for each topic as described in [Part II](#) to be sent forward for scientific peer review.

The **Core Grants topic** supports the development of new and improved statistical and research methods for use by education researchers. These methods are to be user tested by education researchers to ensure their usability, revised as needed, then broadly disseminated.

The **Toolkits, Guidelines, Compendia, and Review Papers (Toolkits) Grants topic** supports compiling existing research and information for a given method into products (such as toolkits, guidelines, compendia, and review papers) that help education researchers understand and apply the method. These products are to be user tested by education researchers to ensure their usability, revised as needed, then broadly disseminated.

### 2. Dissemination History and Plan

IES is committed to making the results of IES-funded research available to a wide range of audiences (see IES Policy Regarding Public Access to Research; <https://ies.ed.gov/funding/researchaccess.asp>). To ensure that findings from the Methods grants program are available to all interested audiences, IES **requires all applicants** to present a plan to disseminate project findings so that the findings make meaningful contributions to education research. In addition, applicants are asked to describe their dissemination history to demonstrate their ability and capacity to disseminate research findings to education researchers including those located at colleges and universities, research organizations (for-profit and non-profit), and state and local education agencies.

Peer reviewers will score Dissemination as a separate criterion in the review process. **Applications that do not contain a Dissemination History and Plan in [Appendix A](#) will not be peer reviewed.**

### 3. Award Limits

Applications to the Methods program may not exceed the following limits on award duration and cost by topic 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.

Topics	Maximum Grant Duration	Maximum Grant Award
Core Grants	3 years	\$900,000
Toolkits, Guidelines, Compendia, and Review Papers Grants	2 years	\$350,000

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/cgi-bin/retrieveECFR?gp=&SID=7231b530d56ee549812e4d9a6e6aa9f2&mc=true&n=sp2.1.200.e&r=SUBPART&ty=HTML>) and reflect the proposed scope of work.

## D. Getting Started

### 1. Technical Assistance for Applicants

IES provides technical assistance to applicants that addresses the appropriateness of project ideas for the Methods grant program. IES program officers can work with applicants through a variety of formats at any time up until the time of Grants.gov submission.

If you submit a letter of intent (LOI) on the IES Review (<https://iesreview.ed.gov/LOI/LOISubmit>) by October 26, 2023, 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. Contact NCER program officers (<https://ies.ed.gov/ncer/staff/stafflist.asp>) at any point in the application planning and preparation process prior to submission to discuss your research idea and whether it is a good fit for this or any other IES research grant program.

The program officer for the Methods grant program is:

Dr. Charles Laurin  
Email: [Charles.Laurin@ed.gov](mailto:Charles.Laurin@ed.gov)  
Telephone: 202-987-0919

### 2. Eligible Applicants

Institutions that have the ability and capacity to conduct scientific 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>1</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 and Native Hawaiian-Serving Institutions, American Indian Tribally Controlled 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

The Principal Investigator (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, and is the primary point of contact with IES. 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). Even if two or more people will share the authority and responsibility for leading and directing the proposed research intellectually and logistically as co-PIs, only one of them may be identified as the PI for the purposes of making a grant award.

IES strives to ensure that the researchers we fund are drawn from the entire pool of talented individuals who bring different backgrounds, perspectives, interests, and experiences to address complex education problems (<https://ies.ed.gov/aboutus/diversity.asp>).

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

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

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<sup>1</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.”

1. *This RFA* - to learn how to prepare an application that is compliant and responsive to the requirements. [Part I](#) provides an overview of the Methods grant program and sets out the general requirements for your grant application. [Part II](#) provides detail on the specific requirements and recommendations for each topic. [Part III](#) provides information about general formatting and the other narrative content for the application, including required appendices. [Part IV](#) provides information on competition regulations and the review process. [Part V](#) provides **a checklist that you can use to ensure that you have included all required application elements to advance to scientific peer review**. [Part VI](#) provides the program codes that you must select from and enter the appropriate code 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)) - for 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.** The PI and the AOR should work together to ensure that the application meets these criteria.

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

- See the separate IES Application Submission Guide [https://ies.ed.gov/funding/submission\\_guide.asp](https://ies.ed.gov/funding/submission_guide.asp) - Received and validated by Grants.gov no later than 11:59:59 p.m. Eastern Time on January 11, 2024.

#### ***(b) Compliance***

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

#### ***(c) Responsiveness***

- Meets the **General Requirements** for all applications (see [Part 1.C](#))
- Meets the **Topics Requirements** for the selected topic (see [Part II](#))

## **E. Changes in the FY 2024 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 FY 2024 RFA for the Statistical and Research Methodology in Education grants program (ALN 84.305D) competition are listed below and described fully in the relevant sections of the RFA.

**Increased Emphasis on Open Science Principles** – throughout the RFA, we highlight IES requirements that support the goals of open science and the various opportunities afforded to IES grantees to share their research findings broadly and to encourage transparency in education research.



- **Requirement for Grantees to Use Persistent Identifiers (PIDs)** – in August 2022, the Office of Science and Technology Policy (OSTP) issued a Memorandum on Ensuring Free, Immediate, and Equitable Access to Federally Funded Research (<https://www.whitehouse.gov/wp-content/uploads/2022/08/08-2022-OSTP-Public-Access-Memo.pdf>). This updated open access policy will go into effect by December 31, 2025. In anticipation of these changes and consistent with National Security Presidential Memorandum 33 (NSPM-33; see <https://www.whitehouse.gov/wp-content/uploads/2022/01/010422-NSPM-33-Implementation-Guidance.pdf>) that establishes policies for federal funding agencies that protect national security while supporting open science, we are requiring that all key personnel for funded projects obtain a PID such as ORCID iD (Open Researcher and Contributor Identification; <https://orcid.org/>) prior to award.
- **Recommendations to Incorporate Additional Open Science Practices** – where appropriate, we have added information throughout the RFA to encourage other open science practices, including pre-registration of projects, planning and budgeting to support curation of data and analysis codes to facilitate ease of data sharing, and budgeting for publication of findings in open access journals.

**Early Career Program has Moved** – applications from Early Career scholars should be submitted to the Research Training Programs in the Education Sciences grant program (ALN 84.305B; <https://ies.ed.gov/ncer/research/researchTraining.asp>) under either of the Early Career Development and Mentoring Programs as appropriate.

## Part II: Topic Requirements and Recommendations

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### A. Applying to a Methods Topic

For the FY 2024 Methods grant program, you **must** submit your application to one of the two topics. You **must** identify your chosen topic on the SF-424 Application for Federal Assistance form (Item 4b) in the Application Package for this competition using the appropriate code (see [Part VI: Program Codes](#)) and the IES Application Submission Guide ([https://ies.ed.gov/funding/submission\\_guide.asp](https://ies.ed.gov/funding/submission_guide.asp)), to ensure that your application is assigned appropriately for scientific peer review. IES **strongly encourages** you to contact the relevant program officer to discuss the appropriateness of your application for submission under a specific Methods topic.

The topics differ by the type of work to be done, maximum funding amount, and maximum duration. Both topics support the development of statistical and methodological products that can be used by education researchers to improve the research that the National Center for Education Research (NCER; <https://ies.ed.gov/ncer/research/>) and the National Center for Special Education Research (NCSE; <https://ies.ed.gov/ncser/research/>) support.

**To be sent forward for scientific peer review, you must**

- **Meet the requirements** outlined in [Part I.C](#)
- **Meet relevant topic requirements** listed here in Part II

**For each topic**, refer to the following:

- The **Purpose section** for the types of research supported
- The **Award Limits section** for duration and cost maximums
- The **Requirements section** for the specific content that you must address in the project narrative to be sent forward for scientific peer review
- The **Recommendations for Strong Applications section** for recommendations to improve the quality of your application. IES asks the peer reviewers to use these recommendations in their evaluation of the quality of your application. IES strongly encourages you to incorporate the recommendations into your project narrative and relevant appendices.

The Methods program has a page on the IES website (<https://ies.ed.gov/ncer/research/researchMethods.asp>) where you can find more information and view the abstracts of previously funded projects.

## B. Core Grants

### 1. Purpose

IES established the Core Grants topic to support the development of new or improved statistical and research methods to improve education research. In addition to developing methods, applicants are required to describe how they will conduct end-user-testing to determine whether education researchers can use them and to make revisions in response to feedback if needed. Applicants are also required to discuss how they will disseminate their new methods and make them widely available to education researchers through different types of products such as articles in applied education journals, detailed working papers and monographs, workshops, and software developed for education researchers.

### 2. Award Limit

No more than \$900,000 (direct and indirect costs) over no more than 3 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 Core Grants topic that exceeds \$900,000 or that is for longer than 3 years.**

### 3. Requirements

You **must** include a Project Narrative with four sections: **(a) Significance, (b) Research Plan, (c) Personnel, and (d) Resources**. If any of these four sections are missing, or lack the required content described below, the application will not move forward to peer review.

The project narrative **must** adhere to the formatting guidelines (see [Part III.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 four sections of the Project Narrative **must** include the content described below. Please see the recommendations section for additional information about what to include in the Project Narrative.

#### *(a) Significance*

The purpose of this section is to describe your research aims while providing a compelling rationale for the development of a new or improved method.

You **must** describe:

- The statistical and/or research method you will develop or improve.
- How the method will help solve practical problems encountered by education researchers.
- How education researchers will obtain and use the method.

#### *(b) Research Plan*

The purpose of this section is to describe how you will develop and test the proposed method, as well as check its usability by education researchers.

You **must** describe your plans and methods for:

- Developing the proposed method.
- Determining that the method works as intended.
- Determining that education researchers can use the method.

#### *(c) Personnel*

The purpose of this section is to describe the relevant expertise and experience, responsibilities, and time commitments of the PI and any other key personnel.

You **must** describe:

- Your project team.

#### *(d) Resources*

The purpose of this section is to describe the institutions involved in the research and their capacity and access to resources needed to execute a project of this size and complexity and to appropriately disseminate findings.

You **must** describe:

- The research infrastructure and capacity to conduct the project.

### **4. Recommendations for a Strong Application**

IES provides recommendations intended to improve the quality of your application. Peer reviewers are asked to consider these recommendations in their evaluation of your application.

#### *(a) Significance*

Describe the specific statistical or methodological issue or problem that your work addresses.

Discuss the overall importance of this issue/problem to the improvement of applied education research, the overall importance of its solution, and its relevance to the type of education research IES funds.

Describe current methods used to address this issue or problem and explain why current practice is not satisfactory.

Describe the new or improved method you propose to develop. Contrast this with current typical practice and its identified shortcomings. A detailed description will show how your new or improved method has the potential to produce substantially more accurate and/or more usable research results because (a) it is sufficiently different from current practice that it does not suffer from the same shortcomings; (b) there are theoretical and empirical justifications for expecting it to function as planned; (c) it will be easier or more efficient for education researchers to use.

Describe what products will be developed that will allow education researchers to make use of the new or improved method (e.g., an article written for education researchers, software).

Discuss how the product(s) will be used by education researchers to improve the designs of their studies, analyses of their data, and/or interpretations of their findings.

If you propose to further develop a method from a previous project, justify the need for another award, and describe the results and outcomes of your prior or currently held awards that contributed to the development of the method.

In [Appendix A: Dissemination History and Plan](#), describe how you will make the product(s) widely available to education researchers in a variety of sectors (academia, government, non- and for-profit) and prior successes in disseminating the findings and products from your work.

#### *(b) Research Plan*

Explain the major activities and sequence of steps you will follow to develop the method and product(s). If you are building on a method or product that is currently available, be clear about what you are changing or enhancing.

Describe any theoretical developments (for example, distributional and estimator derivations) that you will need to do as the first stage of your method development. Describe the underlying methods in the current literature, the supporting assumptions, and the desired endpoint (a new estimator, distribution of test statistic, bounds, fit index, etc.).

If you propose to collect data, you should describe the sample (including criteria for inclusion/exclusion), measures (including evidence of reliability and validity for the specified use), and procedures proposed for the data collection. You should also provide documentation in [Appendix E: Letters of Agreement](#) to assure reviewers that you already have access to the settings where data will be collected or that access can be obtained, and the project can be carried out in a timely fashion.

If you propose secondary data analyses, you should provide information on sampling design, sample characteristics, variables to be used, and the structure of the dataset. The dataset should be described in enough detail to allow reviewers to judge whether the proposed analyses can be conducted with the dataset. If multiple datasets will be linked to conduct analyses, reviewers must be able to judge the feasibility of the linking plan. You should also provide sufficient documentation in [Appendix E: Letters of Agreement](#) to assure reviewers that you have access to the data or that access can be obtained, and the project can be carried out in a timely fashion.

Your data analytic plan should have sufficient detail to permit reviewers to judge the appropriateness and adequacy of the plan for addressing, as applicable, the hypotheses or research questions. You should include an explicit discussion of how any missing data will be handled within the statistical analyses.

If you propose to conduct a simulation study, the procedure should be described at the level of detail typically found in the Methods section of a research manuscript, including a description of the variables to be manipulated, a description of the outcome(s) of interest, and as applicable, criteria for determining whether outcomes such as biases or differences between parameter estimates are consequential. You should describe the data generation process, including the sample size(s), the values of relevant fixed parameters, the values that will be used for parameters that are varied in the simulation study, and the software package that will be used to generate the data.

As you describe the end-user-testing to determine whether education researchers can successfully use the method and product(s), you should identify the setting where testing will be done and the researchers who will carry out the test. For example, colleagues might use the method in their own research, students could use the method in a course you teach, state or local education personnel might try to apply the method with their administrative data. You should also make clear how you will judge successful use of the method and product(s) and how feedback from this process will be used to revise them. You should also identify how you will ensure that the latest versions of your product(s) will remain available to education researchers. Non-published technical reports, working papers, and guidelines can be placed in preprint repositories (such as institution-specific, Open Science Foundation, EdArXiv) and software hosts should be identified (e.g., GitHub, CRAN) along with how you will manage dependencies (i.e., as an R package, dockerfile, requirements.txt).

### *(c) Personnel*

Strong applications will demonstrate that the project team possess the appropriate skills and qualifications to carry out the proposed research project, that the principal investigator and other key personnel possess the appropriate training and experience for their roles and responsibilities, and that they will commit sufficient time to competently implement the proposed research.

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

Identify and briefly describe the relevant background and expertise of all key personnel, including the PI, Co-PIs, Co-Investigators, and any consultants on the project team regardless of whether they are located at the primary applicant institution or a subaward institution.

Include the following:

- Roles and responsibilities of key personnel on the project
- Provide the proportion of time personnel will devote to the project, expressed as percent effort over a 12-month calendar year
- Note personnel with experience in producing similar methods products
- Identify previous success at disseminating research findings and products to education researchers

If you have previously received a Methods grant award, you should indicate the results of your past work, its dissemination, and its use by education researchers. Discuss how the collective research expertise and experience of your team align with and support the content and methodological focus of your proposed Methods project.

*(d) Resources*

Strong applications will demonstrate that there is sufficient research infrastructure and institutional capacity to carry out the proposed research and that the commitments of each partner show support for the implementation and success of the project.

Describe the research infrastructure and capacity to conduct the proposed project at both the primary applicant institution and any subaward institutions, including the following:

- Your institution's capacity to manage a grant of this size.
- Your current access to resources available at the primary institution and any subaward institutions
- Your plan for acquiring any resources that are not currently accessible, will require significant expenditures, and/or are necessary for the successful completion of the project, such as equipment, server/cloud computing time, test materials, curriculum, or training materials.
- Your access to education researchers to user-test the method and product(s). For example, identify education researchers willing to try them in their work or in their courses in which students will use and critique it.
- Your access to specific offices and organizations that will support your plan to disseminate results as described in the required Dissemination Plan in Appendix A: Dissemination History and Plan.
- Access to 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 documenting this access.
    - Convincing letters convey that the organizations understand what their participation in the study will involve, such as annual surveys, assessments, and/or classroom observations. Include information about incentives for participation, if applicable.

## C. Toolkits, Guidelines, Compendia, and Review Papers Grants

### 1. Purpose

IES established the Toolkits, Guidelines, Compendia, and Review Papers (Toolkits) Grants topic to support developing products that bring together the existing research and information available on a specific method for use by education researchers in their own research. These products can include toolkits, guidelines, compendia, and review papers (see <https://ies.ed.gov/ncser/pubs> and <https://ies.ed.gov/ncser/pubs> for examples). Applicants are required to describe how they will conduct end-user-testing to determine whether education researchers can use the products and to make revisions in response to feedback if needed. Applicants are also required to discuss how they will disseminate the products and make them widely available to education researchers.

### 2. Award Limit

No more than \$350,000 (direct and indirect costs) over no more than 2 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 Toolkits topic that exceeds \$350,000 or that is for longer than 2 years.**

### 3. Requirements

You **must** include a Project Narrative with four sections: **(a) Significance, (b) Research Plan, (c) Personnel, and (d) Resources**. If any of these four sections are missing, or lack the required content described below, the application will not move forward to peer review.

The project narrative **must** adhere to the formatting guidelines (see [Part III.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.

#### *(a) Significance*

The purpose of this section is to describe your research aims while providing a compelling rationale for the development of a product that brings together the available research and information on a method.

You **must describe**:

- The toolkit, guidelines, compendia, and/or review paper you will develop.
- How the product(s) will help solve practical problems encountered by education researchers.
- How education researchers will obtain and use the product(s).

#### *(b) Research Plan*

The purpose of this section is to describe how you will develop and test the proposed statistical and/or methodological product(s) as well as check its usability by education researchers.

You **must describe** your plans and methods for:

- Developing the proposed toolkit, guidelines, compendia, and/or review paper.
- Determining that the product(s) works as intended.
- Determining that education researchers can use the product(s).

#### *(c) Personnel*

The purpose of this section is to describe the relevant expertise and experience, responsibilities, and time commitments of the PI and any other key personnel.

You **must** describe:

- Your project team.

#### *(d) Resources*

The purpose of this section is to describe the institutions involved in the research and their capacity and access to resources needed to execute a project of this size and complexity and to appropriately disseminate findings.

You **must** describe:

- The research infrastructure and capacity to conduct the project.

### **4. Recommendations for a Strong Application**

IES provides recommendations intended to improve the quality of your application. Peer reviewers are asked to consider these recommendations in their evaluation of your application.

#### *(a) Significance*

Describe the product(s) you intend to develop (e.g., toolkits, guidelines, compendia, review papers) and the specific method that your product will assist education researchers use of.

Discuss how the product(s) will be used by education researchers to improve the designs of their studies, analyses of their data, and/or interpretations of their findings. For example, a toolkit could assist an applied education researcher to correctly implement a method in their work and accurately describe its use in the write up of their findings.

Justify why this product is needed to improve education research. Your justification might include recent changes in the existing available research, the availability and quality of similar products now available, and the current state of practice among education researchers. Show that your product(s) have the potential to produce substantially more accurate and/or more usable research results than current practice.

In [Appendix A: Dissemination History and Plan](#), describe how you will make the product(s) widely available to education researchers in a variety of sectors (academia, government, non- and for-profit) and prior successes in disseminating the findings and products from your work.

#### *(b) Research Plan*

Explain the major activities and sequence of steps you will follow to develop the product(s). If you are building on a product that is currently available, be clear about what you are changing or enhancing.

Identify the currently available research or other information that you will be drawing upon to develop your product.

Describe in detail how you will develop your product (the toolkit, guidelines, compendium, and/or review paper). Make clear how you will gather the available information on the method addressed by the product, decide which information to include in your product, develop the product so that it accurately reflects the current state of knowledge about the method, and develop the product to be usable by education researchers.

Should you need to do any data collection or analysis as part of the development of your product, describe the data needed, how they will be obtained, and the analyses to be done.

Should you need to hold consensus or advisory panels for the development of your product, describe who will be represented on those panels (include letters of agreement if possible, in [Appendix E](#)), how the panels will function, and how decisions will be made.

As you describe the end-user-testing to determine whether education researchers can successfully use the product(s), you should identify the setting where testing will be done and the researchers who will carry out the test. For example, colleagues might use the product in their own research, students could use the product



in a course you teach, state or local education personnel might try to apply the product with their administrative data. You should also make clear how you will judge successful use of the product(s) and how feedback from this process will be used to revise the product. You should also identify how you will ensure that the latest versions of your product(s) will remain available to education researchers. Non-published technical reports, working papers, and guidelines can be placed in preprint repositories (such as institution-specific, Open Science Foundation, EdArXiv) and software hosts should be identified (e.g., GitHub, CRAN) along with how you will manage dependencies (i.e., as an R package, dockerfile, requirements.txt).

### *(c) Personnel*

Strong applications will demonstrate that the project team possess the appropriate skills and qualifications to carry out the proposed research project, that the principal investigator and other key personnel possess the appropriate training and experience for their roles and responsibilities, and that they will commit sufficient time to competently implement the proposed research.

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

Identify and briefly describe the relevant background and expertise of all key personnel, including the PI, Co-PIs, Co- Investigators, and any consultants on the project team regardless of whether they are located at the primary applicant institution or a subaward institution.

Include the following:

- Roles and responsibilities of key personnel on the project
- Provide the proportion of time personnel will devote to the project, expressed as percent effort over a 12-month calendar year
- Note personnel with experience in producing similar methods products
- Identify previous success at disseminating research findings and products to education researchers

If you have previously received a Methods grant award, you should indicate the results of your past work, its dissemination, and its use by education researchers. Discuss how the collective research expertise and experience of your team align with and support the content and methodological focus of your proposed Methods project.

### *(d) Resources*

Strong applications will demonstrate that there is sufficient research infrastructure and institutional capacity to carry out the proposed research and that the commitments of each partner show support for the implementation and success of the project.

Describe the research infrastructure and capacity to conduct the proposed project at both the primary applicant institution and any subaward institutions, including the following:

- Your institution's capacity to manage a grant of this size.
- Your current access to resources available at the primary institution and any subaward institutions.
- Your plan for acquiring any resources that are not currently accessible, will require significant expenditures, and/or are necessary for the successful completion of the project, such as equipment, server/cloud computing time, test materials, curriculum, or training materials.
- Your access to education researchers to user-test the method and product(s). For example, identify education researchers willing to try them in their work or in their courses in which students will use and critique it.
- Your access to specific offices and organizations that will support your plan to disseminate results as described in the required Dissemination Plan in Appendix A: Dissemination History and Plan.
- Access to 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 documenting this access.
  - Convincing letters convey that the organizations understand what their participation in the study will involve, such as annual surveys, assessments, and/or classroom observations. Include information about incentives for participation, if applicable.

## Part III: 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 topic (see [Part II: Topic 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 required and optional 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 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: Dissemination History and Plan (Required)

You **must** include Appendix A after the project narrative. Appendix A includes two sections: Dissemination History and Dissemination Plan. Appendix A **must** meet the general formatting guidelines and be **no more than three pages**. IES suggests including one page for the Dissemination History and two pages for the Dissemination Plan. 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.

#### *(a) Dissemination History for Methods Grant Program*

The dissemination history is intended to demonstrate that the methods research you have conducted in the past has been disseminated to education researchers. Applicants who have never had an IES grant should focus on the dissemination history of their other methods research. Reviewers will use this information to determine whether the project personnel have the dissemination experience commensurate with their research career stage (early, middle, or late) necessary to carry out the proposed dissemination plan.

The dissemination history should include the following:

- A brief description of the outcomes of prior research, including products developed or tested and how the project's findings and products were disseminated
- For products that were developed through one or more projects, an explanation for how it has been made available to users, the number of active users of the product, the number of users of the product during its history, and funding agreements or outside investments for commercialization (if applicable)
- Other unique dissemination products or notable methods presentations

#### *(b) Dissemination Plan for Methods Grant Program*

Describe your plan to disseminate methodological and statistical products from the proposed project. Dissemination plans should be tailored to the audiences that will benefit from the products and reflect the unique purposes of the project. Identify the audiences that you expect will most likely benefit from your research such as education researchers and other methods researchers who might further develop your product(s). Describe how you will reach education researchers working in different sectors (e.g., academia; federal, state, and local government; and non- and for-profit).

Discuss the different ways in which you intend to reach these audiences. IES-funded researchers are expected to publish and present in venues designed for education researchers in a manner and style useful and usable to this audience. Examples include:

- Give workshops focused on the practical application of new methods and tools to researchers working in or for SEAs and LEAs
- Offer presentations on the theoretical and technical underpinnings of new methods and tools to methodologists as well as other interested researchers working in academic and applied settings.
- Post software and relevant user's guides, detailed working papers, toolkits, guidelines, compendia, and review papers to a readily accessible website
- Publish in journals for applied education research
- Announce the availability of the project's products in forums visited by education researchers (e.g., blogs, tweets, newsletters, press releases to researcher organizations)
- Engage in dissemination activities with relevant IES-funded Research and Development (R&D) Centers (<https://ies.ed.gov/ncer/research/randdCenters.asp>), Research Networks (<https://ies.ed.gov/ncer/research/researchNetworks.asp>), or Regional Educational Laboratories (RELS) (<https://ies.ed.gov/ncee/edlabs/>).

IES-funded researchers who develop statistical and methodological products for use in research are expected to make these products available for research purposes or (after evaluation or validation) for general use. Consistent with existing guidelines, IES encourages researchers to consider how these products could be brought to market to increase their dissemination and use.

**The Dissemination History and 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 should 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 15th page of the appendix before it is forwarded for peer review.

In Appendix C, you may include figures, charts, or tables with supplementary information such as a timeline for your research project, a diagram of the management structure of your project, a table of the research available for use in a synthesis, examples of measures to be collected, or a table of the variables available in a secondary data set.

**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 Statistical and Methodological Products (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 10th page of the appendix before it is forwarded for scientific peer review.

In Appendix D, you may include examples of the product that you intend to develop or of an existing product that you intend to further develop (for example, screenshots of software, user manuals, exemplar templates for a toolkit).

**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)**

Appendix E has no maximum length.

Include letters of agreement from any organization who will participate in or provide data for the proposed research, from any organization carrying out the data analysis or other research activities, take part in the dissemination of the findings, and from persons who will serve as consultants. Such letters of agreement should make it clear that the author of the letter understands the nature of the time commitment and timing of participation, required space and personnel, resources that the organization is prepared to contribute to the research project, and the ways that the organization personnel will be expected to coordinate with the project team (e.g., quarterly meetings with administrative staff) if the application is funded.

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

### **D. Other Narrative Content**

In addition to the project narrative (see [Part II: Topic Requirements and Recommendations](#)) and required and optional Appendices (see above), you will also prepare a project summary/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/Abstract**

You **must** submit the project summary/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/>).

(a) Title

- **Title:** A distinct, descriptive title for the project
- **Topic:** Identify the RFA (Statistical and Research Methodology in Education) and the topic to which you are applying (Core Grants or Toolkits, Guidelines, Compendia, and Review Papers). The topic information should match the topic code entered for Item 4b: Agency Routing Number on the SF 424 Application for Federal Assistance form (see [Part VI](#) and the IES Application Submission Guide ([https://ies.ed.gov/funding/submission\\_guide.asp](https://ies.ed.gov/funding/submission_guide.asp))).

(b) Project Summary

- **Purpose:** A brief description of the purpose of the project and its significance for improving statistics and research methodology in education research
- **Products:** A brief description of the statistical and/or methodological product(s) (new or improved methods, toolkit, software, guidelines, compendia, review papers, articles) the research team will develop.

(c) Structured Abstract

- **Research Design and Methods:** a brief description of the major features of the design and methods to be used (e.g., synthesis technique, Monte Carlo simulation, secondary data analysis, iterative design process) to develop the method and/or product(s).
- **User Testing:** A brief description of how education researchers will try out your method and/or product(s) to determine if they can use it
- **Dissemination:** A brief description of how your method and/or product(s) will be made easily accessible to education researchers
- **Use in Applied Education Research:** A brief description of how your method and/or product(s) is to be used in applied education research and is expected to improve it
- **Related Projects:** A list of any other completed or on-going IES-funded projects that are related to this one, noting the title of the related IES project and providing a link to the online IES abstract, where *related* refers to a project that you are drawing upon or building on as part of your proposed project (not one that only addresses the same method that your propose to work on).

See our online summary/abstracts (<https://ies.ed.gov/funding/grantsearch>) of previous and current Methods grants for examples of the content to be included in your summary/abstract.

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

You **must** submit the bibliography and references cited as a separate PDF attachment in the application package. We do not recommend a 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.

## ***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.

Note that the Revised Common Rule is now in effect with changes that will affect Institutional Review Board (IRB) review of your proposed research protocol. Take care to address how changes to exemption and continuing review procedures and the use of a single IRB will be addressed should your application be recommended for funding.

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 form. IES will accept the SciENcv format for your biographical sketch even though it does not adhere exactly to our general formatting requirements. 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.

Include a persistent identifier (PID) such as an ORCID iD (Open Researcher and Contributor; <https://orcid.org/>) in the biosketches for all key personnel. 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 IV: 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 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.

**The size of the award depends on the topic and scope of the project.** Please attend to the duration and budget maximums set for each topic in [Part II: Topic Requirements and Recommendations](#). IES will not make an award exceeding the relevant maximum grant duration and/or award amount.

#### 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 10 percent of modified total direct costs (see 2 CFR §200.414 [https://www.ecfr.gov/cgi-bin/text-idx?node=se2.1.200\\_1414&rgn=div8](https://www.ecfr.gov/cgi-bin/text-idx?node=se2.1.200_1414&rgn=div8) 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/cgi-bin/text-idx?SID=dcd3efbcf2b6092f84c3b1af32bdcc34&node=se2.1.200\\_1432&rgn=div8](https://www.ecfr.gov/cgi-bin/text-idx?SID=dcd3efbcf2b6092f84c3b1af32bdcc34&node=se2.1.200_1432&rgn=div8)).

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**

20 U.S.C. 9501 et seq., the “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, 85, 86 (part 86 applies only to institutions of higher education), 97, 98, and 99 and 2 CFR 3485. 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 peer review process as the first step in making funding decisions. If your application is recommended for funding based on the outcome of peer review, an IES program officer will contact you to clarify any issues that were raised by the peer reviewers and to address whether the proposed budget adequately supports the scope of work and meets federal guidelines.

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

The research you propose to conduct under a specific topic may require that you have (or will obtain) access to education settings for data collection; 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:

##### **(1) 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.

##### **(2) Using secondary data sets**

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.

### **(3) 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. Performance on previous Department of Education awards is considered as is additional information that may be requested from the applicant, including compliance to the IES Public Access Policy (applicable for all grants funded from 2012 to present; <https://ies.ed.gov/funding/researchaccess.asp>).

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

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

## **2. Post-Award**

### *(a) Compliance with IES Policy on Public Access to Data and Results*

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, although it 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 principal investigator 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 is strongly encouraged as soon as possible **but must occur within 12 months of the publisher's official date of publication.** ERIC will not make the accepted manuscripts available to the public prior to the end of the 12-month embargo period, unless specified by the publisher.

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 will submit bibliographic information from the publication, including title, authors, publication date, journal title, and associated IES award number(s).

### *(b) 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 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.

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

The 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. Should the PI not be able to attend the meeting, she or he may designate another person who is key personnel on the project to attend.

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

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

Letters of Intent (LOIs) are submitted online at <https://iesreview.ed.gov>. **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 seven content areas listed below. Use these fields to provide the requested information. The project description should be single-spaced and is recommended to be no more than one page (about 3,500 characters). 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 staff also use 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.

*Elements of a Letter of Intent:*

- Descriptive title
- Topic that you will address
- Brief description of the proposed project and the method and/or product you will develop
- 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 topic)
- Estimated total budget request (attend to the Budget maximums for each topic)

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

If you intend to revise and resubmit an application that was submitted to one of IES's previous competitions but that was not funded, you must indicate on the SF-424 Application for Federal Assistance Form in the Application Package (see IES Application Submission Guide, [https://ies.ed.gov/funding/submission\\_guide.asp](https://ies.ed.gov/funding/submission_guide.asp)) that the FY 2024 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 2024 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 the FY 2024 application is a new application. In [Appendix B](#), you should provide a rationale explaining why the FY 2024 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.

You may submit applications to more than one of the IES FY 2024 grant programs. In addition, within a particular grant program or topic, you may submit multiple applications. However, you may submit a given application only once for the FY 2024 grant competitions, meaning you may not submit the same application or similar applications to multiple grant programs, multiple topics, or multiple times within the same topic. If you submit the same or similar applications, IES will determine whether and which applications will be accepted for review and/or will be eligible for funding.

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

**Applications must be submitted electronically and received no later than 11:59:59 p.m. Eastern Time on January 11, 2024** through 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/apply-for-grants.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 Peer Review Information Management Online (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 PD/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 one of the IES review panels (<https://ies.ed.gov/director/sro/reviewers.asp>). 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.

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 he or she believes 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 contribute to solving education problems and to provide reliable information about the education practices that support learning and improve academic achievement and access to education for all learners. The specific purpose of IES-supported Methods projects is to support this contribution by developing statistical and methodological products for education researchers to use in their research. In doing so, IES aims to increase the quality, accessibility, use, and relevance of education research. 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 pertinent to each of these criteria is described in [Part II: Topic Requirements and Recommendations](#).

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

Does the applicant thoughtfully address recommendations described in the Significance section for the topic under which the applicant is submitting the application? For resubmissions, does the applicant adequately address the comments/concerns of prior reviewers?

*(b) Research Plan*

Does the applicant thoughtfully address recommendations described in the Research Plan section for the topic 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 applicant thoughtfully address recommendations described in the Personnel section for the topic under which the applicant is submitting the application? 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? For resubmissions, does the applicant adequately address the comments/concerns of prior reviewers?

*(d) Resources*

Does the applicant thoughtfully address recommendations described in the Resources section for the topic under which the applicant is submitting the application? 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? For resubmissions, does the applicant adequately address the comments/concerns of prior reviewers?

*(e) Dissemination*

Does the applicant thoughtfully address recommendations described in [Appendix A: Dissemination History and Plan](#)? Does the applicant present a dissemination plan that is tailored to audiences that will benefit from the findings and reflects the purpose of the project? Does the plan reflect the purpose of the topic? 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
- Contribution to the overall program of methods development described in this request for applications
- Ability to carry out the proposed methods development within the maximum award and duration requirements
- Availability of funds



## Part V: 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 ( <a href="#">Part III.B</a> )?	
	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 <a href="#">Appendix A: Dissemination History and Plan</a> ?	
	If you are resubmitting an application, have you included <a href="#">Appendix B: Response to Reviewers</a> ?	
Responsiveness		
	Have you met all the General Requirements for an application ( <a href="#">Part 1.C</a> )?	
	Have you identified a single topic for your application?	
	Does your project narrative include the four required sections and the associated requirements for the selected topic? Did you describe the elements required for each section?	
Required Project Narrative Elements		
	<u>Core Grants</u>	<u>Toolkits, Guidelines, Compendia, and Review Papers Grants</u>
Significance	You must describe: <ul style="list-style-type: none"> <li>The statistical and/or research method you will develop or improve.</li> <li>How the method will help solve practical problems encountered by education researchers.</li> <li>How education researchers will obtain and use the method.</li> </ul>	You must describe: <ul style="list-style-type: none"> <li>The toolkit, guidelines, compendia, and/or review paper you will develop.</li> <li>How the product(s) will help solve practical problems encountered by education researchers.</li> <li>How education researchers will obtain and use the product(s).</li> </ul>
Research Plan	You must describe your plans and methods for : <ul style="list-style-type: none"> <li>Developing the proposed method.</li> <li>Determining that the method works as intended.</li> <li>Determining that education researchers can use the method.</li> </ul>	You must describe your plans and methods for: <ul style="list-style-type: none"> <li>Developing the proposed toolkit, guidelines, compendia, and/or review paper.</li> <li>Determining that the product(s) works as intended.</li> <li>Determining that education researchers can use the product(s).</li> </ul>
Personnel	You must describe your project team.	You must describe your project team.
Resources	You must describe the research infrastructure and capacity to conduct the project.	You must describe the research infrastructure and capacity to conduct the project.

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

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Applications to the **Statistical and Research Methodology in Education** grant program (**ALN 84.305D**) are submitted under a single topic (Core or Toolkits/Guidelines/Compendia/Reviews). You **must** enter the appropriate topic code 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 to the Core Grants topic should have the following entered in the field for Item 4B: “**NCER-Core**”.

Topics	Codes
Core Grants	NCER-Core
Toolkits/Guidelines/Compendia/Reviews	NCER-Toolkits