

Statistical and Research Methodology in Education

CFDA Number: 84.305D

U.S. DEPARTMENT OF EDUCATION

A Product of the National Center for Education Research

Letter of Intent Due:	May 28, 2020	https://iesreview.ed.gov/LOI/LOISubmit
Application Package Available:	May 7, 2020	https://www.grants.gov/
IES Submission Guide Available:	April 1, 2020	https://ies.ed.gov/funding/pdf/submissionguide.pdf
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Part I: Overview and General Requirements

A. Introduction

The Institute of Education Sciences (IES) provides scientific evidence to improve education practice and policy and shares that evidence in a way that can be used by educators, parents, policymakers, researchers, and the public. Within IES, the National Center for Education Research (NCER) supports research focused on practices and policies that improve education outcomes and access to education opportunities for all learners from early childhood through adulthood, particularly those at risk of failure.

1. Statistical and Research Methodology in Education Grant Program (CFDA 84.305D)

In this Request for Applications (RFA), IES invites applications for research projects that will contribute to its Statistical and Research Methodology in Education (Methods) grant program (CFDA 84.305D). IES's mission is to provide rigorous evidence on which to ground education practice and policy and to encourage its use. The Methods program supports the development of a wide range of methodological and statistical products, including new or improved methods, guidelines and software, to better enable applied education scientists to conduct rigorous education research. Researchers should plan to disseminate their products to applied education researchers who may use them in their own work as well as to methods researchers who may further develop or make use of them.

2. RFA Organization

This RFA is organized as follows. [Part I](#) provides an overview of the competition and sets out the general requirements for a grant application. [Parts II](#) and [III](#) provide further detail on the specific requirements for the Methods grant program. [Part IV](#) provides information about how to prepare your application and the appendices and other narrative content. [Part V](#) provides general information on competition regulations and the review process. [Part VI](#) provides a checklist that you can use to ensure you have included all required application elements to advance to scientific peer review.

3. 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: IES is interested in broadening institutional participation in its research grant programs. IES encourages applications from minority-serving institutions (MSIs), alone or in combination with other institutions, that meet the eligibility criteria for this RFA. MSIs include Alaska Native and Native Hawaiian-Serving Institutions; American Indian Tribally Controlled Colleges and Universities (TCU); Asian American and Native American Pacific Islander-Serving Institutions (AANAPISI); Hispanic-Serving Institutions (HSI); Historically Black Colleges and Universities (HBCU); Native American-Serving, Nontribal Institutions; and Predominantly Black Institutions (PBI).

The Principal Investigator: The institution is responsible for identifying the principal investigator (PI) on a grant application and may elect to designate more than one person to serve in this role. The PI is the individual who 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. If more than one PI is named, the institution identifies these PIs as sharing the authority and responsibility for leading and directing the research project intellectually and logistically. All PIs will be listed on any grant award notification. However, institutions applying for funding must designate a single point of contact for the project. The role of this person is primarily for communication purposes on the scientific and related budgetary aspects of the project and should be listed as the PI. All other PIs should be listed as co-principal investigators (Co-PIs).

4. Technical Assistance for Applicants

IES provides technical assistance (TA) to applicants that addresses the appropriateness of project ideas for this competition and methodological and other substantive issues concerning research in education settings. IES program officers work with applicants through a variety of formats up until the time of Grants.gov submission. If you submit a letter of intent (LOI) at the IES Peer Review Information Management Online (PRIMO) system (<https://iesreview.ed.gov/LOI/LOISubmit>), a program officer will contact you regarding your proposed project. IES also provides Funding Opportunities Webinars (<https://ies.ed.gov/funding/webinars/>) that include advice on choosing the correct competition, grant writing, and submitting your application.

The program officer for this competition is -

Dr. Phill Gagné
Email: Phill.Gagne@ed.gov
Telephone: 202-245-7139

B. Changes in the FY2021 Request for Applications

All applicants and staff involved in proposal preparation and submission, whether submitting a new application or submitting a revised application, **should carefully read all relevant parts of this RFA**. Major changes to the Methods grant program (CFDA 84.305D) competition in FY 2021 are listed below and described fully in relevant sections of the RFA.

1. **Compliance Change.** IES has page limits for the project narrative and some appendices. If the project narrative or an appendix exceeds the limits discussed in this RFA, IES will remove any pages after the maximum for the project narrative or appendix. IES has also instituted formatting guidelines, as discussed in [Part IV.B](#) that applicants must attend to.
2. **Review Criteria Change:** The peer reviewers will provide a separate criterion score reflecting the quality of the project team's Dissemination History and Plan. Reviewers will consider team members' experience disseminating research findings and products from past projects to a range of audiences in addition to applicants' plans for disseminating the findings of the proposed study.

C. Getting Started

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

1. This RFA to learn how to prepare an application that is compliant and responsive to the requirements
2. The IES Application Submission Guide¹ (<https://ies.ed.gov/funding/pdf/submissionguide.pdf>) for important information about submission procedures and IES-specific guidance and recommendations to help you ensure your application is complete and received on time without errors through Grants.gov

We strongly recommend that both the PI and the Authorized Organization Representative (AOR) read both of these documents, whether submitting a new or revised application.

D. Ensuring Your Application is Forwarded for 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/pdf/submissionguide.pdf>).

- Received and validated by Grants.gov no later than 11:59:59 p.m. Eastern Time on July 30, 2020.

b) Compliance

- Includes all **required content** (see [Part III](#))
- Adheres to all formatting requirements (see [Part IV](#)).
- 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 peer review.
- Includes all **required Appendices** (see [Part IV](#))
 - [Appendix A: Dissemination History and Plan](#) (All applications)
 - [Appendix B: Response to Reviewers](#) (Resubmissions only)

c) Responsiveness

- Meets **General Requirements** for all applications (see [Part I.D](#)).
 - Choose one [Topic](#)
- Meets **Project Narrative Requirements** for the selected Topic (see [Part III](#))

¹ Please note that the IES Application Submission Guide includes application submission information that used to be included in the Request for Applications but has now been pulled out as a separate document.

E. General Requirements

Applications under the Methods grant program **must meet the requirements** set out in this section in order to be sent forward for scientific peer review.

1. Topics

Your application **must** be directed to one of the two Methods topics (see [Part II: Topic Descriptions](#)). The Methods topics include -

- Statistical and Research Methodology in Education - Regular
(<https://ies.ed.gov/ncer/projects/program.asp?ProgID=60>)
Statistical and Research Methodology in Education - Early Career
(<https://ies.ed.gov/ncer/projects/program.asp?ProgID=86>)

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 grant program are available to all interested audiences, IES **requires all applicants** to discuss their prior history of disseminating findings from prior projects and to present a plan to disseminate project findings in [Appendix A: Dissemination History and Plan](#) of the application.

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 accepted for peer review.**

F. Award Limits

Applications to the Statistical and Research Methodology in Education grants program **must** conform to the following limits on award duration and cost by Topic.

Topic	Maximum Grant Duration	Maximum Grant Award
Regular Grants	3 years	\$900,000
Early Career Grants	2 years	\$225,000

Part II: Topic Descriptions

A. Applying to a Topic

For the FY 2021 Methods grant program, you **must** submit to one of the two research topics described in this section. You must identify your chosen topic area on the SF-424 Form (Item 4b) of the Application Package (see the IES Application Submission Guide (<https://ies.ed.gov/funding/pdf/submissionguide.pdf>), or IES may reject your application as nonresponsive to the requirements of this RFA.

Across all topics, **in order to be sent forward for scientific peer review, you must meet**

- **The general requirements** outlined in [Part I.D: General Requirements](#)
- **The specific requirements** listed under [Part III: Specific Requirements and Recommendations](#)

For each topic:

For the FY 2021 Methods competition, IES is competing two topics: (1) Regular Grants and (2) Early Career Grants. Applications submitted under both topics are to address the same types of methodological issues and meet the same specific requirements except those regarding Personnel. Awards made under the two topics differ in maximum project duration and award amount.

1. Regular Grants

The proposed duration of the project should reflect the scope of work to be accomplished. **The maximum duration of a Regular Methods Grant is 3 years.**

The budget should reflect the scope of the work to be conducted and the personnel and resource requirements to conduct the work. **The maximum award for a Regular Methods Grant is \$900,000 (total cost = direct + indirect costs).**

2. Early Career Grants

IES established the Early Career Grants to encourage a new generation of education researchers to address methodological issues and challenges and to develop statistical and methodological products that will benefit the education sciences. **Applicants to the Early Career Grants topic must have received their doctorate on or after April 1, 2016.** Applicants eligible for Early Career Grants may apply to either the Early Career or the Regular Grants topic. You should indicate your choice on the SF-424 cover sheet and at the top of the first page of the Project Narrative. Applicants who apply for the Early Career Grants topic **must** include the required research mentor or advisory panel who will collaborate on the research.

Early Career grants are intended for applicants proposing high-quality work of the type discussed in the Overview section but that can be done over a shorter period and with less funding. **The maximum duration of an Early Career Methods Grant is 2 years.**

The budget should reflect the scope of the work to be conducted and the personnel and resource requirements to conduct the work. **The maximum award for an Early Career Methods Grant is \$225,000 (total cost = direct + indirect costs).**

The Statistics and Modeling peer review panel (<https://ies.ed.gov/director/sro/reviewers.asp>) reviews all applications to the Methods grant program.

See the Procedures for Peer Review of Grant Applications (https://ies.ed.gov/director/sro/application_review.asp) for more information.

IES strongly encourages you to contact the program officer for this competition if you have questions regarding the appropriateness of a project for submission under a specific topic.

B. Statistical and Research Methods

1. Purpose

IES is interested in the development of practical statistical and methodological products and software to improve study designs, data analyses, and interpretations of findings. These products should be designed for use by applied education researchers. IES requires that applicants justify the significance of their proposed work for applied education research, test that their products can be used by applied education researchers and identify how they will disseminate their products to applied education researchers (for example, through workshops and well-established websites rather than solely through methodological journals).

2. 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 seeing applications that address the following.

- *Variability in Effects:* Evaluations of program and policy interventions all too often focus only on average effects, neglecting the substantial variation that is often found. 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. Ultimately, IES seeks to support the collection and dissemination of rigorous and reliable information that will help researchers decide which factors to include in their studies and how best to conduct the corresponding analyses.
- *Generalizability of Findings:* Multilevel analyses of data from rigorous evaluation designs provide estimates of effects across multiple classrooms, schools, or districts, but the applicability of these estimates to schools within or outside the sample is rarely considered. Applied researchers need tools to answer such questions as “Does it work in my school?” from a principal whose school was in the sample, or “Could this work in my district?” from a superintendent whose school district was not involved in the study. The use of convenience sampling in evaluations increases the complexity of generalizing results. There has been some work in education on developing weights based on surveys or other sources of information

about the population to make the estimate of the treatment effect more likely to reflect the effect in the general population, but further research is needed.

- *Replication*: Replication is critical to advancing our understanding of what works. However, the education sciences lack agreement on how a replication or a set of replications can best be designed and how their findings can be best analyzed to determine replication success. Research is needed to develop validated practices and criteria for the design and analysis of future replication studies and the determination of replication success.
- *Single-case Designs*: Single-case experimental designs (SCDs) are critically important for research with low-incidence disability populations. A paper (<https://eric.ed.gov/?id=ED562991>) commissioned by IES provides a thorough theoretical treatment and applied demonstration of effect sizes in single-case research. IES has supported work on the development of design-comparable effect sizes for reversal and multiple baseline designs. There is not, however, a clear approach for calculating design-comparable effect sizes for other SCDs, such as alternating treatment designs and changing criterion designs. 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 SCDs through statistical approaches such as multilevel modeling.
- *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 that come out of data science, artificial intelligence, and machine learning methods. This could include techniques and tools to streamline the process of merging multiple datasets, tools to facilitate the collection of a variety of data from education technology products, and tools to facilitate data analysis.
- *Quasi-experimental Designs (QEDs)*: QEDs (for example, matching and regression discontinuity designs) are typically employed when random assignment is not feasible to evaluate the impact of an intervention. Work is needed to increase the rigor of these methods and confidence in the potential causal implications of the results.²
- *Interpreting Impacts*: Findings from evaluation studies are often presented in terms of p-values or standardized effect sizes, both of which lack clear practical interpretations. Findings also tend to be reported as a single overall effect, rather than taking into account variation of the effect across clusters or subgroups. Education researchers and consumers of education research need alternative approaches and tools to help them determine what a meaningful effect size is in different contexts.

² IES has restricted-use data files from random assignment studies that could be used to conduct this type of study. Information on obtaining IES's restricted-use data licenses is available at <https://nces.ed.gov/pubsearch/licenses.asp>.

- *Costs and Cost Effectiveness*: Research to improve the accuracy of cost analysis and cost-effectiveness analysis, increase their interpretability, and make them easier to use will support their wider implementation in evaluations and use in decision making.
- *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.
- *Methods for Synthesizing Qualitative Evidence*: IES's What Works Clearinghouse™ (<https://ies.ed.gov/ncee/wwc/>) currently synthesizes quantitative impact evaluations (e.g., RCTs, QEDs, SCDs) using a variety of increasingly well-established techniques when developing its Intervention Reports and Practice Guides. Rigorous approaches to synthesizing qualitative evidence, particularly evidence that arises during the implementation of educational interventions, are comparatively less well understood. Research is needed to develop and test these methods, as well as to consider how the resulting syntheses might complement information that arises from quantitative syntheses.
- *Addressing Test Opt Out as a Source of Missing Data*: An increasing number of students are opting out of state and district standardized tests. Applied education researchers would benefit from methodological assistance on how to address this source of missing data, especially if it is non-random.

IES is interested in research across a wide range of areas, and you are not limited to the ones described above. IES encourages applications in the above areas because it believes research in these areas can contribute to important advances in applied education research.

Part III: Specific Requirements and Recommendations

For applications to the FY 2021 Methods grants program, you **must** submit under either the Regular or Early Career topic.

See the Requirements section for the specific content that you must address in the project narrative in order to be sent forward for scientific peer review.

See the Award Limits section for duration and cost maximums that restrict budgets by topic.

See the Recommendations for Strong Applications section for recommendations to improve the quality of your application. Where appropriate, recommendations are aligned with the Standards for Excellence in Education Research (SEER Principles; <https://ies.ed.gov/seer/>) to ensure that research is transparent, actionable, and focused on meaningful outcomes that have the potential to improve education outcomes. The scientific peer reviewers are asked to consider 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 (see [Part IV](#)).

A. Requirements

The project narrative **must** adhere to the font guidelines (see Part [IV.B](#)) and be **no more than 22 pages**. If the narrative exceeds this page limit, IES will remove any pages after the 22nd page of the narrative. The project narrative for an Exploration project application **must** include four sections: Significance, Research Plan, Personnel, and Resources.

1. Significance

The purpose of this section is to describe your research aims while providing a compelling rationale for the development of a new methodological and/or statistical product or the further development of an existing one.

You **must describe** -

- The methodological and/or statistical product(s) you will produce
- How it will solve practical problems encountered by applied education researchers
- How it will be easy to obtain and used by applied education researchers

2. Research Plan

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

You **must describe** your research design, methods and plan for -

- Developing the methodological and/or statistical product(s)
- Determining that it works as intended
- Determining that applied education researchers can use it

3. Personnel

The purpose of this section is to demonstrate that your team possesses the appropriate training and experience for the proposed research and dissemination activities and will commit enough time to the project.

You **must describe** your project team.

For **Early Career applications**, you **must also**

- Provide the date of the PI's doctorate (to be eligible, it must have been received on or after April 1, 2016)
- Identify the PI's dissertation chair
- Identify the required research mentor or advisory panel members who will collaborate on the proposed research. A mentor or adviser cannot have served as the PI's dissertation chair.

4. Resources

The purpose of this section is to describe how you have both the institutional capacity to complete a project of this type and the access to the resources you will need to successfully complete this project and disseminate the products(s) you will produce.

You **must describe** your resources to conduct the project.

B. Award Limits

Awards made under the Methods grant program **must** conform to the following limits on duration and cost. These limits vary depending on whether the project is led by an Early Career PI.

1. Duration Maximums

The maximum duration of a Regular Methods Grant is **3 years**.

The maximum duration of an Early Career Methods Grant is **2 years**.

2. Cost Maximums

The maximum award for a Regular Methods Grant is **\$900,000** (total cost = direct costs + indirect costs).

The maximum award for an Early Career Methods Grant is **\$225,000** (total cost = direct costs + indirect costs).

C. Recommendations for Strong Applications

These recommendations are intended to improve the quality of your application, and the peer reviewers are asked to consider these recommendations in their evaluation of your application.

1. Significance

Describe the specific issue or problem faced by applied education researchers that your work addresses.

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

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

Describe the intended practical statistical/methodological product(s) you will produce (e.g., methods, guidelines, software) and how it is to be implemented. Contrast this with current typical practice and its identified shortcomings. A detailed description will clearly show that your product(s) 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; and (c) applied education researchers will be able to use it.

If you propose to further develop a statistical/methodological product 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.

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

In [Appendix A: Dissemination History and Plan](#), describe how you will make the product(s) widely available to applied education researchers.

For applications to the Early Career topic, if you are proposing work that builds on your dissertation, you should describe how the new work substantially differs from and expands on your past work. To this end, you should describe your dissertation with enough detail to ensure that the peer reviewers will understand the differences between it and the proposed work.

2. 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.

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.

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.

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

As you describe how you will determine whether applied 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 method in their own research, students could use the method in a course you teach, state or local education personnel might try the method with their administrative data. You should also make clear how you will judge successful use of the product(s).

3. Personnel

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

Describe additional personnel at the primary applicant institution and any subaward institutions along with any consultants.

In its research grant programs, IES is interested in including individuals from groups that have typically been underrepresented in the education sciences. Describe the backgrounds and experiences of project team members in light of this.

Describe team members' qualifications to carry out the proposed work, including the following:

- Statistical and methodological expertise necessary to carry out the research plan
- Experience with the datasets proposed for use, and working with the holders of data as needed
- Adapting methods for use by applied education researchers
- Past success at disseminating research findings and products to a range of audiences, including in peer-reviewed scientific journals, to applied education researchers, and the education marketplace

Describe how your research team collectively demonstrates the capacity to complete this work.

Identify the management structure and procedures that will be used to keep the project on track and ensure the quality of its work, including the following:

- Roles and responsibilities of personnel within the project
- Proportion of time personnel will devote to the project, expressed as percent effort over a 12-month calendar year

For applicants to the Early Career Grants topic, describe your mentor's or advisers' qualifications for supporting your proposed research and their roles on the project. Grant funds can be used to support the mentors' and advisers' roles in the project. Although mentors and advisers may be co-authors, IES expects that the PI will have first authorship on primary research publications resulting from the grant.

If you have previously received a Methods grant award, you should indicate the results of your past work, its dissemination, and its use by other researchers. In addition, you should discuss any theoretical contributions made by your previous work. By demonstrating that your previous work has made these contributions, you provide a stronger case for engaging in another Methods project.

4. Resources

Describe your institution's capacity to manage a grant of this size.

Describe your access to resources available at the primary institution and any subaward institutions.

Describe your plan for acquiring any resources that are not currently accessible, will require significant effort or expenditure, and are necessary for the successful completion of the project.

Describe your access to any datasets required and, if applicable, to schools (or other education delivery settings) with whom you will be working. Include Letters of Agreement in [Appendix E](#) documenting the willingness of organizations to allow you to use their datasets for the purposes of your study and, if applicable, the availability and cooperation of the schools to take part in the project. Convincing letters should convey that the organizations understand what their participation in the study will involve, such as, provision of specific data, annual student and teacher surveys, and student assessments.

Describe your access to education researchers to user-test the method. For example, identify applied education researchers willing to try the product in their work or courses in which students will use and critique it.

Describe your resources to carry out your plans to disseminate the results of your project in [Appendix A: Dissemination History and Plan](#):

- Describe any offices or organizations expected to take part in your dissemination plans.
- Describe resources to support dissemination through electronic means such as a website, social media account(s), electronic newsletter, listserv, or other electronic dissemination approach.

Part IV: Preparing Your Application

A. Overview

The application contents—individual forms and their PDF attachments—represent the body of an application to IES. IES encourages you to refer to the IES Application Submission Guide (<https://ies.ed.gov/funding/pdf/submissionguide.pdf>) for additional information about preparing to submit your application and ensuring your application is sufficient.

B. General Formatting

To ensure that reviewers can read your applications 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. The type size used must conform to all three requirements. 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 peer review.

As a practical matter, if you use a 12-point Times New Roman font without compressing, kerning, condensing, or other alterations, the application will typically meet these requirements.

5. Graphs, Diagrams, and Tables

IES encourages you to use black and white in graphs, diagrams, tables, and charts. If color is used, you should ensure that the material reproduces well when 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 III: Specific Requirements and Recommendations](#)) is followed by several appendices. Some of these appendices are required, and some are optional. When you submit your application through Grants.gov, you will create a single PDF file that *contains the project narrative and all appendices* and include it as an attachment in the application package. Include appendices in alphabetical order and simply skip an appendix if it is not required for your application or if you choose not to include one of the optional appendices. See the IES Application Submission Guide (<https://ies.ed.gov/funding/pdf/submissionguide.pdf>) 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 will be reviewed 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**, 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 3rd page of the appendix before it is forwarded for peer review.

(a) Dissemination History

The dissemination history is intended to demonstrate that the research you have conducted in the past has been disseminated in a way that is consistent with the IES mission to promote scientifically valid research findings that can provide the basis for improving academic instruction and lifelong learning. Applicants who have never had an IES grant should focus on dissemination history of related, past projects. Reviewers will use this information to determine whether the project personnel have the experience 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 presentations of research findings, particularly those that were intended for practitioners, policymakers, parents, students, and/or the general public

(b) Dissemination Plan

Describe your plan to disseminate the findings from the proposed project. Dissemination plans should be tailored to the audiences that will benefit from the findings 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).

Discuss the different ways in which you intend to reach these audiences through the publications, presentations, and products you expect to produce.

IES-funded researchers are expected to publish and present in venues designed for applied education researchers in a manner and style useful and usable to this audience, as applicable.

Examples:

- Give presentations and workshops at meetings of professional associations of applied education researchers.
- Post software and relevant user's guides to a readily accessible website.
- Publish in journals for applied education research.
- Engage in 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 create products for use in research and practice as a result of their project (such as new or improved methods, guidelines or other methodological resources, software, user's manuals, and professional development programs), and guidance for research design 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.

IES-funded researchers are expected to publish their findings in scientific, peer-reviewed journals and present them at conferences attended by other researchers.

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 peer review. 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 or justification to be considered a new application is the only information that may be included in Appendix B; all other material will be removed prior to review of the application.

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

Appendix C **must** meet the general formatting guidelines and be **no more than 15 pages**. If Appendix C exceeds this page limit, IES will remove any pages after the 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 like a timeline for your research project, a diagram of the management structure of your project, or examples of measures used to collect data for your project, such as individual test items, tests, surveys, and observation and interview protocols. These are the only materials that may be included in Appendix C; all other material will be removed prior to review of the application.

4. Appendix D: Examples of 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 peer review. 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 and user manuals). These are the only materials that may be included in Appendix D; all other material will be removed prior to review of the application.

5. Appendix E: Letters of Agreement (Optional)

There is **no recommended page length** for Appendix E. Use this appendix to provide copies of Letters of Agreement from schools and districts who will participate in or provide data for the proposed research or serve as consultants. Ensure that the letters reproduce well so that reviewers can easily read them. Do not reduce the size of the letters. See the IES Application Submission Guide (<https://ies.ed.gov/funding/pdf/submissionguide.pdf>) for guidance regarding the size of file attachments.

Letters of Agreement should include enough information to make it clear that the author of the letter understands the nature of the commitment of time, space, and resources to the research project that will be required if the application is funded. A common reason for projects to fail is loss of participating schools and districts. Letters of Agreement regarding the provision of data should make it clear that the author of the letter will provide the data described in the application for use in the proposed research

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

D. Other Narrative Content

In addition to the project narrative (see [Part III: Specific 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 to include as file attachments in your application. See the IES Application Submission Guide (<https://ies.ed.gov/funding/pdf/submissionguide.pdf>) 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. We recommend that the project summary/abstract be one-page long and include the following information:

- **Title:** A distinct, descriptive title of the project.
- **Topic** to which you are applying (either Regular or Early Career). This information should match the topic code entered for Item 4b: Agency Routing Number on the SF 424 Application for Federal Assistance form (see the IES Application Submission Guide (<https://ies.ed.gov/funding/pdf/submissionguide.pdf>)).
- **Purpose:** A brief description of the purpose of the project and its significance for improving education statistics and research methodology.
- **Methodological Development:** A brief description of the product(s) the research team will develop, evaluate, or validate.
- **Research Design and Methods:** Briefly describe the major features of the design and methodology to be used (e.g., Monte Carlo simulation, secondary data analysis, iterative design process).
- **User Testing:** If applicable, a brief description of how applied education researchers will try out your product to determine if they can use it and find it helpful.
- **Key Products:** A brief description of the new software, analytic approaches, or methodological guidance the research team will develop.
- **Use in Applied Education Research:** A brief description of how your product is to be used in applied education research and is expected to improve it.

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

2. Bibliography and References Cited

You **must** submit the bibliography and references cited as a separate PDF attachment in the application package. There is **no recommended page length** for the bibliography and references cited. You should include complete citations, including the names of all authors (in the same sequence in which they appear in the publication), titles of relevant elements such as the article/journal and chapter/book, page numbers, and year of publication for literature cited in the project narrative.

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/overview.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 Institutional Review Board 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.

4. Biographical Sketches for Key Personnel

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

Biographical sketches are submitted as separate PDF attachments in the application package. IES strongly encourages applicants to use SciENcv (<http://www.ncbi.nlm.nih.gov/sciencv/>) where you will find an IES biosketch form. 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.

Be sure to include your ORCID number (Open Researcher and Contributor; <https://orcid.org/>) if you have one and consider establishing one if you have yet to do so.

The biographical sketch for the principal investigator, each co-principal investigator, and other key personnel should show how key personnel possess training and expertise commensurate with their specified duties on the proposed project, for example by describing relevant publications, grants, and research experience.

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.

Part V: Competition Regulations and Review Criteria

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 Descriptions](#).

3. Special Considerations for Budget Expenses

(a) Indirect Cost Rate

When calculating your expenses for research conducted in field settings, you should apply your institution's federally negotiated off-campus indirect cost rate. **Please note that the** Indirect Cost Group (ICG) in the U.S. Department of Education's Office of the Chief Financial Officer will not be available for assistance during the application preparation process. If your institution does not have an indirect cost rate and you receive a grant from IES, the ICG group can help with obtaining an indirect cost rate once the grant is awarded.

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 (http://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, 86 (part 86 applies only to institutions of higher education), 97, 98, and 99. In addition 34 CFR part 75 is applicable, except for the provisions in 34 CFR 75.100, 75.101(b), 75.102, 75.103, 75.105, 75.109(a), 75.200, 75.201, 75.209, 75.210, 75.211, 75.217, 75.219, 75.220, 75.221, 75.222, and 75.230.

B. Additional Requirements

1. Pre-Award

(a) Clarification and Budget Questions

IES uses the 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 and Education Settings

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

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

(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 datasets

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

(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 additional information that may be requested from the applicant, including compliance to the IES Public Access Policy (<https://ies.ed.gov/funding/researchaccess.asp>). The policy applies to all grants funded from 2012 to present.

2. Post Award

(a) Compliance with IES Policy on Public Access to Results

All principal investigators are required to submit the electronic version of their final manuscripts upon acceptance for publication in a peer-reviewed scholarly publication 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. Principal investigators must submit any peer-reviewed scholarly publications to ERIC.

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

C. Overview of Application and Scientific Peer Review Process

1. Submitting Your Letter of Intent

Letters of Intent (LOIs) are submitted online at <https://iesreview.ed.gov/LOI/LOISubmit>. **Select the Letter of Intent form for the topic 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. The LOI form includes the following information.

Elements for the Letter of Intent:

- Descriptive title
- Topic that you will address
- Brief description of the proposed project
- Name, institutional affiliation, address, telephone number and email address of the PI and any Co-PIs
- 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 the previous IES 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/pdf/submissionguide.pdf>) that the FY 2021 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 2021 Request for Applications.

If you submitted a somewhat similar application in the past and did not receive an award but are submitting the current application as a new application, you should indicate on the application form (Item 8) that your FY 2021 application is a new application. In Appendix B, you should provide a rationale explaining why your FY 2021 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 2021 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 2021 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 July 30, 2020 through the internet using the software provided on the Grants.gov website (<https://www.grants.gov/>). You must follow the application procedures and submission requirements described in the IES Application Submission Guide (<https://ies.ed.gov/funding/pdf/submissionguide.pdf>) 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) (<https://iesreview.ed.gov/>) system. PRIMO allows applicants to track the progress of their application via the Applicant Notification System (ANS).

Approximately 1 to 2 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 4 to 6 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/pdf/submissionguide.pdf>) 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 a panel of experts (<https://ies.ed.gov/director/sro/reviewers.asp>) who have substantive and methodological expertise appropriate to the program of research and Request for Applications. 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).

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

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. IES expects reviewers to assess the scientific rigor as well as the theoretical and practical significance of the research proposed in order to judge the likelihood that it will make a meaningful contribution to the larger IES mission. Information about each of these criteria is described in [Part III: Specific Requirements and Recommendations](#) and in the section describing the relevant research grant topic within [Part II: Topic Descriptions](#).

(a) Significance

Does the applicant address recommendations described in the Significance section for the topic under which the applicant is submitting the application?

(b) Research Plan

Does the applicant address recommendations described in the Research Plan section for the topic under which the applicant is submitting the application?

(c) Personnel

Does the applicant address recommendations described in the Personnel section for the topic under which the applicant is submitting the application? Do the principal investigator, project director, and other key personnel possess appropriate training and experience and will they commit sufficient time to competently implement the proposed research?

(d) Resources

Does the applicant address recommendations described in the Resources section for the topic under which the applicant is submitting the application? Does the applicant have the facilities, equipment, supplies, and other resources required to support the proposed activities? Do the commitments of each partner show support for the implementation and success of the project?

(e) Dissemination

Does the applicant address recommendations described in Appendix A: Dissemination History and Plan? Does the applicant present a dissemination plan that is tailored to the purpose of the project and designed to reach a wide range of audiences? Does the applicant describe a dissemination history that demonstrates past success in sharing results of education research widely and appropriately?

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 research described in this request for applications
- Ability to carry out the proposed research within the maximum award and duration requirements
- Availability of funds

Part VI: Compliance and Responsiveness Checklist

Only compliant and responsive applications will be peer reviewed. 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/pdf/submissionguide.pdf>) 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 (Part IV.B)?	
	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 peer review.	
	Have you included Appendix A: Dissemination History and Plan?	
	If you are resubmitting an application, have you included Appendix B: Response to Reviewers?	
Responsiveness		
	Have you met all the General Requirements for an application?	
	<ul style="list-style-type: none"> 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		
	Early Career Methods Grant	Regular Methods Grant
Significance	You must describe <ul style="list-style-type: none"> the specific product(s) you will produce how it will solve practical problems encountered by applied education researchers how it will be easy to obtain and use by applied education researchers 	You must describe <ul style="list-style-type: none"> the specific product(s) you will produce how it will solve practical problems encountered by applied education researchers how it will be easy to obtain and use by applied education researchers
Research Plan	You must describe your research design, methods and plan for <ul style="list-style-type: none"> developing the product(s) determining that it works as intended determining that applied education researchers can use it 	You must describe your research design, methods and plan for <ul style="list-style-type: none"> developing the product(s) determining that it works as intended determining that applied education researchers can use it
Personnel	You must describe your project team For Early Career applications, you must also <ul style="list-style-type: none"> provide the date of the PI's doctorate (to be eligible, it must have been received on or after April 1, 2016) identify the PI's dissertation chair identify the required research mentor or advisory panel who will collaborate on the proposed research. A mentor or advisor cannot have served as the PI's dissertation chair 	You must describe your project team
Resources	You must describe your resources to conduct the project	You must describe your resources to conduct the project

Part VII: Program Codes

Applications to the **Statistical and Research Methodology in Education program (CFDA 84.305D)** are submitted under a single topic. You must enter the appropriate topic and project type code in Item 4b of the SF 424 Application for Federal Assistance form (see the IES Application Submission Guide, <https://ies.ed.gov/funding/pdf/submissionguide.pdf>, for more information about this form). For example, an application to the Statistical and Research Methodology in Education program (CFDA 84.305D) under the Early Career Grants program topic should have the code “NCER-Early Career” entered in the field for Item 4b.

Topics	Codes
Regular Grants	NCER-Regular
Early Career Grants	NCER-Early Career