REQUEST FOR APPLICATIONS

Statistical and Research Methodology in Education

CFDA Number: 84.305D

Milestone	Date	Website
Letter of Intent Due	June 21, 2018	https://iesreview.ed.gov/
Application Package Available	June 21, 2018	http://www.grants.gov/
Application Due	**No later than 4:30:00 pm Eastern Time on August 23, 2018**	http://www.grants.gov/
Applicants Notified	By July 1, 2019	https://iesreview.ed.gov/
Possible Start Dates	July 1, 2019 to September 1, 2019	

IES 2018 **U.S. Department of Education**

Table of Contents

PART I: OVERVIEW

A. INTRODUCTION

In this announcement, the Institute of Education Sciences (Institute) requests applications for research projects that will contribute to its Statistical and Research Methodology in Education program (CFDA 84.305D). The goal of this research program is to provide a wide range of methodological and statistical products (the Institute defines "products" to include new or improved methods, guidelines or other methodological resources, and software) that will better enable applied education scientists to conduct rigorous education research.

For the FY 2019 competition, the Institute will consider only applications that are responsive and compliant to the requirements described in this Request for Applications (RFA) *and* submitted electronically via Grants.gov (http://www.grants.gov) on time. Separate funding announcements are available on the Institute's website that pertain to the other research and training grant programs funded through the Institute's National Center for Education Research (http://ncer.ed.gov) and to the discretionary grant competitions funded through the Institute's National Center for Special Education Research (http://ncser.ed.gov). An overview of the Institute's research grant programs is available at http://ies.ed.gov/funding/overview.asp.

The mission of the Institute, broadly speaking, is to provide rigorous evidence on which to ground education practice and policy and to encourage its use. Critical to achieving this mission is providing education scientists with the tools they need to conduct rigorous applied research. To that end, the Institute invites applications to develop practical statistical and methodological products that would enhance the ability of researchers to conduct high-quality, scientific education research. For information on the types of research that the Institute funds, please see the Institute's research funding announcements at http://ies.ed.gov/funding. 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.

The Institute encourages you to contact the Institute's Program Officers as you develop your application. Program Officers can provide guidance on substantive aspects of your application and answer any questions prior to submitting an application. The Program Officer for this competition is:

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

The Institute asks potential applicants to submit a Letter of Intent (see Part III.C.1) prior to the application submission deadline. Letters of Intent are optional but strongly encouraged by the Institute. If you submit a Letter of Intent, a Program Officer will contact you regarding your proposed research. Institute staff also uses the information in the Letters of Intent 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. If you do not submit a Letter of Intent, you are still eligible to submit an application.

In addition, the Institute encourages you to sign up for the Institute's Funding Opportunities Webinars for advice on choosing the correct research competition, grant writing, and submitting your application. For more information regarding webinar topics, dates, and the registration process, see http://ies.ed.gov/funding/webinars/index.asp.

B. STATISTICAL AND RESEARCH METHODS

The Institute is interested in the development of practical statistical and methodological products (e.g., new or improved methods, guidelines or other methodological resources, software) that can be used by most education researchers (rather than only by statisticians and researchers with highly sophisticated statistical skills) to improve the designs of their studies, analyses of their data, and interpretations of their findings. To this end, the Institute 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 (e.g., through workshops and well-established websites rather than solely through methodological journals).

The Institute recognizes that there is a wide range of methodological needs in applied education research and depends upon the field to identify those needs and to propose how they might be filled. At the same time, from the research it supports, the Institute has identified issues or challenges that would benefit from more attention from methodologists. As a result, for FY 2019, the Institute is especially interested in seeing applications that address the following:

- Variability in Effects: Evaluations of program and policy interventions estimate average effects but often find that effects vary substantially around the average, and the sources of that variability are not well understood (Journal of Research on Education Effectiveness, 2017; Weiss, Bloom, and Brock, 2014). Research is needed to improve or expand methods to identify factors (e.g., neighborhood context, school or organizational characteristics, student or family characteristics) that may account for such variation. This work might also include the further development and refinement of methods for the systematic collection and analysis of data on moderating and mediating variables. Ultimately, the Institute seeks to advise researchers on what moderators and mediators 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 direct applicability of these estimates to the 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 (Kern et al., 2016; Stuart et al., 2011; Tipton, 2013; Tipton et al., 2014), but further research is needed.

- Single-case Designs: Single-case experimental designs are critically important for research with low-incidence disability populations. A paper commissioned by the Institute (Shadish, Hedges, Odom, and Horner, 2015) provides a thorough theoretical treatment and applied demonstration of effect sizes in single-case research. However, further research is needed on effect sizes, improving or extending the statistical analyses of different single-case designs (e.g., alternating treatments, multiple baselines) and the use of different approaches (e.g., hierarchical linear modeling, nonparametric tests) while addressing analytical challenges such as lack of independence between observations, low numbers of participants, and phase shifts.

- Analyzing Big Data: The increasing availability of observational datasets (large both in number of participants and variables per participant) collected by multiple sources creates new opportunities to address applied education research questions once the appropriate techniques are developed to handle and analyze the data. Broadly, this will involve the application of data science to education research. Specific examples of such efforts include determining the potential of classification and regression trees to yield better predictions for dichotomous outcomes, and whether Bayesian structural time series or elastic net regression could help to yield a less cumbersome predictive model.

- Quasi-experimental Designs (QEDs): QEDs (e.g., matching and regression discontinuity designs) are typically employed when random assignment is not feasible to evaluate the impact of an intervention. Work is needed on improving these methods, including increasing their ability to reduce selection bias in estimates of the treatment effect and identifying the conditions that are necessary for doing so.[1] Relatedly, as matching techniques become more sophisticated and greater data availability increases matching possibilities, applied researchers would benefit from advice on how best to match to obtain the most appropriate comparison group, and methods/software to carry out matching.

- Interpreting Impacts: Findings from evaluation studies are often presented in ways that lack clear practical implications (e.g., Cohen's 1988 guidelines on effect sizes). Education researchers and consumers of education research need tools to help them interpret the findings in ways that lead to sound decisions. For example, policymakers and practitioners might find it more helpful if an intervention's effects on student achievement were benchmarked against normal student academic growth, student achievement gaps, impacts of other interventions, or through a comparison of the intervention's costs and benefits (Hill, et al., 2008; Lipsey, et al., 2012).

- An increasing number of students are opting out of state and district standardized tests used to assess student performance and measure progress toward policy goals such as increasing proficiency in reading, math, and other subjects. Applied education researchers would benefit from methodological assistance on how to address this source of missing data, especially if it is non-random.

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

C. COMMON APPLICANT QUESTIONS

- *May I submit an application if I did not submit a Letter of Intent?* Yes, but the Institute strongly encourages you to submit one. If you miss the deadline for submitting a Letter of Intent, then contact the appropriate Program Officer for the topic that seems to best fit your research. Please see Part III.C.1 Submitting a Letter of Intent for more information.

- *Is there a limit on the number of times I may revise and resubmit an application?* No. Currently, there is no limit on resubmissions. Please see Part III.C.2. Resubmissions and Multiple Submissions for important information about requirements for resubmissions.

- *May I submit the same application to more than one of the Institute's grant programs?* No.

- *May I submit multiple applications?* Yes. You may submit multiple applications if they are substantively different than one another. Multiple applications may be submitted within the same topic, across different topics, or across the Institute's grant programs.

- *May I apply if I work at a for-profit developer or distributor of an intervention or assessment?* Yes. You may apply if you or your collaborators develop, distribute, or otherwise market products

[1] The Institute has restricted-use data files from random assignment studies that could be used to conduct this type of study. Information on obtaining the Institute's restricted-use data licenses is available at http://nces.ed.gov/pubsearch/licenses.asp.

or services (for-profit or non-profit) that can be used as interventions, components of interventions, or assessments in the proposed research activities. The involvement of the developer or distributor, however, must not jeopardize the objectivity of the research. In cases where the developer or distributor is part of the proposed research team, you should discuss how you will ensure the objectivity of the research in the Project Narrative.

- *May I apply if I intend to copyright products (e.g., curriculum) developed using grant funds?* Yes. Products derived from Institute-funded grants may be copyrighted and used by the grantee for proprietary purposes, but the Department reserves a royalty-free, non-exclusive, and irrevocable right to reproduce, publish, or otherwise use such products for Federal purposes and to authorize others to do so [2 C.F.R. § 200.315(b) (2014)].

- *May I apply to do research on non-U.S. topics or using non-U.S. data?* Yes, but research supported by the Institute must be relevant to education in the United States and you should justify the relevance of such research in your application.

- *May I apply if I am not located in the United States or if I want to collaborate with researchers located outside of the United States?* Yes, you may submit an application if your institution is not located in the territorial United States. You may also propose working with subawardees who are not located in the territorial United States. In both cases, your proposed work must be relevant to education in the United States. Also, institutions not located in the territorial United States (both primary grantees and subawardees) cannot charge indirect costs.

D. PRE-AWARD REQUIREMENTS

Applicants considered for funding following scientific peer review are required to provide further information about the proposed research activities before a grant award is made For example, you will be required to provide updated Letters of Agreement showing access to the authentic education settings where your work is to take place or to the secondary data sets you have proposed to analyze. You may be asked for additional information about your Research Plan and Dissemination Plan (required for all applications). If significant revisions to the project arise from these information requests they will have to be addressed under the original budget.

E. CHANGES IN THE FY 2019 REQUEST FOR APPLICATIONS

If you are familiar with the Request for Applications (RFA) for Statistical and Research Methodology in Education from previous years, please note the following changes.

- The format has been revised along the lines of the Institute's other RFAs. The four sections of the Project Narrative now list Requirements (the minimum criteria required for an application to be sent forward for scientific peer review) and Recommendations for a Strong Application (criteria that make for a strong application and are used by the peer reviewers).
- The Institute **has added a requirement** to include a Dissemination Plan in Appendix A in your application. **If your application does not include the required Dissemination Plan in Appendix A, it will be deemed noncompliant and will not be forwarded for scientific peer review**. Appendix A: Dissemination Plan will be considered by the scientific peer reviewers as part of their review of the Significance section of your Research Narrative. In addition, they are to consider the resources you have available for dissemination as part of their review of the Resources section of the Project Narrative (see Part IV.C PDF Attachments for more information).
- Because the new, required Dissemination Plan goes in Appendix A, the alpha identifiers for the other appendices have been changed. The alpha identifiers and descriptive titles for all

appendices, both required and optional, are listed below and described fully in Part IV.C PDF Attachments.

- Appendix A: Dissemination Plan (Required)
- Appendix B: Response to Reviewers (Required for Resubmissions Only)
- Appendix C: Supplemental Charts, Tables, and Figures (Optional)
- Appendix D: Examples of Intervention or Assessment Materials (Optional)
- Appendix E: Letters of Agreement (Optional)

- The maximum award for the Early Career Grants topic has been increased to $225,000.

PART II: GENERAL AND SPECIFIC REQUIREMENTS

A. READING THE REQUEST FOR APPLICATIONS

Both **Principal Investigators and Authorized Organization Representatives** should read the Request for Applications to learn how to prepare an application that meets the following criteria:

1. Maximum Budget and Duration (described below and under Part II).
2. Criteria required for an application to be sent forward for peer review (Requirements).
3. Criteria that make for a strong (competitive) application and are used by the peer reviewers (Recommendations for a Strong Application).

1. Maximum Budget and Duration

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

2. Requirements

- **RESPONSIVENESS**
  - ✓ Meets **Applicant requirements** (see Part II.B).
  - ✓ Meets **Topic** requirements (see Part II.D)
  - ✓ Meets **Project Narrative requirements** (see Part II.E).
- **COMPLIANCE**
  - ✓ Includes all **required content** (see Part IV.C).
  - ✓ Include all **required appendices** (see Part IV.C)
    - ➢ Appendix A: Dissemination Plan (all applications)
    - ➢ Appendix B: Response to Reviewers (resubmissions)
- **SUBMISSION**
  - ✓ Submitted electronically via Grants.gov no later than **4:30:00 p.m. Eastern Time on August 23, 2018**.
  - ✓ Uses the **correct application package** downloaded from Grants.gov (see Part IV.A).
  - ✓ Includes **PDF files** that are **named and saved appropriately** and that are **attached to the proper forms** in the application package (see Parts IV.C and V.E.4).

3. Recommendations for a Strong Application

Under Part II.E Specific Requirements and Recommendations, the Institute provides recommendations to improve the quality of your application (see Part II.E). The scientific peer reviewers are asked to consider these recommendations in their evaluation of your application. The Institute strongly encourages you to incorporate the recommendations into your Project Narrative and relevant appendices.

B. APPLICANT REQUIREMENTS

1. Eligible Applicants

Applicants that have the ability and capacity to conduct scientific research are eligible to apply. These include, but are not limited to, non-profit and for-profit organizations and public and private agencies and institutions, such as colleges and universities, and research firms.

2. The Principal Investigator and Authorized Organization Representative

The Principal Investigator

The Principal Investigator (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.[2] This person should be identified on the application as the Project Director/Principal Investigator. All other PIs should be listed as co-Principal Investigators (co-PI). For FY 2019, a PI under the Early Career topic must have received his/her doctorate on or after April 1, 2014.

The PI will attend one meeting each year (for up to 2 days) in Washington, DC with other Institute grantees and Institute staff. The project's budget should include this meeting. Should the PI not be able to attend the meeting, she/he can designate another person who is key personnel on the research team to attend.

The Authorized Organization Representative

The Authorized Organization Representative (AOR) for the applicant institution is the official who has the authority to legally commit the applicant to (1) accept federal funding and (2) execute the proposed project. When your application is submitted through Grants.gov, the AOR automatically signs the cover sheet of the application, and in doing so, assures compliance with U.S. Department of Education policy on public access to scientific publications and data as well as other policies and regulations governing research awards (see Part III.B. Additional Award Requirements).

C. DISSEMINATION

The Institute is committed to making the results of Institute-funded research available to a wide range of audiences. The Institute has a public access policy (see IES Policy Regarding Public Access to Research) that requires all grantees to submit their peer-reviewed scholarly publications to the Education Resources Information Center (ERIC, http://eric.ed.gov).

Statistical and Research Methods projects are intended to primarily support the work of applied education researchers. They may also develop products that other methods researchers further develop or apply in their own methods development. To achieve these purposes, applicants are expected to disseminate the findings from their projects so that others may apply and build upon them. The Institute **requires all applicants** to present a plan to disseminate project findings in Appendix A: Dissemination Plan of the application. The scientific peer reviewers will consider the quality of the Dissemination Plan presented in Appendix A as part of their review of the Significance section of your Project Narrative. **Applications that do not contain a Dissemination Plan in Appendix A will be deemed noncompliant and will not be accepted for review**.

In your dissemination plan, you should:

[2] The Institute uses the uniform format for reporting performance progress on Federally-funded research projects, the Research Performance Progress Report (RPPR http://www.nsf.gov/bfa/dias/policy/rppr/) for these reports.

- Identify the audiences that you expect will be most likely to benefit from your research (e.g., education researchers, other methods researchers who might further develop your product).
- Discuss the different ways in which you intend to reach these audiences through the major publications, presentations (in live and virtual venues), and products you expect to produce.

See Part IV.C.3 (Appendix A: Dissemination Plan) for more information about the **required Dissemination Plan** to include in your application.

D. TOPICS

For the FY 2019 competition, the Institute is competing two topics: (1) Regular Grants and (2) Early Career Grants for researchers who completed their doctorates within the last five years. Both topics are to address the same types of methodological issues and meet the same requirements (except those regarding Personnel) discussed throughout this Request for Applications. They 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 Statistical and Research Methodology in Education project under the Regular Grants topic 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 Statistical and Research Methodology in Education project under the Regular Grants topic is $900,000 (total cost = direct + indirect costs).**

2. Early Career Grants

The Institute established the Early Career Grants topic for applications from early career researchers to encourage a new generation of education researchers to address methodological issues and challenges and to develop products that will benefit the education sciences. **Applicants to the Early Career Grants topic must have received their doctorate on or after April 1, 2014.** Applicants eligible for the Early Career Grants topic 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.

The Early Career topic is 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 a Statistical and Research Methodology project under the Early Career Grants topic 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 a Statistical and Research Methodology project under the Early Career Grants topic is $225,000 (total cost = direct + indirect costs).**

E. SPECIFIC REQUIREMENTS AND RECOMMENDATIONS

The Institute intends to fund research projects that aim to expand and improve the methodological and statistical tools that are available for applied education researchers conducting research of the type that the Institute funds through its research grant competitions, statistics contracts, and evaluation contracts.

To this end, the Institute requests projects that will generate practical statistical and methodological products (e.g., new or improved methods, guidelines or other methodological resources, software) of immediate use to applied education researchers by the end of the project.

1. The Project Narrative

The Project Narrative (recommended length: no more than 25 pages) for a Statistical and Research Methodology in Education project application must include four sections: Significance, Research Plan, Personnel, and Resources.

- Use the Significance section to explain why it is important to develop the statistical or research method and who will benefit from its development.
- Use the Research Plan section to detail how you will develop the method.
- Use the Personnel section to describe the relevant expertise of your research team and their responsibilities within and time commitments to the project.
- Use the Resources section to describe your access to institutional resources, any needed education delivery settings (e.g., schools), and relevant data sources; to describe your access to applied education researchers who can check the usability of the method; and to describe your resources to disseminate your results to a wide audience.

For each section of the Project Narrative, both Requirements and Recommendations are provided below.

- The Requirements are the minimum necessary for an application to be sent forward for scientific peer review. **Your application must meet all Project Narrative Requirements in order for your application to be considered responsive and sent forward for scientific peer review.**
- In order to improve the quality of your application, the Institute offers Recommendations for a Strong Application following each set of Project Narrative Requirements. The scientific peer reviewers are asked to consider the recommendations in their evaluation of your application. **The Institute strongly encourages you to incorporate the Recommendations into your Project Narrative.**

a. Significance of the Project – the purpose of this section is to describe your research aims while providing a compelling rationale for the development of a new method or the further development of an existing one.

Requirements: In order to be responsive and sent forward for peer review, applications **must** describe:

(i) The specific product the project is intended to produce.

(ii) How the product will be determined easy to use by applied education researchers and disseminated to them.

Recommendations for a Strong Application: In order to address the above requirements, the Institute recommends that you include the following in your Significance section to provide a compelling rationale for the proposed research.

- 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 the Institute 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 of your project (e.g., methods, guidelines or other methodological resources, software) and how it is to be implemented. Contrast this with current typical practice and its identified shortcomings. A detailed description will clearly show your product 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 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 products of your research 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, describe how you will make the products of your proposed research 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.

b. Research Plan – the purpose of this section is to describe how you will develop and test the method as well as check its usability by applied education researchers.

Requirements: In order to be responsive and sent forward for peer review, applications **must** describe:

(i) How you will develop the product.

(ii) How you will test that the product works as intended.

(iii) How you will test that applied education researchers can use the product.

(iv) The data you will use.

(v) The data analysis plan.

Recommendations for a Strong Application: In order to address the above requirements, the Institute recommends that you include the following in your Research Plan section to provide a compelling rationale for the proposed research.

- Explain the major activities and sequence of steps you will follow to develop the product. If you are building off 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 sufficient documentation in Appendix E (e.g., 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 data set. The data set should be described in sufficient detail to allow reviewers to judge whether the proposed analyses can be conducted with the data set. If multiple data sets will be linked to conduct analyses, you should provide sufficient detail for reviewers to judge the feasibility of the linking plan. You should also provide sufficient documentation in Appendix E (e.g., 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 Method 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 method, you should identify the setting where testing will be done and the researchers who will carry out the test (e.g., 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 method.

c. Personnel – the purpose of this section is to describe the relevant expertise of your research team, the responsibilities of each team member, and each team member’s time commitments.

Requirements: In order to be responsive and sent forward for peer review, applications **must** describe:

(i) All key personnel on the project including the Principal Investigator and any Co-Principal Investigators or Co-Investigators.

(ii) For Early Career applications, you **must** also describe three additional details:

- First, provide the date of the PI’s doctorate (to be eligible, it must have been received on or after April 1, 2014).
- Second, identify the PI’s dissertation chair.
- Third, identify the required research mentor or advisory panel who will collaborate on the proposed research. A mentor or adviser cannot have served as the PI’s dissertation chair.

Recommendations for a Strong Application: In order to address the above requirements, the Institute recommends that you include the following in your Personnel section to demonstrate that your team possesses the appropriate training and experience and will commit sufficient time to implement the proposed research competently.

- Identify and briefly describe the following for all key personnel (i.e., Principal Investigator, Co-Principal Investigators, Co-Investigators, mentors and advisers) on the project team:
    - Qualifications to carry out the proposed work.
    - Roles and responsibilities within the project.
    - Percent of time and calendar months per year (both academic and summer) to be devoted to the project.
    - Past success at disseminating research findings and products in peer-reviewed scientific journals and directly to applied education researchers.
- Describe how your research team collectively demonstrates expertise in the methodology required, experience with the datasets proposed for use, adapting methods for use by applied education researchers, and working with the holders of data as needed.
- For applications to the Early Career Grants category, 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, the Institute expects that principal investigators will have first authorship on primary research publications resulting from the grant.
- If you have previously received a Statistical and Research Methodology in Education award, you should indicate the results of your past work, its dissemination, and its use by other researchers and/or policymakers and practitioners. 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 Statistical and Research Methodology in Education project.

d. 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 its products.

Requirements: In order to be responsive and sent forward for peer review, applications **must** describe:

(i) The resources to conduct the project.

Recommendations for a Strong Application: In order to address the above requirements, the Institute recommends that you include the following in your Resources section to demonstrate that your team has a plan for acquiring or accessing the facilities, equipment, supplies, and other resources required to support the proposed work, the commitments of each partner for the implementation and success of the project, and the capacity to disseminate the results of the research.

- Describe your institutional capacity and experience to manage a grant of this type.
- 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 data sets 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 data sets for the purposes of your study and, if applicable, the availability and cooperation of the schools to take part in the project. These letters should convey that the organizations understand what their participation in the study will involve (e.g., provision of specific data, annual student and teacher surveys, and student assessments).

- Describe your access to education researchers to user-test the method (e.g., identify applied education researchers willing to try the method in their work or courses in which students will use and critique the method).
- Describe your resources to carry out your plans to disseminate the results from your project as described in the required Dissemination Plan in Appendix A.
- Note any specific team members, offices or organizations expected to take part in your dissemination plans and their specific roles.

PART III: COMPETITION REGULATIONS AND REVIEW CRITERIA

A. FUNDING MECHANISMS AND RESTRICTIONS

1. Mechanism of Support
The Institute intends to award grants pursuant to this Request for Applications.

2. Funding Available
All awards pursuant to this Request for Applications are contingent upon the availability of funds and the receipt of meritorious applications. The Institute 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.

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

3. Special Considerations for Budget Expenses

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. Questions about indirect cost rates should be directed to the U.S. Department of Education's Indirect Cost Group http://www2.ed.gov/about/offices/list/ocfo/fipao/icgindex.html.

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

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 OMB's Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (Uniform Guidance), 2 CFR, §200.432 Conferences.

In particular, 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 (e.g., working lunches); however, the Institute 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 AWARD REQUIREMENTS

1. **Public Availability of Results**

Recipients of awards are expected to publish or otherwise make publicly available the results of the work supported through this program. Institute-funded investigators must submit final manuscripts resulting from research supported in whole or in part by the Institute to the Educational Resources Information Center (ERIC, http://eric.ed.gov) upon acceptance for publication. An author's final manuscript is defined as the final version accepted for journal publication and includes all graphics and supplemental materials that are associated with the article. The Institute will make the manuscript available to the public through ERIC no later than 12 months after the official date of publication. Investigators and their institutions are responsible for ensuring that any publishing or copyright agreements concerning submitted articles fully comply with this requirement.

2. **Special Conditions on Grants**

The Institute 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.

3. **Demonstrating Access to Data and Authentic Education Settings**

The research you propose to do may require that you have (or will obtain) access to secondary data sets 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, **the Institute will require additional supporting evidence prior to the release of funds**. If you cannot provide such documentation, the Institute may not award the grant or may withhold funds.

You will need supporting evidence of partnership or access if you are:

- *Conducting research in or with authentic 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 authentic education settings (e.g., schools), 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 the Institute 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, the Institute will ask you to provide documentation that the settings originally recruited for the application are still willing to partner in the research.

- *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 data sets (e.g., federally-collected data sets, 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 data sets in order to receive the grant. This means that if you do not have permission to use the proposed data sets at the time of application, you must provide documentation to the Institute from the entity controlling the data set(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 data set prior to submitting your application, the Institute will ask you to provide updated documentation indicating that you still have permission to use the data set to conduct the proposed research during the project period.
- *Building on existing studies* - You may propose studies that piggyback onto an ongoing study (i.e., that require access to subjects and data from another study). 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, the Institute strongly advises applicants to establish a written agreement, within 3 months of receipt of an award, among all key collaborators (e.g., Principal and co-Principal Investigators) and their institutions regarding roles, responsibilities, access to data, publication rights, and decision-making procedures.

C. OVERVIEW OF APPLICATION AND SCIENTIFIC PEER REVIEW PROCESS

1. Submitting a Letter of Intent

The Institute strongly encourages potential applicants to submit a Letter of Intent by June 21, 2018. Letters of Intent are optional, non-binding, and not used in the scientific peer review of a subsequent application. However, when you submit a Letter of Intent, one of the Institute's Program Officers will contact you regarding your proposed research to offer assistance. The Institute also uses the Letter of Intent 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. Should you miss the deadline for submitting a Letter of Intent, you still may submit an application. If you miss the Letter of Intent deadline, the Institute asks that you inform the relevant Program Officer of your intention to submit an application.

Letters of Intent are submitted online at (https://iesreview.ed.gov). **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).

- Descriptive title
- Topic (Regular or Early Career)
- Brief description of the proposed project
- 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 the topic)
- Estimated total budget request (attend to the Budget maximums for the topic)

2. Resubmissions and Multiple Submissions

If you intend to revise and resubmit an application that was submitted to one of the Institute's previous competitions but that was not funded, you must indicate on the SF-424 Form of the Application Package (Items 4a and 8) (see Part V.F.1) that the FY 2019 application is a resubmission (Item 8) and include the application number of the previous application (an 11-character alphanumeric identifier beginning "R305" or "R324" 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 (see Part IV.C.4). Revised and resubmitted applications will be reviewed according to this FY 2019 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 2019 application is a new application. In Appendix B (Part IV.C.4), you should provide a rationale explaining why your FY 2019 application should be considered a new application rather than a revision. If you do not provide such an explanation, then the Institute 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 Institute's FY 2019 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 2019 grant competitions (i.e., 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, the Institute 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 4:30:00 p.m. Eastern Time on August 23, 2018 through the Internet using the software provided on the Grants.gov website: http://www.grants.gov/. You must follow the application procedures and submission requirements described in Part IV Preparing Your Application and Part V Submitting Your Application and the instructions in the User Guides provided by Grants.gov (https://grants.gov/help/html/help/GetStarted/Get_Started.htm).

After receiving the applications, Institute staff will review each application for compliance and responsiveness to this Request for Applications. Applications that do not address specific requirements of this request will not be considered further.

Once you formally submit an application, Institute staff will not comment on its status until the award decisions are announced (no later than July 1, 2019), except with respect to issues of compliance and responsiveness. This communication will come through the Applicant Notification System (https://iesreview.ed.gov).

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

4. Scientific Peer Review Process

The Institute 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 Institute's website (http://ies.ed.gov/director/sro/peer_review/application_review.asp) by a panel of scientists 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 Institute's scientific review panels. 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, the Institute calculates an average overall score for each application and prepares a preliminary rank order of applications before the full scientific 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 Institute-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 students. The Institute expects reviewers for all applications to assess the following aspects of an application in order to judge the likelihood that the proposed research will have a substantial impact on the pursuit of that goal. Information pertinent to each of these criteria is also described above in Part II.E. Specific Requirements and Recommendations.

a. Significance

Does the applicant provide a compelling rationale for the significance of the project as defined in the Significance section? Do the proposed products of the project meet the needs of applied education researchers?

b. Research Plan

Does the applicant address the recommendations described in the Research Plan section? Does the applicant provide a clear and complete plan for carrying out the research to address the research questions and goals of the project?

c. Personnel

Does the description of the personnel make it apparent that the Principal Investigator and other key personnel possess appropriate training and experience and will commit sufficient time to competently implement the proposed research?

In addition, for projects under the Early Career Grants topic, does the project include the appropriate advisory personnel?

d. Resources

Does the applicant have the facilities, equipment, supplies, and other resources required to support the proposed activities (i.e., to develop and test the method, determine its usability for applied education research, and disseminate the results to a range of audiences)? Do the commitments of each partner show support for the implementation and success of the project?

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;
- Alignment of project budget and duration with duration and budget maximums specified in the Request for Applications, i.e., the proposed research can be carried out with the proposed budget and project duration after making any necessary adjustments to meet the duration and budget maximums; and
- Availability of funds.

PART IV: PREPARING YOUR APPLICATION

A. GRANT APPLICATION PACKAGE

The application contents – individual forms and their PDF attachments – represent the body of an application to the Institute. All applications for Institute funding must be self-contained. As an example, reviewers are under no obligation to view an Internet website if you include the site address (URL) in the application. In addition, **you may not submit additional materials directly to the Institute after the application package is submitted**.

The Application Package for this competition (84-305D2019) provides all of the forms that you must complete and submit. The application form approved for use in the competition specified in this Request for Applications is the government-wide SF-424 Research and Related (R&R) Form (OMB Number 4040-0001).

1. Date Application Package is Available on Grants.gov

The Application Package will be available on http://www.grants.gov/ by June 21, 2018.

2. How to Download the Correct Application Package

To find the correct downloadable Application Package, you must first search by the CFDA number for this research competition without the alpha suffix. To submit an application to the Statistical and Research Methodology in Education Grants program, you must search on: CFDA 84.305.

The Grants.gov search on CFDA 84.305 will yield more than one Application Package. For the Statistical and Research Methodology in Education Grants program, you must download the Application Package marked:

- Statistical and Research Methodology in Education CFDA 84.305D

You must download the Application Package that is designated for this grant competition. If you use a different Application Package, even if it is for another Institute competition, the application will be submitted to the wrong competition. Applications submitted using the incorrect application package run the risk of not being reviewed according to the requirements and recommendations for the Statistical and Research Methodology in Education competition.

See Part V: Submitting Your Application, for a complete description of the forms that make up the application package and directions for filling out these forms.

B. GENERAL FORMATTING

For a complete application, you must submit the following as individual attachments to the R&R forms that are contained in the application package for this competition in Adobe Portable Document Format (PDF):

- Project Summary/Abstract;
- Project Narrative, and if applicable, Appendix A, Appendix B, Appendix C, Appendix D, and Appendix E (all together as one PDF file);
- Bibliography and References Cited;
- Research on Human Subjects Narrative (i.e., Exempt or Non-Exempt Research Narrative);
- A Biographical Sketch for each senior/key person;
- A Narrative Budget Justification for the total Project budget; and

- Subaward Budget(s) that has (have) been extracted from the R&R Subaward Budget (Fed/Non-Fed) Attachment(s) Form, if applicable.

Information about the formatting requirements for all of these documents except the Subaward budget attachment (see Part V.F.6.) is provided below.

1. Page and Margin Specifications

For all Institute research 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 right or upper right corner for ease of reading.

3. Spacing

We recommend that you use single spacing.

4. Type Size (Font Size)

Small type size makes it difficult for reviewers to read the application. To ensure legibility, we recommend the following:

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

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 recommendations. When converting documents into PDF files, you should check that the resulting type size is consistent with the original document.

5. Graphs, Diagrams, and Tables

We recommend that you 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, should be readily legible.

C. PDF ATTACHMENTS

The information you include in these PDF attachments provides the majority of the information on which reviewers will evaluate the application.

1. Project Summary/Abstract

a. Submission

You must submit the project summary/abstract as a separate PDF attachment at Item 7 of the Other Project Information form (see Part V.F.4: Research & Related Other Project Information).

b. Recommended page length

We recommend that the project summary/abstract be no more than one page.

c. Content

The project summary/abstract should include the following:

- **Title** of the project.

- The **topic** to which you are applying (Early Career, Regular).
- **Purpose**: A brief description of the purpose of the project and its significance for improving education statistics and research methodology.
- **Setting**: A brief description of the location (e.g., state or states) where the research will take place and other important characteristics of the locale (e.g., urban/suburban/rural).
- **Sample**: A brief description of the sample that will be involved in the study (e.g., number of participants, age or grade level, race/ethnicity, SES).
- **Methodological Development**: A brief description of the method to be developed, evaluated, or validated.
- **Control Condition**: If applicable, a brief description of the control or comparison condition used in a simulation or secondary data analysis.
- **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).
- **Key Measures:** A brief description of key measures and outcomes.
- **Data Analytic Strategy**: A brief description of the data analytic strategy that will be used to answer research questions.

Please see https://ies.ed.gov/ncer/projects for examples of the content to be included in your project summary/abstract.

2. Project Narrative

a. Submission

You must submit the Project Narrative as a separate PDF attachment at Item 8 of the Other Project Information form (see Part V.F.4: Research & Related Other Project Information).

b. Recommended page length

We recommend that the Project Narrative be no more than 25 pages. To help reviewers locate information and conduct the highest quality review, write a concise and easy to read narrative, with pages numbered consecutively using the header or footer function to place numbers at the top or bottom right-hand corner.

c. Citing references in text

We recommend that you use the author-date style of citation (e.g., James, 2004), such as that described in the Publication Manual of the American Psychological Association, 6th Ed. (American Psychological Association, 2009).

d. Content

Your project narrative **must** include four sections in order to be compliant with the requirements of this Request for Applications: (1) Significance; (2) Research Plan; (3) Personnel; and (4) Resources. Information to be included in each of these sections is detailed in Part II.E: Specific Requirements and Recommendations. **The information you include in each of these four sections will provide the majority of the information on which reviewers will evaluate the application**.

3. Appendix A: Dissemination Plan (Required)

a) Submission

All applications **must** include Appendix A, after the project narrative as part of the same PDF attachment at Item 8 of the Other Project Information form (see Part V.F.4: Research & Related Other Project Information).

b) Recommended page length

We recommend that Appendix A be no more than two pages.

c) Content

In Appendix A, describe your required plan to disseminate the findings from the proposed project. In your dissemination plan, you should

- Identify the audiences that you expect will be most likely to benefit from your research such as the following:
    - Applied education researchers who may use your research and/or product in their education research.
    - Methods researchers who may develop it further or apply it in their methods development.
- Discuss the different ways in which you intend to reach these audiences through publications, presentations, websites, workshops, demonstrations, presentations, and products you expect to produce.

The Dissemination Plan is the only information that should be included in Appendix A.

4. Appendix B: Response to Reviewers (Required for Resubmissions Only)

a. Submission

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. Include Appendix B after Appendix A (required), which follows the project narrative as part of the same PDF attachment at Item 8 of the Other Project Information form (see Part V.F.4: Research & Related Other Project Information).

b. Recommended page length

We recommend that Appendix B be no more than three pages.

c. Content

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.

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

a. Submission

If you choose to have an Appendix C, you must include it at the end of the project narrative, following Appendix B, (if included) and Appendix A, and submit it as part of the same PDF attachment at Item 8 of the Other Project Information form (see Part V.F.4: Research & Related Other Project Information).

b. Recommended page length

We recommend that Appendix C be no more than 15 pages.

c. Content

You may include figures, charts, tables (e.g., a timeline for your research project, a diagram of the management structure of your project), or measures (e.g., individual items, tests, surveys, observation and interview protocols) used to collect data for your project. These are the only materials that should be included in Appendix C.

6. Appendix D: Examples of Intervention or Assessment Materials (Optional)

a. Submission

If you choose to have an Appendix D, you must include it following Appendix C (if included; if no Appendix C is included, then Appendix D should follow Appendix B, if included, and Appendix A, required, which follow the project narrative), and submit it as part of the same PDF attachment at Item 8 of the Other Project Information form (see Part V.F.4: Research & Related Other Project Information).

b. Recommended page length

We recommend that Appendix D be no more than 10 pages.

c. Content

In Appendix D, if you are proposing to explore, develop, evaluate, or validate an intervention or assessment you may include examples of curriculum materials, computer screen shots, assessment items, or other materials used in the intervention or assessment to be explored, developed, evaluated, or validated. These are the only materials that should be included in Appendix D.

7. Appendix E: Letters of Agreement (Optional)

a. Submission

If you choose to have an Appendix E, you must include it following the other Appendices included at the end of the project narrative and submit it as part of the same PDF attachment at Item 8 of the Other Project Information form (see Part V.F.4: Research & Related Other Project Information).

b. Recommended page length

We do not recommend a page length for Appendix E.

c. Content

Include in Appendix E the Letters of Agreement from partners (e.g., schools and districts), data sources (e.g., state agencies holding administrative data), and consultants. Ensure that the letters reproduce well so that reviewers can easily read them. Do not reduce the size of the letters. Although, see Part V.E.4. Attaching Files 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 should be included in Appendix E.

8. Bibliography and References Cited

a. Submission

You must submit this section as a separate PDF attachment at Item 9 of the Other Project Information form (see Part V.F.4: Research & Related Other Project Information).

b. Recommend page length

We do not recommend a page length for the Bibliography and References cited.

c. Content

You should include complete citations, including the names of all authors (in the same sequence in which they appear in the publication), titles (e.g., article and journal, chapter and book, book), page numbers, and year of publication for literature cited in the project narrative.

9. Research on Human Subjects Narrative

a. Submission

The human subjects narrative must be submitted as a PDF attachment at Item 12 of the Other Project Information form (see Part V.F.4: Research & Related Other Project Information).

b. Recommended page length

We do not recommend a page length for the Human Subjects Narrative.

c. Content

The human subjects narrative should address the information specified by the U.S. Department of Education's Regulations for the Protection of Human Subjects (see http://www2.ed.gov/about/offices/list/ocfo/humansub.html for additional information).

> *Exempt Research on Human Subjects Narrative*
>
> Provide an "exempt" narrative if you checked "yes" on Item 1 of the Research & Related Other Project Information form. The narrative must contain sufficient information about the involvement of human subjects in the proposed research to allow a determination by the Department that the designated exemption(s) are appropriate. The six categories of research that qualify for exemption from coverage by the regulations are described on the Department's website http://www2.ed.gov/policy/fund/guid/humansub/overview.html.
>
> *Non-exempt Research on Human Subjects Narrative*
>
> If some or all of the planned research activities are covered (not exempt) from the Human Subjects Regulations and you checked "no" on Item 1 of the Research & Related Other Project Information form, provide a "non-exempt research" narrative. The non-exempt narrative should describe the following: the characteristics of the subject population; the data to be collected from human subjects; recruitment and consent procedures; any potential risks; planned procedures for protecting against or minimizing potential risks; the importance of the knowledge to be gained relative to potential risks; and any other sites where human subjects are involved.

Note that 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/selected 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 after the formal request.

10. Biographical Sketches of Senior/Key Personnel

a. Submission

Each sketch will be submitted as a separate PDF attachment and attached to the Research & Related Senior/Key Person Profile (Expanded) form (see Part V.F.2: Research & Related Senior/Key Person Profile

[Expanded]). The Institute encourages you to use the IES biosketch template available through SciENcv or you may develop your own biosketch format.

b. Recommended page length

We recommend that each Biographical Sketch be no more than five pages, which includes Current and Pending Support.

c. Content

Provide a biographical sketch for the Principal Investigator, each co-Principal Investigator, and each co-Investigator that includes information sufficient to demonstrate that key personnel possess training and expertise commensurate with their specified duties on the proposed project (e.g., publications, grants, and relevant research experience). If you would like, you may also include biographical sketches for consultants (this form will allow for up to 40 biographical sketches in total).

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 his/her time, expressed as percent effort over a 12-month calendar year, allocated to each project. Include the proposed grant as one of the pending grants in this list. If the total 12-month calendar year percent effort across all current and pending projects exceeds 100 percent, you must explain how time will be allocated if all pending applications are successful in the Narrative Budget Justification. 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.

11. Narrative Budget Justification

a. Submission

The narrative budget justification must be submitted as a PDF attachment at Section K of the first project period of the Research & Related Budget (SF 424) Sections A & B; C, D, & E; and F-K form for the Project (see Part V.E.5 Research & Related Budget (Total Federal + Non-Federal) - Sections A & B; C, D, & E; and F-K). For grant submissions with a subaward(s), a separate narrative budget justification for each subaward must be submitted and attached at Section K of the Research & Related Budget (SF 424) for the specific Subaward/Consortium that has been extracted and attached using the R&R Subaward Budget (Fed/Non-Fed) Attachment(s) Form (see Part V.F.6).

b. Recommended page length

We do not recommend a page length for the Narrative Budget Justification.

c. Content

A narrative budget justification must be submitted for the Project budget, and a separate narrative budget justification must be submitted for any subaward budgets included in the application. Each narrative budget justification should provide sufficient detail to allow reviewers to judge whether reasonable costs have been attributed to the project and its subawards, if applicable. The budget justification should correspond to the itemized breakdown of project costs that is provided in the corresponding Research & Related Budget (SF 424) Sections A & B; C, D, & E; and F-K form for each year of the project. The narrative should include the time commitments for key personnel expressed as annual percent effort (i.e., calculated over a 12-month period) and brief descriptions of the responsibilities of key personnel. For consultants, the narrative should include the number of days of anticipated consultation, the expected rate of compensation, travel, per diem, and other related costs. A justification for equipment purchases, supplies, travel (including information regarding number of days of travel, mode of transportation, per diem rates, number of travelers, etc.), and other related project costs should also be provided in the budget narrative for each project year outlined in the Research & Related Budget (SF 424).

d. Indirect Cost Rate

You must use your institution's federally negotiated indirect cost rate. When calculating your indirect costs on expenses for research conducted in field settings, you should apply your institution's negotiated off-campus indirect cost rate (see Part III.A.3: Special Considerations for Budget Expenses).

If your institution does not have a federally negotiated indirect cost rate you should consult a member of the Indirect Cost Group (ICG) in the U.S. Department of Education's Office of the Chief Financial Officer http://www2.ed.gov/about/offices/list/ocfo/fipao/icgreps.html to help you estimate the indirect cost rate to put in your application.

PART V: SUBMITTING YOUR APPLICATION

This part of the RFA describes important submission procedures you need to be aware of to ensure your application is received on time (no later than 4:30:00 p.m. Eastern Time on August 23, 2018) and accepted by the Institute. Any questions that you have about submitting your application through Grants.gov should be addressed to the Grants.gov Contact Center at support@grants.gov or call 1-800-518-4726. You can also access the Grants.gov Self-Service Knowledge Base web portal at https://grants-portal.psc.gov/Welcome.aspx?pt=Grants for further guidance and troubleshooting tips.

A. MANDATORY ELECTRONIC SUBMISSION OF APPLICATIONS AND DEADLINE

Applications must be submitted electronically through the Grants.gov web site http://www.grants.gov/ and must be received (fully uploaded and processed by Grants.gov) no later than 4:30:00 p.m. Eastern Time on August 23, 2018. **Applications received by Grants.gov after the 4:30:00 p.m. Eastern Time application deadline will be considered late and will not be sent forward for scientific peer review**.

Submission through Grants.gov is required unless you qualify for one of the exceptions to the electronic submission requirement *and* submit, no later than 2 weeks before the application deadline date, a written statement to the Department that you qualify for one of these exceptions. A description of the Allowable Exceptions to Electronic Submissions is provided at the end of this document.

Please consider submitting your application ahead of the deadline date (the Institute recommends 3 to 4 days in advance of the closing date and time) to avoid running the risk of a late submission that will not be reviewed. **The Institute does not accept late applications.**

B. REGISTER ON GRANTS.GOV

To submit an application to the Institute via Grants.gov, your organization must have four things:

- A Data Universal Numbering System (DUNS) Number,
- An active System for Award Management (SAM) registration,
- An active Grants.gov account, and
- A workspace for your application within Grants.gov.

1. **Register Early**

Grants.gov registration involves many steps including obtaining a DUNS number if you do not already have one. The DUNS number is necessary to complete registration on SAM (www.sam.gov), which itself may take approximately one week to complete. Note: SAM registration can take several weeks to complete, depending upon the completeness and accuracy of the data entered into the SAM database by the applicant organization. During SAM registration the E-Business Point of Contact (eBIZ POC) role for the organization is assigned. The eBIZ POC is the individual within the organization who oversees all activities within Grants.gov and gives permissions to Authorized Organization Representatives (AORs). AORs are allowed to submit grant applications on behalf of their organization. It is the eBIZ POC's responsibility to renew the organization's SAM registration annually.

There have been some changes to the SAM registration process. Beginning on April 27, 2018, new entities, or entities renewing or updating their registration will be required to submit an original, signed notarized letter confirming the authorized Entity Administrator associated with the DUNS number before the registration is activated. Visit this FAQ page for more information: https://www.gsa.gov/about-us/organization/federal-acquisition-service/office-of-systems-management/integrated-award-environment-iae/sam-update.

You may begin working on your application while completing the registration process, but you cannot submit an application until all of the Registration steps are complete. Please note that once your SAM registration is active, it will take 24 to 48 hours for the information to be available in Grants.gov, and before you can submit an application through Grants.gov.

For additional assistance with registering your DUNS number in SAM or updating your existing SAM account, the Department of Education has prepared a SAM.gov Tip Sheet which you can find at: http://www2.ed.gov/fund/grant/apply/sam-faqs.html.

2. Create a Grants.gov Account

If your organization is new to federal grants or Grants.gov, review the Organization Registration page https://www.grants.gov/web/grants/applicants/organization-registration.html. If you already have a Grants.gov account, you do not need to register another account.

- Click the Register link https://www.grants.gov/web/grants/register.html in the top-right corner of the Grants.gov banner.
- Click the **Get Registered Now** button on the Register page.
- Complete the **Contact Information** and **Account Details** sections. All fields with a red asterisk (*) are required.
  - Email Address - When entering an email address, please keep in mind that all correspondence with Grants.gov will be sent to that email address.
- Select whether to subscribe or unsubscribe from Grants.gov Communications. The **Alerts** are important messages about time-sensitive or major system changes. The **Newsletter** features training, system enhancement updates, and other resources to help the federal grants community.
- Decide if you would like to add a profile to your Grants.gov account or click the **Continue** button to log in. You need to add a profile https://www.grants.gov/web/grants/applicants/registration/add-profile.html to submit an application.

3. Add a Profile to a Grants.gov Account

A profile in Grants.gov corresponds to a single applicant organization the user represents (i.e., an applicant) or an individual applicant. If you work for or consult with multiple organizations and have a profile for each, you may log in to one Grants.gov account to access all of your grant applications. To add an organizational profile to your Grants.gov account, enter the DUNS Number for the organization in the DUNS field while adding a profile. For more detailed instructions about creating a profile on Grants.gov see https://www.grants.gov/web/grants/applicants/registration/add-profile.html.

- After you register with Grants.gov and create an Organization Applicant Profile, the organization applicant's request for Grants.gov roles and access is sent to the EBiz POC. Each organization has one eBIZ POC that is assigned in SAM. Authorized Organization Representatives (AORs) are allowed to submit grant applications on behalf of their organization. The eBIZ POC will then log into Grants.gov and authorize the appropriate roles, including the AOR. The application can be submitted online by any person assigned the AOR role.
- When applications are submitted through Grants.gov, the name of the organization applicant with the AOR role that submitted the application is inserted into the signature line of the application, serving as the electronic signature. The eBIZ POC **must** authorize people who are able to make legally binding commitments on behalf of the organization as a user with the AOR role; **this step is often missed and it is crucial for valid and timely submissions.**

C. WORKSPACE (NEW)

To submit your application, you must create or use an existing workspace within Grants.gov. Workspace is a shared, online environment where multiple people may simultaneously access and edit different forms within the application https://www.grants.gov/web/grants/applicants/workspace-overview.html. Creating a workspace for your application allows you to complete it online and route it through your organization for review before submitting. Participants who have assigned roles in the workspace can complete all the required forms online (or by downloading PDF versions and working offline) and check for errors before submission.

The Workspace progress bar will display the state of your application process as you apply. Click the blue question mark icon near the upper-right corner of each page for additional help if needed. Once the application is complete and ready to be submitted, click the Sign and Submit button on the Manage Workspace page, under the Forms tab.

- Adobe Reader: If you do not want to complete the forms online, you can download individual PDF forms in Workspace and complete them offline. The individual PDF forms can be downloaded and saved to your local device storage, network drive(s), or external drives, then accessed through Adobe Reader. See the Adobe Software Compatibility page on Grants.gov to download the appropriate version if needed https://www.grants.gov/web/grants/applicants/adobe-software-compatibility.html.

For additional training resources on Workspace, including video tutorials, please see https://www.grants.gov/web/grants/applicants/applicant-training.html. The Institute also offers webinars on the application submission process http://ies.ed.gov/funding/webinars/index.asp.

D. SUBMISSION AND SUBMISSION VERIFICATION

1. Submit Early

The Institute strongly recommends that you not wait until the deadline date to submit an application. Grants.gov will put a date/time stamp on the application and then process it after it is fully uploaded. **The time it takes to upload an application will vary depending on a number of factors including the size of the application and the speed of your internet connection.** If Grants.gov rejects your application due to errors in the application package, you will need to resubmit successfully before 4:30:00 p.m. Eastern Time on the deadline date. As an example, if you begin the submission process at 4:00:00 p.m. Eastern Time on the deadline date, and Grants.gov rejects the application at 4:15:00 p.m. Eastern Time, there may not be enough time for you to locate the error that caused the submission to be rejected, correct it, and then attempt to submit the application again before the 4:30:00 p.m. Eastern Time deadline. **Grants.gov recommends that you begin the submission process at least 24 to 48 hours before the deadline date and time to ensure a successful, on-time submission.**

Note: To submit successfully, **you must provide the DUNS number on your application that was used when you were registered as an Authorized Organization Representative (AOR) on Grants.gov**. This DUNS number should be the same number used when your organization registered with the SAM. If you do not enter the same DUNS number on your application as the DUNS you registered with, Grants.gov will reject your application.

2. Verify Submission is OK

The Institute urges you to verify that Grants.gov and the Institute have received the application on time and that it was validated successfully. To see the date and time that your application was received by Grants.gov, you need to log on to Grants.gov and click on the "Track My Application" link http://www.grants.gov/web/grants/applicants/track-my-application.html. For a successful submission, the date/time received should be no later than 4:30:00 p.m. Eastern Time on the deadline date, and the application status should be: (1) Validated (i.e., no errors in submission); (2) Received by Agency (i.e., Grants.gov has transmitted the submission to the U.S. Department of Education); and (3) Agency Tracking Number Assigned (the U.S. Department of Education has assigned a unique PR/Award Number to the application).

Note: If the date/time received is later than 4:30:00 p.m. Eastern Time on the deadline date, the application is late. If the application has a status of "Received" it is still awaiting validation by Grants.gov. Once validation is complete, the status will change either to "Validated" or "Rejected with Errors." If the status is "Rejected with Errors," the application has not been received successfully. Grants.gov provides information on reasons why applications may be rejected in its Frequently Asked Questions (FAQ) page (http://www.grants.gov/web/grants/applicants/encountering-error-messages.html).

You will receive four emails regarding the status of your submission; the first three will come from Grants.gov and the fourth will come from the U.S. Department of Education. Within 2 days of submitting a grant application to Grants.gov, you will receive three emails from Grants.gov:

- The first email message will confirm receipt of the application by the Grants.gov system and will provide you with an application tracking number beginning with the word "GRANT", for example GRANT00234567. You can use this number to track your application on Grants.gov using the "Track My Application" link http://www.grants.gov/web/grants/applicants/track-my-application.html before it is transmitted to the U.S. Department of Education.

- The second email message will indicate that the application EITHER has been successfully validated by the Grants.gov system prior to transmission to the U.S. Department of Education OR has been rejected due to errors, in which case it will not be transmitted to the Department.

- The third email message will indicate that the U.S. Department of Education has confirmed retrieval of the application from Grants.gov once it has been validated.

If the second email message indicates that the application, as identified by its unique application tracking number, is valid and the time of receipt was no later than 4:30:00 p.m. Eastern Time, then the application is successful and on-time.

Note: You should not rely solely on email to confirm whether an application has been received on-time and validated successfully. The Institute urges you to use the "Track My Application" link on Grants.gov to verify on-time, valid submissions in addition to the confirmation emails available at http://www.grants.gov/web/grants/applicants/track-my-application.html.

Once Grants.gov validates the application and transmits it to the U.S. Department of Education, you will receive an email from the U.S. Department of Education.

- This fourth email message will indicate that the application has been assigned a PR/Award number unique to the application beginning with the letter R, followed by the section of the CFDA number unique to that research competition (e.g., 305D), the fiscal year for the submission (e.g., 19 for fiscal year 2019), and finally four digits unique to the application, for example R305D19XXXX. If the application was received after the closing date/time, this email will also indicate that the application is late and will not be given further consideration.

Note: The Institute strongly recommends that you begin the submission process at least 3 to 4 days in advance of the deadline date to allow for a successful and timely submission.

3. Late Applications

If your application is submitted after 4:30:00 p.m. Eastern Time on the application deadline date your application will not be accepted and will not be reviewed. **The Institute does not accept late applications.**

Late applications are often the result of one or more common submission problems that could not be resolved because there was not enough time to do so before the application deadline. Some of the reasons Grants.gov may reject an application can be found on the Grants.gov site http://www.grants.gov/web/grants/applicants/encountering-error-messages.html. For more detailed information on troubleshooting Adobe errors, you can review the Adobe Reader Software Tip Sheet at http://www.grants.gov/web/grants/applicants/adobe-software-compatibility.html.

If after consulting these resources you still experience problems, contact Grants.gov Customer Support (1-800-518-4726 or support@grants.gov) or access the Grants.gov Self-Service Knowledge Base web portal https://grants-portal.psc.gov/Welcome.aspx?pt=Grants.

If the Grants.gov Support Desk determines that a technical problem occurred with the Grants.gov system, and determines that the problem affected your ability to submit the application by the submission deadline, you may petition the Institute to review your application (email the relevant program officer with the Grants.gov case number and related information). However, if Grants.gov determines that the problem you experienced is one of those identified by Grants.gov as common application errors, do not petition the Institute to have your case reviewed because these common submission problems are not grounds for petition. **The Institute will not accept an application that was late due to failure to follow the submission guidelines provided by Grants.gov and summarized in this RFA**.

E. TIPS FOR WORKING WITH GRANTS.GOV

Please go to http://www.grants.gov/web/grants/support.html for help with Grants.gov. For additional tips related to submitting grant applications, refer to the Grants.gov Applicant FAQs http://www.grants.gov/web/grants/applicants/applicant-faqs.html.

1. Internet Connections

The time required to upload and submit your application will vary depending upon a number of factors including the type of internet connection you are using (e.g., high speed connection versus dial up). Plan your submission accordingly.

2. Browser Support

The latest versions of Microsoft Internet Explorer (IE), Mozilla Firefox, Google Chrome, and Apple Safari are supported for use with Grants.gov. However, these web browsers undergo frequent changes and updates, so we recommend you have the latest version when using Grants.gov. Legacy versions of these web browsers may be functional, but you may experience issues.

For additional information or updates, please see the Grants.gov Browser information in the Applicant FAQs.

3. Software Requirements

Grants.gov recommends using Adobe Acrobat Reader for Windows or MAC OS. Grants.gov has an Adobe Software Compatibility page https://www.grants.gov/web/grants/applicants/adobe-software-compatibility.html where you can download the appropriate version of Adobe if needed.

4. **Attaching Files**

You must attach **read-only, flattened .PDF files** to the forms in the application package (see Part IV.C PDF Attachments).

- PDF files are the only approved file type accepted by the Department of Education as detailed in the Federal Register application notice. Applicants must submit individual .PDF files only when attaching files to their application. Specifically, the Department will not accept any attachments that contain files within a file, such as PDF Portfolio files, or an interactive or fillable .PDF file. Any attachments uploaded that are not .PDF files or are password protected files will not be read.
- Grants.gov cannot process an application that includes two or more files that have the same name within a grant submission. Therefore, each file uploaded to your application package should have a unique file name.
- When attaching files, applicants should follow the guidelines established by Grants.gov on the size and content of file names. Uploaded file names must be fewer than 50 characters, and, in general, applicants should not use any special characters. However, Grants.gov does allow for the following UTF-8 characters when naming your attachments: A-Z, a-z, 0-9, underscore, hyphen, space, period, parenthesis, curly braces, square brackets, ampersand, tilde, exclamation point, comma, semi colon, apostrophe, at sign, number sign, dollar sign, percent sign, plus sign, and equal sign. Applications submitted that do not comply with the Grants.gov guidelines will be rejected at Grants.gov and not forwarded to the Department.
- Applicants should limit the size of their file attachments. Documents submitted that contain graphics and/or scanned material often greatly increase the size of the file attachments and can result in difficulties opening the files. For reference, the average discretionary grant application package with all attachments is less than 5 MB. Therefore, you may want to check the total size of your package before submission.

F. REQUIRED RESEARCH & RELATED (R&R) FORMS AND OTHER FORMS

You must complete and submit the R&R forms described below. All of these forms are provided in the application package for this competition (84-305D2019). Please note that fields marked by an asterisk, highlighted in yellow and outlined in red on these forms are required fields and must be completed to ensure a successful submission.

Note: Although not required fields, Items 4a (Federal Identifier) and b (Agency Routing Number) on the Application for Federal Assistance SF 424 (R&R) form provide critical information to the Institute and should be filled out for an application to this research grant competition.

1. **Application for Federal Assistance SF 424 (R&R)**

This form asks for general information about the applicant, including but not limited to the following: contact information; an Employer Identification Number (EIN); a DUNS number; a descriptive title for the project; an indication of the project topic; Principal Investigator contact information; start and end dates for the project; congressional district; total estimated project funding; and Authorized Organization Representative contact information.

Because information on this form populates selected fields on some of the other forms described below, you should complete this form first. This form allows you to attach a cover letter; however, the Institute does not require a cover letter so you should not attach one here.

Provide the requested information using the drop down menus when available. Guidance for completing selected items follows.

- Item 1

  Type of Submission. Select either "Application" or “Changed/Corrected Application”. “Changed/Corrected Application” should only be selected in the event that you need to submit an updated version of an already submitted application (e.g., you realized you left something out of the first application submitted). The Institute does not require pre-applications for its grant competitions.

- Item 2

  Date Submitted. Enter the date the application is submitted to the Institute.

  Applicant Identifier. Leave this blank.

- Item 3

  Date Received by State and State Application Identifier. Leave these items blank.

- Item 4

  Note: This item provides important information that is used by the Institute to screen applications for responsiveness to the competition requirements and for assignment to the appropriate scientific peer review panel. **It is critical that you complete this information completely and accurately or the application may be rejected as nonresponsive or assigned inaccurately for scientific review of merit**.

  - Item 4a: Federal Identifier. **Enter information in this field if this is a Resubmission**. If this application is a revision of an application that was submitted to an Institute grant competition in a prior fiscal year (e.g., FY 2017) that received reviewer feedback, then this application is considered a “Resubmission” (see Item 8 Type of Application). You should **enter the PR/Award number that was assigned to the prior submission (e.g., R305D17XXXX) in this field**.

  - Item 4b: Agency Routing Number. **Enter the code for the topic that the application addresses in this field**. Applications to the Statistical and Research Methodology in Education (CFDA 84.305D) program must be submitted to a particular topic.

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

It is critical that you use the appropriate code in this field and that the code shown in this field agrees with the information included in the application abstract. Indicating the correct code facilitates the appropriate processing and review of the application. Failure to do so may result in delays to processing and puts your application at risk for being identified as nonresponsive and not considered for further review.

  - Item 4c: Previous Grants.gov Tracking ID. If you are submitting a “Changed/Corrected” application (see Item 1) to correct an error, enter the Grants.gov Tracking Number associated with the application that was already submitted through Grants.gov. Contact the Program Officer listed on the application package and provide the Grants.gov tracking numbers associated with both applications (the one with the error and the one that has been corrected) to ensure that the correction application is reviewed.

- Item 5

  Applicant Information. Enter all of the information requested, including the legal name of the applicant, the name of the primary organizational unit (e.g., school, department, division, etc.) that will undertake the activity, and the address, including the county and the 9-digit ZIP/Postal Code of the primary performance site (i.e., the Applicant institution) location. This field is required if the Project Performance Site is located in the United States. The field for "Country" is pre-populated with "USA: UNITED STATES." For applicants located in another country, contact the Program Officer before submitting the application. Use the drop down menus where they are provided.

  Organizational DUNS. Enter the DUNS or DUNS+4 number of the applicant organization. A **Data Universal Numbering System (DUNS)** number is a unique 9-character identification number provided by the commercial company Dun & Bradstreet (D&B) to identify organizations. If your institution does not have a DUNS number and therefore needs to register for one, a DUNS number can be obtained through the Dun & Bradstreet website http://fedgov.dnb.com/webform/displayHomePage.do.

  Note: The DUNS number provided on this form must be the same DUNS number used to register on Grants.gov (and the same as the DUNS number used when registering with the SAM). **If the DUNS number used in the application is not the same as the DUNS number used to register with Grants.gov, the application will be rejected with errors by Grants.gov**.

  Person to Be Contacted on Matters Involving this Application. Enter all of the information requested, including the name, telephone and fax numbers, and email address of the person to be contacted on matters involving this application. The role of this person is primarily for communication purposes on the budgetary aspects of the project. As an example, this may be the contact person from the applicant institution's office of sponsored projects. Use the drop down menus where they are provided.

- Item 6

  Employer Identification (EIN) or (TIN). Enter either the Employer Identification Number (EIN) or Tax Identification Number (TIN) as assigned by the Internal Revenue Service. If the applicant organization is not located in the United States, enter 44-4444444.

- Item 7

  Type of Applicant. Use the drop down menu to select the type of applicant. If Other, please specify.

  Small Business Organization Type. If "Small Business" is selected as Type of Applicant, indicate whether or not the applicant is a "Women Owned" small business – a small business that is at least 51% owned by a woman or women, who also control and operate it. Also indicate whether or not the applicant is a "Socially and Economically Disadvantaged" small business, as determined by the U.S. Small Business Administration pursuant to section 8(a) of the Small Business Act U.S.C. 637(a).

- Item 8

Type of Application. Indicate whether the application is a “New” application or a “Resubmission” of an application that was submitted under a previous Institute competition and received reviewer comments. Only the "New" and "Resubmission" options apply to Institute competitions. Do not select any option other than "New" or "Resubmission."

Submission to Other Agencies. Indicate whether or not this application is being submitted to another agency or agencies. If yes, indicate the name of the agency or agencies.

- Item 9

Name of Federal Agency. Do not complete this item. The name of the federal agency to which the application is being submitted will already be entered on the form.

- Item 10

Catalog of Federal Domestic Assistance Number. Do not complete this item. The CFDA number of the program competition to which the application is being submitted will already be entered on the form. The CFDA number can be found in the Federal Register Notice and on the face page of the Request for Applications.

- Item 11

Descriptive Title of Applicant’s Project. **Enter a distinctive, descriptive title for the project**. The maximum number of characters allowed in this item field is 200.

- Item 12

Proposed Project Start Date and Ending Date. Enter the proposed start date of the project and the proposed end date of the project. The start date must not be earlier than July 1, 2019, which is the Earliest Anticipated Start Date listed in this Request for Applications, and must not be later than September 1, 2019. The end date is restricted based on the duration maximum for the topic selected.

- Item 13

Congressional District of Applicant. For both the applicant and the project, enter the Congressional District in this format: 2 character State Abbreviation - 3 character District Number (e.g., CA-005 for California's 5th district, CA-012 for California's 12th district). Grants.gov provides help for finding this information http://www.grants.gov/web/grants/applicants/applicant-faqs.html under “How can I find my congressional district code?” If the program/project is outside the U.S., enter 00-000.

- Item 14

Project Director/Principal Investigator Contact Information. Enter all of the information requested for the Project Director/Principal Investigator, including position/title, name, address (including county), organizational affiliation (e.g., organization, department, division, etc.), telephone and fax numbers, and email address. Use the drop down menus where they are provided.

- Item 15

Estimated Project Funding

- Total Federal Funds Requested. Enter the total Federal funds requested for the entire project period.

- Total Non-Federal Funds. Enter the total non-Federal funds requested for the entire project period.

- Total Federal & Non-Federal Funds. Enter the total estimated funds for the entire project period, including both Federal and non-Federal funds.

- Estimated Program Income. Identify any program income estimated for the project period, if applicable.

- Item 16

  Is Application Subject to Review by State Executive Order 12372 Process? The Institute is not soliciting applications that are subject to review by Executive Order 12372; therefore, check the box "Program is not covered by E.O. 12372" to indicate "No" for this item.

- Item 17

  This is the Authorized Organization Representative's electronic signature.

  By providing the electronic signature, the Authorized Organization Representative certifies the following:

  - To the statements contained in the list of certifications
  - That the statements are true, complete and accurate to the best of his/her knowledge.

  By providing the electronic signature, the Authorized Organization Representative also provides the required assurances, agrees to comply with any resulting terms if an award is accepted, and acknowledges that any false, fictitious, or fraudulent statements or claims may subject him/her to criminal, civil, or administrative penalties.

  Note: The certifications and assurances referred to here are described in Part V.F.7: Other Forms Included in the Application Package).

- Item 18

  SF LLL or other Explanatory Documentation. Do not add the SF LLL here. A copy of the SF LLL is provided as an optional document within the application package. See Part V.F.7: Other Forms Included in the Application Package to determine applicability. If it is applicable to the grant submission, choose the SF LLL from the optional document menu, complete it, and save the completed SF LLL form as part of the application package.

- Item 19

  Authorized Organization Representative. The Authorized Organization Representative is the official who has the authority both to legally commit the applicant to (1) accept federal funding and (2) execute the proposed project. Enter all information requested for the Authorized Organization Representative including name, title, organizational affiliation (e.g., organization, department, division, etc.), address, telephone and fax numbers, and email address of the Authorized Organization Representative. Use the drop down menus where they are provided.

Signature of Authorized Organization Representative. Leave this item blank as it is automatically completed when the application is submitted through Grants.gov.

Date Signed. Leave this item blank as the date is automatically generated when the application is submitted through Grants.gov.

- Item 20

  Pre-application. Do not complete this item as the Institute does not require pre-applications for its grant competitions.

- Item 21

  Cover Letter. Do not complete this item as the Institute does not require cover letters for its grant competitions.

2. Research & Related Senior/Key Person Profile (Expanded)

This form asks you to: (1) identify the Project Director/Principal Investigator and other senior and/or key persons involved in the project; (2) specify the role key staff will serve; and (3) provide contact information for each senior/key person identified. The form also requests information about the highest academic or professional degree or other credentials earned and the degree year. This form includes a "Credential/Agency Log In" box that is optional.

This form also provides the means for attaching the Biographical Sketches of senior/key personnel as PDF files. This form will allow for the attachment of a total of 40 biographical sketches: one for the project director/principal investigator and up to 39 additional sketches for senior/key staff. See Part IV.C.10: Biographical Sketches of Senior/Key Personnel for information about recommended page lengths, formatting, and content to be included in the biographical sketches. The persons listed on this form should be the same persons listed in the Personnel section of the Project Narrative. If consultants are listed there, you may include a biographical sketch for each one listed. The Institute strongly encourages the use of SciENcv to create IES Biosketches for grant applications to the Institute.

3. Project/Performance Site Location(s)

This form asks you to identify the primary site where project work will be performed. You must complete the information for the primary site. If a portion of the project will be performed at any other site(s), the form also asks you to identify and provide information about the additional site(s). As an example, a research proposal to an Institute competition may include the applicant institution as the primary site and one or more schools where data collection will take place as additional sites. The form permits the identification of eight project/performance site locations in total. This form requires the applicant to identify the Congressional District for each site. See above, Application for Federal Assistance SF 424 (R&R), Item 13 for information about Congressional Districts. DUNS number information is optional on this form.

4. Research & Related Other Project Information

This form asks you to provide information about any research that will be conducted involving Human Subjects, including: (1) whether human subjects are involved; (2) if human subjects are involved, whether or not the project is exempt from the human subjects regulations; (3) if the project is exempt from the regulations, an indication of the exemption number(s); and, (4) if the project is not exempt from the regulations, whether an Institutional Review Board (IRB) review is pending; and if IRB approval has been given, the date on which the project was approved; and, the Human Subject Assurance number. This form also asks you: (1) whether there is proprietary information included in the application; (2) whether the project has an actual or potential impact on the environment; (3) whether the research site is designated or eligible to be designated as a historic place; and, (4) if the project involves activities outside the U.S., to identify the countries involved.

This form also provides the means for attaching a number of PDF files (see Part IV.C: PDF Attachments for information about about recommended page lengths, formatting, and content to be included) including the following:

- Project Summary/Abstract,
- Project Narrative and Appendices,
- Bibliography and References Cited, and
- Research on Human Subjects Narrative.

- Item 1

  Are Human Subjects Involved? If activities involving human subjects are planned at any time during the proposed project at any performance site or collaborating institution, you must check "Yes." (You must check "Yes" even if the proposed project is exempt from Regulations for the Protection of Human Subjects.) If there are no activities involving human subjects planned at any time during the proposed project at any performance site or collaborating institution, you may check "No" and skip to Item 2.

  Is the Project Exempt from Federal Regulations? If all human subject activities are exempt from Human Subjects regulations, then you may check "Yes." You are required to answer this question if you answered "yes" to the first question "Are Human Subjects Involved?"

  If you answer "yes" to the question "Is the Project Exempt from Federal Regulations?" you are required to check the appropriate exemption number box or boxes corresponding to one or more of the exemption categories. The six categories of research that qualify for exemption from coverage by the regulations are described on the U.S. Department of Education's website http://www2.ed.gov/policy/fund/guid/humansub/overview.html. Provide an Exempt Research on Human Subjects Narrative at Item 12 of this form (see Part IV.C.9. Research on Human Subjects Narrative).

  If you answer "no" to the question "Is the Project Exempt from Federal Regulations?" you will be prompted to answer questions about the Institutional Review Board (IRB) review.

  If no, is the IRB review pending? Answer either "Yes" or "No."

  If you answer "yes" because the review is pending, then leave the IRB approval date blank. If you answer "no" because the review is not pending, then you are required to enter the latest IRB approval date, if available. Therefore, you should select "No" only if a date is available for IRB approval.

  Note: IRB Approval may not be pending because you have not begun the IRB process. In this case, an IRB Approval Date will not be available. However, a date must be entered in this field if "No" is selected or the application will be rejected with errors by Grants.gov. Therefore, you should check "Yes" to the question "Is the IRB review pending?" if an IRB Approval date is not available.

  If you answer "no" to the question "Is the Project Exempt from Federal Regulations?" provide a Non-exempt Research on Human Subjects Narrative at Item 12 of this form (see Part IV.C.9. Research on Human Subjects Narrative).

Human Subject Assurance Number: Leave this item blank.

- Item 2

  Are Vertebrate Animals used? Check whether or not vertebrate animals will be used in this project.

- Item 3

  Is proprietary/privileged information included in the application? Patentable ideas, trade secrets, privileged or confidential commercial or financial information, disclosure of which may harm the applicant, should be included in applications only when such information is necessary to convey an understanding of the proposed project. If the application includes such information, check "Yes" and clearly mark each line or paragraph on the pages containing the proprietary/privileged information with a legend similar to: "The following contains proprietary/privileged information that (name of applicant) requests not be released to persons outside the Government, except for purposes of review and evaluation."

- Item 4

  Does this project have an actual or potential impact on the environment? Check whether or not this project will have an actual or potential impact on the environment.

- Item 5

  Is the research site designated, or eligible to be designated as a historic place? Check whether or not the research site is designated, or eligible to be designated as a historic place. Explain if necessary.

- Item 6

  Does the project involve activities outside of the United States or partnerships with international collaborators? Check "Yes" or "No." If the answer is "Yes," then you need to identify the countries with which international cooperative activities are involved. An explanation of these international activities or partnerships is optional.

- Item 7.

  Project Summary/Abstract. Attach the Project Summary/Abstract as a PDF file here. See Part IV.C. PDF Attachments for information about recommended content, formatting, and page lengths for this PDF file.

- Item 8.

  Project Narrative. Create a single PDF file that contains the Project Narrative and Appendix A (required), as well as, when applicable, Appendix B (required for resubmissions), Appendix C (optional), Appendix D (optional) and Appendix E (optional). Attach that single PDF file here. See Part IV.C. PDF Attachments for information about content and recommended formatting and page length for the different components of this PDF file.

- Item 9.

Bibliography and References Cited. Attach the Bibliography and References Cited as a PDF file here. See Part IV.C. PDF Attachments for information about recommended content, formatting, and page lengths for this PDF file.

- Item 10.

  Facilities and Other Resources. Do not include an attachment here. Explanatory information about facilities and other resources must be included in the Resources Section of the 25-page Project Narrative for the application and may also be included in the Narrative Budget Justification. In the project narrative of competitive proposals, applicants describe having access to institutional resources that adequately support research activities, access to data, and access to schools in which to conduct the research. Strong applications document the availability and cooperation of the data holders, schools, or other education delivery settings that will be required to carry out the research proposed in the application via a letter of agreement from the education organization. Include Letters of Agreement in Appendix E.

- Item 11.

  Equipment. Do not include an attachment here. Explanatory information about equipment may be included in the Narrative Budget Justification.

- Item 12.

  Other Attachments. Attach a Research on Human Subjects Narrative as a PDF file here. You must attach either an Exempt Research on Human Subjects Narrative or a Non-Exempt Research on Human Subjects Narrative. See Part IV.C. PDF Attachments for information about recommended content, formatting, and page lengths for this PDF file.

  If you checked "Yes" to Item 1 of this form "Are Human Subjects Involved?" and designated an exemption number(s), then you must provide an "Exempt Research" narrative. If some or all of the planned research activities are covered by (not exempt from) the Human Subjects Regulations, then you must provide a "Non-exempt Research" narrative.

5. Research & Related Budget (Total Federal+Non-Federal)-Sections A & B; C, D, & E; F-K

This form asks you to provide detailed budget information for each year of support requested for the applicant institution (i.e., the Project Budget). The form also asks you to indicate any non-Federal funds supporting the project. You should provide this budget information for each project year using all sections of the R&R Budget form. Note that the budget form has multiple sections for each budget year: A & B; C, D, & E; and F-K.

- Sections A & B ask for information about Senior/Key Persons and Other Personnel
- Sections C, D, & E ask for information about Equipment, Travel, and Participant/Trainee Costs
- Sections F - K ask for information about Other Direct Costs and Indirect Costs

You must complete each of these sections for as many budget periods (i.e., project years) as you are requesting funds.

Note: The narrative budget justification for each of the project budget years must be attached at Section K of the first budget period; otherwise, you will not be able to enter budget information for subsequent project years.

Note: Budget information for a subaward(s) on the project must be entered using a separate form, the R&R Subaward Budget (Fed/Non-Fed) Attachment(s) Form, described in Part V.F.6. This is the only form that can be used to extract the proper file format to complete subaward budget information. **The application will be rejected with errors by Grants.gov if subaward budget information is included using any other form or file format.**

Enter the Federal Funds requested for all budget line items as instructed below. If any non-Federal funds will be contributed to the project, enter the amount of those funds for the relevant budget categories in the spaces provided.

All fields asking for total funds in this form will auto calculate.

- Organizational DUNS.

  If you completed the SF 424 R&R Application for Federal Assistance form first, the DUNS number will be pre-populated here. Otherwise, the organizational DUNS number must be entered here.

- Budget Type.

  Check the box labeled "Project" to indicate that this is the budget requested for the primary applicant organization. If the project involves a subaward(s), you must access the R&R Subaward Budget (Fed/Non-Fed) Attachment(s) Form to complete a subaward budget (see Part V.F.6 for instructions regarding budgets for a subaward).

- Budget Period Information.

  Enter the start date and the end date for each budget period. **Enter no more than the number of budget periods allowed for the project as determined by the Award Duration Maximums for the relevant Topic selected for your project**. Note: If you activate an extra budget period and leave it blank this may cause your application to be rejected with errors by Grants.gov.

- Budget Sections A & B

  A. Senior/Key Person. The project director/principal investigator information will be pre-populated here from the SF 424 R&R Application for Federal Assistance form if it was completed first. Then, enter all of the information requested for each of the remaining senior/key personnel, including the project role of each and the number of months each will devote to the project, i.e., calendar or academic + summer. You may enter the annual compensation (base salary – dollars) paid by the employer for each senior/key person; however, you may choose to leave this field blank. Regardless of the number of months devoted to the project, indicate only the amount of salary being requested for each budget period for each senior/key person. Enter applicable fringe benefits, if any, for each senior/key person. Enter the Federal dollars and, if applicable, the Non-Federal dollars. If any personnel intend to donate time, this donated time must be listed in the budget and budget narrative and described as cost sharing. The Institute does not require or request such cost sharing nor consider it in award decisions but does require that it be documented. Personnel proposing to donate time must demonstrate that they have such time available.

  B. Other Personnel. Enter all of the information requested for each project role listed – for example postdoctoral associates, graduate students, undergraduate students, secretary/clerical, etc. – including, for each project role, the number of personnel proposed and the number of months devoted to the project (calendar or academic + summer). Regardless of the number of months devoted to the project, indicate only the amount of salary/wages being requested for each project role. Enter applicable fringe benefits, if any, for each project role category. Enter the Federal dollars and, if applicable, the non-Federal dollars.

Total Salary, Wages, and Fringe Benefits (A + B). This total will auto calculate.

- Budget Sections C, D, & E

C. Equipment Description. Enter all of the information requested for equipment. Equipment is defined as an item of property that has an acquisition cost of $5,000 or more (unless the applicant organization has established lower levels) and an expected service life of more than 1 year. List each item of equipment separately and justify each in the narrative budget justification. Allowable items ordinarily will be limited to research equipment and apparatus not already available for the conduct of the work. General-purpose equipment, such as a personal computer, is not eligible for support unless primarily or exclusively used in the actual conduct of scientific research. Enter the Federal dollars and, if applicable, the non-Federal dollars.

Total C. Equipment. This total will auto calculate.

D. Travel. Enter all of the information requested for Travel.

Enter the total funds requested for domestic travel. In the narrative budget justification, include the purpose, destination, dates of travel (if known), applicable per diem rates, and number of individuals for each trip. If the dates of travel are not known, specify the estimated length of the trip (e.g., 3 days). Enter the Federal dollars and, if applicable, the non-Federal dollars.

Enter the total funds requested for foreign travel. In the narrative budget justification, include the purpose, destination, dates of travel (if known), applicable per diem rates, and number of individuals for each trip. If the dates of travel are not known, specify the estimated length of the trip (e.g., 3 days). Enter the Federal dollars and, if applicable, the non-Federal dollars.

Total D. Travel Costs. This total will auto calculate.

E. Participant/Trainee Support Costs. Do not enter information here; this category is not used for project budgets for this competition.

Number of Participants/Trainees. Do not enter information here; this category is not used for project budgets for this competition.

Total E. Participants/Trainee Support Costs. Do not enter information here; this category is not used for project budgets for this competition.

- Budget Sections F-K

F. Other Direct Costs. Enter all of the information requested under the various cost categories. Enter the Federal dollars and, if applicable, the non-Federal dollars.

Materials and Supplies. Enter the total funds requested for materials and supplies. In the narrative budget justification, indicate the general categories of supplies, including an amount for each category. Categories less than $1,000 are not required to be itemized.

Publication Costs. Enter the total publication funds requested. The proposed budget may request funds for the costs of documenting, preparing, publishing or otherwise making available to others the findings and products of the work conducted under the award. In the narrative budget justification, include supporting information.

Consultant Services. Enter the total costs for all consultant services. In the narrative budget justification, identify each consultant, the services he/she will perform, total number of days, travel costs, and total estimated costs. Note: Travel costs for consultants can be included here or in Section D. Travel.

ADP/Computer Services. Enter the total funds requested for ADP/computer services. The cost of computer services, including computer-based retrieval of scientific, technical, and education information may be requested. In the narrative budget justification, include the established computer service rates at the proposing organization if applicable.

Subaward/Consortium/Contractual Costs. Enter the total funds requested for: (1) all subaward/consortium organization(s) proposed for the project and (2) any other contractual costs proposed for the project. Use the R&R Subaward Budget (Fed/Non-Fed) Attachment(s) Form to provide detailed subaward information (see Part V.F.6).

Equipment or Facility Rental/User Fees. Enter the total funds requested for equipment or facility rental/user fees. In the narrative budget justification, identify each rental user fee and justify.

Alterations and Renovations. Leave this field blank. The Institute does not provide funds for construction costs.

Other. Describe any other direct costs in the space provided and enter the total funds requested for this "Other" category of direct costs. Use the narrative budget justification to further itemize and justify.

Total F. Other Direct Costs. This total will auto calculate.

- G. Direct Costs

Total Direct Costs (A thru F). This total will auto calculate.

- H. Indirect Costs

Enter all of the information requested for Indirect Costs. Principal investigators should note that if they are requesting reimbursement for indirect costs, this information is to be completed by their Business Office.

Indirect Cost Type. Indicate the type of base (e.g., Salary & Wages, Modified Total Direct Costs, Other [explain]). In addition, indicate if the Indirect Cost type is Off-site. If more than one rate/base is involved, use separate lines for each. When calculating your expenses for research conducted in field settings, you should apply your institution's negotiated off-campus indirect cost rate, as directed by the terms of your institution's negotiated agreement with the federal government.

Institutions, both primary grantees and subawardees, not located in the territorial US cannot charge indirect costs.

If you do not have a current indirect rate(s) approved by a Federal agency, indicate "None--will negotiate". **If your institution does not have a federally negotiated indirect cost rate,** you should consult a member of the Indirect Cost Group (ICG) in the U.S. Department of

Education's Office of the Chief Financial Officer http://www2.ed.gov/about/offices/list/ocfo/fipao/icgreps.html to help you estimate the indirect cost rate to put in your application.

Indirect Cost Rate (%). Indicate the most recent Indirect Cost rate(s) (also known as Facilities & Administrative Costs [F&A]) established with the cognizant Federal office, or in the case of for-profit organizations, the rate(s) established with the appropriate agency.

If your institution has a cognizant/oversight agency and your application is selected for an award, you must submit the indirect cost rate proposal to that cognizant/oversight agency office for approval.

Indirect Cost Base ($). Enter the amount of the base (dollars) for each indirect cost type. Depending on the grant program to which you are applying and/or the applicant institution's approved Indirect Cost Rate Agreement, some direct cost budget categories in the grant application budget may not be included in the base and multiplied by the indirect cost rate. Use the narrative budget justification to explain which costs are included and which costs are excluded from the base to which the indirect cost rate is applied. If your grant application is selected for an award, the Institute will request a copy of the applicant institution's approved Indirect Cost Rate Agreement.

Indirect Cost Funds Requested. Enter the funds requested (Federal dollars and, if applicable, the non-Federal dollars) for each indirect cost type.

Total H. Indirect Costs. This total will auto calculate.

Cognizant Agency. Enter the name of the Federal agency responsible for approving the indirect cost rate(s) for the applicant. Enter the name and telephone number of the individual responsible for negotiating the indirect cost rate. If a Cognizant Agency is not known, enter “None.”

- I. Total Direct and Indirect Costs

  Total Direct and Indirect Costs (G + H). This total will auto calculate.

- J. Fee.

  Do not enter a dollar amount here as you are not allowed to charge a fee on a grant or cooperative agreement.

- K. Budget Justification

  Attach the Narrative Budget Justification as a PDF file at Section K of the first budget period (see Part IV.C.11 for information about content and recommended formatting and page lengths for this PDF file). Note that if the justification is not attached at Section K of the first budget period, you will not be able to access the form for the second budget period and all subsequent budget periods. The single narrative must provide a budget justification for each year of the entire project.

- Cumulative Budget. This section will auto calculate all cost categories for all budget periods included.

Final Note: The overall grant budget cannot exceed the maximum grant award for the Research Topic being applied under as listed in the table below.

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

6. R&R Subaward Budget (Fed/Non-Fed) Attachment(s) Form

This form provides the means to both extract and attach the Research & Related Budget (Total Fed + Non-Fed) form that is to be used by an institution that will hold a subaward on the grant. Please note that separate budgets are required only for subawardee/consortium organizations that perform a substantive portion of the project. As with the Primary Budget, the extracted Research & Related Budget (Total Fed + Non-Fed) form asks you to provide detailed budget information for each year of support requested for a subaward/consortium member with substantive involvement in the project. The budget form also asks for information regarding non-Federal funds supporting the project at the subaward/consortium member level. You should provide this budget information for each project year using all sections of the R&R Budget form. Note that the budget form has multiple sections for each budget year: A & B; C, D, & E; and F-K.

- Sections A & B ask for information about Senior/Key Persons and Other Personnel.
- Sections C, D, & E ask for information about Equipment, Travel, and Participant/Trainee Costs.
- Sections F - K ask for information about Other Direct Costs and Indirect Costs.

“Subaward/Consortium” must be selected as the Budget Type, and all sections of the budget form for each project year must be completed in accordance with the R&R (Federal/Non-Federal) Budget instructions provided above in Part V.F.5. Note that subaward organizations are also required to provide their DUNS or DUNS+4 number.

You may extract and attach up to 10 subaward budget forms. When you use the button “Click here to extract the R&R Budget (Fed/Non-Fed) Attachment,” a Research & Related Budget (Total Fed + Non-Fed) form will open. Each institution that will hold a subaward to perform a substantive portion of the project must complete one of these forms and save it as a PDF file with the name of the subawardee organization. Once each subawardee institution has completed the form, you must attach these completed subaward budget form files to the R&R Subaward Budget (Fed/Non-Fed) Attachment(s) Form. Each subaward budget form file attached to this form must have a unique name.

Note: This R&R Subaward Budget (Fed/Non-Fed) Attachment(s) Form must be used to attach only one or more Research & Related Budget (Total Fed + Non-Fed) form(s) that have been extracted from this form. Note the form’s instruction: “Click here to extract the R&R Budget (Fed/Non-Fed) Attachment”. **If you attach a file format to this form that was not extracted from this attachment form your application will be rejected with errors by Grants.gov.**

7. Other Forms Included in the Application Package

You are required to submit the first two forms identified here. You are not required to submit the third form, Disclosure of Lobbying Activities – Standard Form LLL, unless it is applicable.

- SF 424B-Assurances-Non-Construction Programs.
- Grants.gov Lobbying form (formerly, ED 80-0013 form).
- Disclosure of Lobbying Activities – Standard Form LLL (if applicable).

G. SUMMARY OF APPLICATION CONTENT

R&R Form	Instructions	Additional Information
Application for Federal Assistance SF 424 (R & R)	Part V.F.1	Form provided in Grants.gov application package
Senior/Key Person Profile (Expanded)	Part V.F.2	Form provided in Grants.gov application package
Project/Performance Site Location(s)	Part V.F.3	Form provided in Grants.gov application package
Other Project Information	Part V.F.4	Form provided in Grants.gov application package
Budget (Total Federal + Non-Federal):	Part V.F.5	Form provided in Grants.gov application package
R&R Subaward Budget (Fed/Non-Fed) Attachment(s) Form	Part V.F.6	Form provided in Grants.gov application package to *extract and attach* subaward budget(s).
SF 424B Assurances – Non-Construction Programs Grants.gov Lobbying form Disclosure of Lobby Activities – Standard Form LLL (if applicable)	Part V.F.7	Forms provided in Grants.gov application package
Project Summary/Abstract	Part IV.C.1	Attach PDF at Item 7 of "Other Project Information" form
Project Narrative and Appendices • Narrative • Appendix A • Appendix B • Appendix C • Appendix D • Appendix E	Part IV.C.2-7	Project Narrative, Appendix A, and if applicable, Appendix B, Appendix C, Appendix D, and Appendix E must ALL be included together in one PDF file attached at Item 8 of "Other Project Information" form.
Bibliography and References Cited	Part IV.C.8	Attach PDF at Item 9 of "Other Project Information" form.
Research on Human Subjects Narrative, if applicable	Part IV.C.9	Attach PDF at Item 12 of "Other Project Information" form.
Biographical Sketches of Senior/Key Personnel including Current & Pending Support for Senior/Key Personnel	Part IV.C.10	Attach each as a separate PDF to "Senior/Key Person Profile (Expanded)" form.
Narrative Budget Justification	Part IV.C.11	Attach PDF) using *Section K – Budget Period 1* of the "Budget (Total Federal + Non-Federal)" form.

H. APPLICATION CHECKLIST

Have each of the following forms been completed?	
	SF 424 Application for Federal Assistance
	For item 4a, is the PR/Award number entered if this is a Resubmission following the instructions in Part V.F.1?
	For item 4b, is the correct topic code included following the instructions in Part V.F.1?
	For item 8, is the Type of Application appropriately marked as either "New" or "Resubmission" following the instructions in Part V.F.1?
	Senior/Key Person Profile (Expanded)
	Project/Performance Site Location(s)
	Other Project Information
	Budget (Total Federal + Non-Federal): Sections A & B; Sections C, D, & E; Sections F - K
	R&R Subaward Budget (Federal/Non-Federal) Attachment(s) form (if applicable)
	SF 424B Assurances – Non-Construction Programs
	Grants.gov Lobbying form (formerly ED 80-0013 form)
	Disclosure of Lobbying Activities – Standard Form LLL (if applicable)
Have each of the following items been attached as PDF files in the correct place?	
	Project Summary/Abstract, using Item 7 of the "Other Project Information" form
	Project Narrative, and where applicable, Appendix A (required), Appendix B (required for resubmissions), Appendix C, and Appendix D, and Appendix E as a single file using Item 8 of the "Other Project Information" form
	Bibliography and References Cited, using Item 9 of the "Other Project Information" form
	Research on Human Subjects Narrative, either the Exempt Research Narrative or the Non-exempt Research Narrative, using Item 12 of the "Other Project Information" form
	Biographical Sketches of Senior/Key Personnel, using "Attach Biographical Sketch" of the "Senior/Key Person Profile (Expanded)" form that includes Current & Pending Support of the Senior/Key Personnel
	Narrative Budget Justification, using Section K – Budget Period 1 of the "Budget (Total Federal + Non-Federal" form
	Budget (Total Federal + Non-Federal): Sections A & B; Sections C, D, & E; Sections F – K for the Subaward(s), using the "R&R Subaward Budget (Federal/Non-Federal) Attachment(s)" form, as appropriate, that conforms to the Award Duration, Annual Cost Maximum and Total Cost Maximum for the Topic selected.
Have the following actions been completed?	
	The correct PDF files are attached to the proper forms in the Grants.gov application package
	The "Check Package for Errors" button at the top of the grant application package has been used to identify errors or missing required information that prevents an application from being processed
	The "Track My Application" link has been used to verify that the upload was fully completed and that the application was processed and validated successfully by Grants.gov before 4:30:00 p.m., Eastern Time on the deadline date

I. PROGRAM OFFICER CONTACT INFORMATION

Please contact the Institute's Program Officers with any questions you may have about the best topic and grant program for your application. Program Officers function as knowledgeable colleagues who can provide substantive feedback on your research idea, including reading a draft of your project narrative. Program Officers can also help you with any questions you may have about the content and preparation of PDF file attachments. However, any questions you have about individual forms within the application package and electronic submission of your application through Grants.gov should be directed first to the Grants.gov Contact Center at support@grants.gov, http://www.grants.gov/web/grants/about/contact-us.html, or call 1-800-518-4726. The Program Officer for this competition is:

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

REFERENCES

American Psychological Association, Research Office (2009). *Publication Manual of the American Psychological Association* (6th ed.). Washington, DC: American Psychological Association.

Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.

Hill, C.J., Bloom, H.S., Black, A.R., and Lipsey, M.W. (2008). Empirical Benchmarks for Interpreting Effect Sizes in Research. *Child Development Perspectives, 2*(3), 172-177.

Journal of Research on Education Effectiveness (JREE). 2017. Theme issue on Variation in Treatment Effects. *Journal of Research on Education Effectiveness*, 10(4).

Kern, H.L., Stuart, E.A., Hill, J., and Green, D.P. (2016). Assessing Methods for Generalizing Experimental Impact Estimates to Target Populations. *Journal of Research on Educational Effectiveness* 9(1): 103-127.

Lipsey, M.W., Puzio, K., Yun, C., Hebert, M. A., Steinka-Fry, K., Cole, M. W., Roberts, M., Anthony, K. S., and Busick, M. D. (2012). *Translating the Statistical Representation of the Effects of Education Interventions into more Readily Interpretable Forms*. Institute of Education Sciences, National Center for Special Education Research. Downloaded from http://ies.ed.gov/ncser/pubs/20133000/ on December 18, 2012.

Shadish, W.R., Hedges, L.V., Horner, R H., and Odom, S.L. (2015). The Role of Between-Case Effect Size in Conducting, Interpreting, and Summarizing Single-Case Research (NCER-2015-02). Washington, DC: National Center for Education Research, Institute of Education Sciences, U.S. Department of Education. Downloaded from http://ies.ed.gov/ncser/pubs/2015002/ on March 8, 2016.

Stuart, E.., Cole, S.R., Bradshaw, C.P., and Leaf, P.J. (2011). The Use of Propensity Scores to Assess the Generalizability of Results from Randomized Trials. *Journal of the Royal Statistical Society, Series A,* Part 2, 369-386.

Tipton, E. (2013). Improving Generalizations from Experiments Using Propensity Score Subclassification: Assumptions, Properties, and Contexts. *Journal of Educational and Behavioral Statistics, 38,* 239-266.

Tipton, E., Hedges, L.V., Vaden-Kiernan, M., Borman, G.D., Sullivan, K., and Caverly, S. (2014). Sample Selection in Randomized Experiments: A New Method Using Propensity Score Stratified Sampling. *Journal of Research on Educational Effectiveness, 7,* 114-135.

Weiss, M.J., Bloom, H.S., and Brock, T. (2014). A Conceptual Framework for Studying the Sources of Variation in Program Effects. *Journal of Policy Analysis and Management 33*,(3) 778-808.

ALLOWABLE EXCEPTIONS TO ELECTRONIC SUBMISSIONS

You may qualify for an exception to the electronic submission requirement and submit an application in paper format if you are unable to submit the application through the Grants.gov system because: (a) you do not have access to the Internet; or (b) you do not have the capacity to upload large documents to the Grants.gov system; and (c) no later than 2 weeks before the application deadline date (14 calendar days or, if the fourteenth calendar date before the application deadline date falls on a Federal holiday, the next business day following the Federal holiday), you mail or fax a written statement to the Institute explaining which of the two grounds for an exception prevents you from using the Internet to submit the application. If you mail the written statement to the Institute, it must be postmarked no later than 2 weeks before the application deadline date. If you fax the written statement to the Institute, the faxed statement must be received no later than 2 weeks before the application deadline date. The written statement should be addressed and mailed or faxed to:

Ellie Pelaez, Office of Administration and Policy
Institute of Education Sciences, U.S. Department of Education
550 12th Street, S.W.
Potomac Center Plaza - Room 4126
Washington, DC 20202
FAX: (202) 245-6752

If you request and qualify for an exception to the electronic submission requirement you may submit an application via mail, commercial carrier or hand delivery. To submit an application by mail, mail the original and two copies of the application on or before the deadline date to:

U.S. Department of Education
Application Control Center
Attention: CFDA# (84.305D)
LBJ Basement Level 1
400 Maryland Avenue, S.W.
Washington, DC 20202 – 4260

You must show one of the following as proof of mailing: (a) a legibly dated U.S. Postal Service Postmark; (b) a legible mail receipt with the date of mailing stamped by the U.S. Postal Service; (c) a dated shipping label, invoice, or receipt from a commercial carrier; or (d) any other proof of mailing acceptable to the U.S. Secretary of Education (a private metered postmark or a mail receipt that is not dated by the U.S. Postal Services will not be accepted by the Institute). Note that the U.S. Postal Service does not uniformly provide a dated postmark. Before relying on this method, you should check with your local post office. If your application is postmarked after the application deadline date, the Institute will not consider your application. The Application Control Center will mail you a notification of receipt of the grant application. If this notification is not received within 15 business days from the application deadline date, call the U.S. Department of Education Application Control Center at (202) 245-6288.

To submit an application by hand, you or your courier must hand deliver the original and two copies of the application no later than 4:30:00 p.m. (Eastern Time) on or before the deadline date to:

U.S. Department of Education
Application Control Center
Attention: CFDA# (84.305D)
550 12th Street, S.W.
Potomac Center Plaza - Room 7039
Washington, DC 20202 – 4260

The Application Control Center accepts application deliveries daily between 8:00 a.m. and 4:30 p.m. (Eastern Time) except Saturdays, Sundays and Federal holidays.