

REQUEST FOR APPLICATIONS

Statistical and Research Methodology in Education

CFDA Number: 84.305D

<u>COMPETITION</u>	Letter of Intent Due Date	Application Package Available	Application Due Date
	https://iesreview.ed.gov/	http://www.grants.gov/	http://www.grants.gov/
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PART I GENERAL OVERVIEW

1. REQUEST FOR APPLICATIONS

In this announcement, the Institute of Education Sciences (Institute) invites applications for research projects that will contribute to its Statistical and Research Methodology in Education grant program. For the FY 2013 competition, the Institute will consider only applications that meet the requirements described below.

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

PART II STATISTICAL AND RESEARCH METHODOLOGY IN EDUCATION

2. PURPOSE

Through the grant program on Statistical and Research Methodology in Education (Methods), the Institute supports research to advance education research methods and statistical analyses. The long-term outcome of this research program will be a wide range of methodological and statistical tools that will better enable education scientists to conduct rigorous education research.

3. BACKGROUND

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 new approaches, to extend and improve existing methods, and to create other tools that would enhance the ability of researchers to conduct the types of research that the Institute funds. 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>. In this section, the Institute provides a few examples of areas in which research is needed to improve the statistical and methodological tools available to education scientists. The Institute, however, is interested in a wide range of topics, and *you are not limited to the examples described below*.

The Institute is interested in the development of practical statistical and methodological tools 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. For example, education researchers are more likely to use a new statistical program that is based on software they already use rather than a program based on software that is primarily used by specialists. Similarly, education researchers are more likely to use easily accessible, stand-alone software with documentation written for a general research audience and disseminated through well-established websites than programs designed for highly trained statisticians and disseminated in methodological journals. Tools and resources that are designed to help education researchers are more likely to have a broader impact on education research. For example, education researchers can now more accurately determine adequate sample sizes for cluster randomized trials through Optimal Design software (freely available with documentation at http://sitemaker.umich.edu/group-based/optimal_design_software) and the ongoing compilation of catalogs of intraclass correlations for different types of outcomes and different types of schools and other clusters (e.g., Hedges & Hedberg, 2007). Similarly, education researchers would be better able to

interpret effect sizes if they had alternative approaches that allowed them to better translate effect sizes into changes/differences in the studied outcome rather than relying on Cohen's 1988 guidelines. For example, one approach to improving effect size interpretation has been to determine average annual student gains on standardized achievement tests that researchers can compare their findings to (Hill, Bloom, Black, & Lipsey, 2008).

The Institute is also interested in the study and improvement of statistical methods being used by education leaders and policymakers to make important decisions. For example, education leaders and policymakers are widely adopting value-added modeling methods to evaluate students, teachers, schools, and districts. Because these evaluations often have high-stakes for those being evaluated, as well as longer-term implications for the quality of the education system, the Institute is interested in determining the proper uses of the evaluations and ways to improve the models that underlie them.

The Institute invites applications to develop tools or methods for making the analysis and interpretation of data from the National Assessment of Educational Progress (NAEP) easier for education leaders and decision makers or to permit advanced analytic techniques to be readily applied to NAEP data. Mandated by Congress, the NAEP surveys the education achievement of students in the United States and monitors their progress over time. Commonly known as the "Nation's Report Card," NAEP has been collecting data to provide educators and policymakers with valid and meaningful information for more than 30 years. The state-of-the-art psychometric and sampling designs used in NAEP present an analytic challenge for many education researchers. The Institute is also interested in the development of methodological and analytic procedures relevant to NAEP. For example, you might propose to test alternatives to some component of the NAEP sampling or psychometric model to test analytic solutions to problems that were previously intractable in the context of NAEP.

The Institute encourages applications to develop or investigate techniques to increase the generalizability of studies. Oftentimes, evaluations of education interventions are conducted on samples that may not be truly representative of larger populations of policy interest. In some cases, a convenience sample (e.g., schools willing to participate in a study) may be used. In other cases, randomly selected samples may be taken from a small geographical area (e.g., schools within a district), and consequently the results may not generalize to larger geographical areas (e.g., all districts within a state). The Institute is interested in applications to understand how results from these two types of samples can be generalized to broader populations. Although there has been some work in education on developing weights based on surveys or other sources of information on the population to make the estimate of the treatment effect more likely to reflect the effect in the general population, relatively little research has been conducted to address this problem.

The Institute is interested in applications to identify ways to increase the power of studies to detect effects. Education evaluations can be expensive, especially when schools are the unit of analysis. How can researchers increase statistical power without having to add additional sites? Although some work has examined the use of covariates and blocking to increase power (Bloom, Richburg-Hayes, & Black, 2007; Raudenbush, Martinez, & Spybrook, 2007), more research is needed. The Institute views this as a critical area of need for the advancement of education research. In addition, the Institute encourages applications to develop and refine tools for calculating power in complex multilevel designs, such as cross-classified models, growth models, and multilevel latent variable models.

The Institute is also interested in research that will address differential attrition, which can compromise a research design. Researchers need information on the causes or predictors of differential attrition, methods to reduce such attrition, guidelines to determine if such attrition has biased their estimate of the effect of an intervention, alternatives to analyzing the data (such as matched quasi-experimental comparisons) when differential attrition is high, and guidance on what data should be collected from the start of the study in case differential attrition forces researchers to rely on alternative analysis.

The Institute encourages research that examines quasi-experimental methods. Quasi-experimental methods (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 to determine which methods best reduce selection bias in estimates of the effect and the conditions that are necessary for producing such results. An example of this type of work is a study by Bloom and colleagues (2002) that utilized existing data from a large random assignment study – the National Evaluation of Welfare-to-Work Strategies – to test different approaches. The Institute has restricted-use data files from random assignment studies that could be used to conduct this type of study. Interested applicants should contact the program officer listed in *Section 24* of this program announcement. Information on obtaining IES restricted-use data licenses is available at <http://nces.ed.gov/pubsearch/licenses.asp>.

The Institute will also accept applications to conduct methodological research that piggybacks onto an existing study. For example, a researcher involved in an evaluation study of an education intervention might propose a project under this Request for Applications to test several strategies to enhance recruitment and retention of participants or to examine the influence of different consent procedures.

The Institute also solicits applications to improve or extend statistical analyses of single-case experimental designs (e.g., alternating treatments, multiple baseline designs). Single-case experimental designs pose several analytical challenges, such as violations of assumptions of traditional inferential statistics (e.g., independence between observations) and low numbers of participants, but they also come with the advantage of many measurements per participant, which yields a nested data structure. Applicants may propose research that continues exploration of various approaches (e.g., hierarchical linear modeling, nonparametric tests, measurement of effect size) for analyzing results from individual single-case studies, as well as analyzing aggregated single-case design data.

To reiterate, the Institute is interested in a wide range of topics and you are not limited to the examples described above.

PART III REQUIREMENTS OF THE PROPOSED RESEARCH

4. GENERAL REQUIREMENTS OF THE PROPOSED RESEARCH

A. Resubmissions

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 application form that your FY 2013 application is a revised application and include the application number of the previous application (an 11 character alphanumeric identifier beginning "R305" or "R324"). The 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 no more than 3 pages of Appendix A. Revised and resubmitted applications will be reviewed according to the FY 2013 Request for Applications.

If you submitted a somewhat similar application in the past but are submitting the current application as a new application, you must indicate on the application form that your FY 2013 application is a new application. You must provide a rationale explaining why the FY 2013 application should be considered to be a new application rather than a revision using no more than 3 pages of Appendix A. Without such an explanation, if the Institute determines that the current application is similar to a previously unfunded application, the Institute may send the reviews of the prior unfunded application to this year's reviewers along with the current application.

B. Applying to multiple competitions or topics

You may submit applications to more than one of the Institute's FY 2013 grant programs. In addition, within a particular grant program, you may submit multiple applications. However, you may not submit a given application or similar applications more than once. In cases of an applicant submitting 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.

5. SPECIFIC REQUIREMENTS OF THE PROPOSED RESEARCH

The Institute intends to fund research projects that aim to expand and improve the methodological and statistical tools that are available for education researchers conducting research of the type that the Institute funds through its research grant competitions, statistics contracts, and evaluation contracts. For FY 2013, the Institute requests projects that will provide findings, resources, and tools of *immediate practical use to education researchers by the end of the project*.

A. The Project Narrative

In your 25-page project narrative, use the **Significance** section to explain why it is important to develop the statistical or research method (method). 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, educational delivery settings (e.g., schools), and relevant data sources.

a. Significance of the project

In the Significance section of the project narrative, you should clearly describe your research aims while providing a compelling rationale for the development of a new method or the further development of an existing one. The Significance section should answer three questions: (a) *What is the specific method to be developed?*, (b) *Why is this method expected to produce better research results than current practice?*, and (c) *What is the overall importance of the proposed project?*

In answering these questions, you should:

- 1) Describe the specific issue or problem faced by education researchers that your work will address. Discuss the overall importance of this issue/problem to the improvement of education research, the overall importance of its resolution, and its relevance to the type of work the Institute funds.
- 2) Describe current methods used to address this issue or problem and explain why current practice is not satisfactory.
- 3) Describe your proposed method and how it is to be implemented. Contrast this with current typical practice and its identified shortcomings. A detailed description of the proposed method will clearly show that it has the potential to produce substantially better research results because (a) it is sufficiently different from current practice and does not suffer from the same shortcomings, (b) there are theoretical and empirical justifications for expecting the method to function as planned, and (c) education researchers will be able to use it.
- 4) Discuss how the products of your research will be made widely available.
- 5) Note if you are applying for a Methods award to further develop a method that was the focus of a previous project, justify the need for another award, and describe the results and outcomes of prior or currently held awards to support the further development of the method.

It can be helpful to end the Significance section with a summary paragraph justifying the importance of the proposed work. From the reviewers' perspective, such a paragraph organizes the arguments made throughout the Significance section and better prepares them to read the Research Plan.

b. Research Plan

The Research Plan must clearly describe how you will develop and test the method as well as check its feasibility of use by education researchers. You should provide sufficient detail for reviewers to understand what you are proposing to undertake and to judge the degree to which following the plan will yield answers to the research questions. The research plan should provide evidence that you have alternative approaches if difficulties are encountered.

You may propose to collect and analyze original data and/or to analyze secondary data. If original data collection is part of the proposed design, you must describe the sample (including inclusion/exclusion criteria), measures (including evidence of reliability and validity for the specified use), and procedures proposed for the data collection. You must provide sufficient documentation (e.g., letters of agreement) to assure reviewers that you already have access to the data sources or that access can be obtained and the project can be carried out in a timely fashion.

If you propose secondary data analyses, you must describe the data set(s) to be used in the investigation including information on sampling design, sample characteristics, variables to be used, structure of the data set, and ability to ensure access to the data set if you do not already have access to it. The data set should be described in sufficient detail to allow reviewers to judge whether or not the proposed analyses may 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 must provide sufficient documentation (e.g., letters of agreement) to assure reviewers that you already have access to the data or that access can be obtained and the project can be carried out in a timely fashion.

You must include a detailed description of the data analysis procedures. 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 exclusion from testing, or missing data, will be handled within the statistical analyses.

You should describe how you will test whether the method works as it is intended to and produces reliable and valid results. In addition, you should describe how you will check whether education researchers can successfully use the method (e.g., colleagues might use the method in their own research, students could use the method in a course you teach).

c. Personnel

For your application to be competitive, you will need a research team that collectively demonstrates expertise in the relevant content domain(s), the methodology required, working with the datasets proposed for use, adapting methods for use by education researchers, and working with schools or other education agencies as needed.

This section should identify all key personnel on the project team including those from other organizations. You should briefly describe the following for all key personnel:

- 1) qualifications,
- 2) roles and responsibilities within the project,
- 3) percent of time and calendar months per year (academic plus summer) to be devoted to the project, and
- 4) past success at disseminating research findings in peer-reviewed scientific journals.

d. Resources

You should describe the institutional resources of all the institutions involved in the proposed research that will be used to support your study. You should discuss the overall management of the research project and what resources and procedures are available to support the successful completion of this

project. You should describe your access to any data sets that you require and, if applicable, to schools (or other education delivery settings) you will be working with. In addition, you should include letters of support in Appendix C documenting the willingness of organizations to allow you to use their datasets for the purposes of your study and, if applicable, the availability and cooperation of the schools to take part in the study via letters of support. These letters should be placed in Appendix C and 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, student assessments).

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

B. Awards

Your proposed length of project should reflect the scope of work to be accomplished. **The maximum duration of a Statistical and Research Methodology project is 3 years.** Applications that propose a longer project length will be deemed non-responsive to the Request for Applications and will not be accepted for review.

Your budget should reflect the scope of the work to be done. **The maximum award for a Statistical and Research Methodology project is \$900,000 (total cost = direct + indirect costs).** An application proposing a budget higher than the maximum award will be deemed non-responsive to the Request for Applications and will not be accepted for review.

The Institute does not intend for the maximum award to be interpreted as suggesting that only large projects are funded under the Statistical and Research Methodology in Education Grants program. The Institute is interested in applications proposing high-quality work that can be done for much smaller amounts of funding (e.g., \$50,000). Such projects may be particularly appropriate for early-career researchers working to develop their research agenda. As noted above, you should request a budget that reflects the scope of your work and you should decide whether to apply based on the significance of your work and your research team's ability to complete the work.

PART IV GENERAL SUBMISSION AND REVIEW INFORMATION

6. MECHANISM OF SUPPORT

The Institute intends to award grants pursuant to this Request for Applications. The maximum length of the award period is 3 years.

7. FUNDING AVAILABLE

Although the plans of the Institute include the Statistical and Research Methodology program described in this announcement, awards pursuant to this Request for Applications are contingent upon the availability of funds and the receipt of meritorious applications. The number of projects funded depends upon the number of high quality applications submitted. The Institute does not have plans to award a specific number of grants under this competition.

The size of the award depends on the scope of the project. Please attend to the maximums set for project length (3 years) and budget (\$900,000). If you request a project length longer than the maximum length or a budget higher than the maximum award, your application will be deemed non-responsive to the Request for Applications and will not be reviewed.

8. ELIGIBLE APPLICANTS

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

You may submit an application if your institution is not located in the territorial United States. You may also propose working with sub-awardees 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 U.S. (both primary grantees and sub-awardees) cannot charge indirect costs.

You may collaborate with, or be from, for-profit entities that develop, distribute, or otherwise market products or services that can be used in the proposed research activities. Involvement of the developer or distributor must not jeopardize the objectivity of the research.

All research supported by the Institute **must be relevant to education in the United States**.

9. THE PRINCIPAL INVESTIGATOR

The Principal Investigator 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.

Your institution is responsible for identifying the Principal Investigator. Your institution may elect to designate more than one Principal Investigator. In so doing, the institution identifies them as individuals who share the authority and responsibility for leading and directing the research project intellectually and logistically. All Principal Investigators will be listed on any grant award notification.

However, institutions applying for funding must designate a single point of contact for the project. The role of this person is primarily for communication purposes on the scientific and related budgetary aspects of the project and should be listed as the Principal Investigator. All other Principal Investigators should be listed as Co-Principal Investigators.

The Principal Investigator is expected to attend one meeting each year (for up to 3 days) in Washington, D.C. with other grantees and Institute staff. The project's budget should include this meeting. Should the Principal Investigator not be able to attend the meeting, he/she can designate another member of the research team to attend.

10. SPECIAL CONSIDERATIONS FOR INDIRECT COST RATES

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 sub-awardees, not located in the territorial U.S. cannot charge indirect costs.

11. DEMONSTRATING ACCESS TO DATA AND EDUCATION DELIVERY SETTINGS

You may propose to conduct research that requires access to studies currently under way, secondary data sets, or education delivery settings (e.g., classrooms, schools, districts). In such cases, you will need to provide evidence that you have access to these resources prior to receiving funding. Whenever possible, you should include letters of support 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 may 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:

Building off of 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 must be one of the members of the research team applying for the grant to conduct the new project.

Using secondary data sets

If your application is being considered for funding based on scientific merit scores from the peer review panel and your research relies on access to secondary data sets (such as 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 may 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.

Conducting research in education delivery settings

If your application is being considered for funding based on scientific merit scores from the peer review panel and your research relies on access to education delivery 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 may ask you to provide documentation that the settings originally recruited for the application are still willing to partner in the research.

In addition to obtaining evidence of access, the Institute strongly advises applicants to establish a written agreement, within three months of receipt of an award, among all key collaborators and their institutions (e.g., Principal and Co-Principal Investigators) regarding roles, responsibilities, access to data, publication rights, and decision-making procedures.

12. 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, peer-reviewed 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 manuscript is to be made available to the public through ERIC no later than 12 months after the official date of publication. Institutions and investigators are responsible for ensuring that any publishing or copyright agreements concerning submitted articles fully comply with this requirement.

13. SPECIAL CONDITIONS ON GRANTS

The Institute may impose special conditions on a grant if the applicant or 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.

14. SUBMITTING A LETTER OF INTENT

The Institute asks that you submit a letter of intent by **4:30 p.m.** Washington D.C. time on the relevant due date for the competition to which you plan to submit. The Institute staff use the information in the letters of intent to identify the expertise needed for the scientific peer review panels, secure a sufficient number of reviewers to handle the anticipated number of applications, and provide feedback to you on your research idea. The Institute encourages you to submit a letter of intent even if you think you might later decide not to submit an application. The letter of intent is not binding and does not enter into the review of a subsequent application. The letter of intent must be submitted electronically using the instructions provided at <https://iesreview.ed.gov>. Receipt of the letter of intent will be acknowledged via email. Should you miss the deadline for submitting a letter of intent, you still may submit an application. The Institute asks that you inform the relevant program officer (identified in *Section 24*) of your intention to submit an application if you miss the deadline.

A. Content

The letter of intent should include the following:

- 1) Descriptive title
- 2) Brief description of the proposed project
- 3) Name, institutional affiliation, address, telephone number, and e-mail address of the Principal Investigator and any Co-Principal Investigators
- 4) Name and institutional affiliation of any key collaborators and contractors
- 5) Duration of the proposed project
- 6) Estimated total budget request (the estimate need only be a rough approximation)

B. Format and Page Limitation

The online submission page (<http://iesreview.ed.gov>) contains fields for each of the content areas described above. You will use these fields to provide the necessary information. The project description should be single-spaced and should not exceed 1 page (about 3,500 characters).

15. APPLICATION INSTRUCTIONS AND APPLICATION PACKAGE

A. Documents Needed to Prepare an Application

To complete and submit an application, you need to review and use three documents: the Request for Applications, the IES Grants.gov Application Submission Guide, and the Application Package.

- 1) The *Request for Applications* for the Statistical and Research Methodology in Education Grant Program (CFDA 84.305D) describes the substantive requirements for a research application.
 - ✓ Request for Applications <http://ies.ed.gov/funding/>
- 2) The *IES Grants.gov Application Submission Guide* provides the instructions for completing and submitting the forms included in the Application Package.
 - ✓ IES Grants.gov Application Submission Guide <http://ies.ed.gov/funding/>

Additional help navigating Grants.gov is available in the Grants.gov User Guides:

- ✓ Grants.gov User Guides http://www.grants.gov/applicants/app_help_reso.jsp

3) The *Application Package* provides all of the forms that you must complete and submit. The application form approved for use in the competitions specified in this RFA is the government-wide SF-424 Research and Related (R&R) Form (OMB Number 4040-0001). *Section C* below explains how to download the Application Package from Grants.gov.

B. Date Application Package is Available on Grants.gov

The Application Package will be available on <http://www.grants.gov/> by **April 19, 2012**.

C. How to Download the Correct Application Package

a. CFDA number

To find the correct downloadable Application Package, you must first search by the CFDA number for each IES Request for Applications *without* the alpha suffix. For the Statistical and Research Methodology in Education Request for Applications, applicants must search on: **CFDA 84.305**.

b. Statistical and Research Methodology in Education Application Package

The Grants.gov search on CFDA 84.305 will yield more than one Application Package. For the Statistical and Research Methodology in Education grant 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 the grant competition and competition deadline. If you use a different Application Package, even if it is for an Institute competition, the application will be submitted to the wrong competition. Applications submitted using the incorrect application package may not be reviewed for the Statistical and Research Methodology in Education grant program.

16. MANDATORY ELECTRONIC SUBMISSION OF APPLICATIONS AND DEADLINE

Applications must be **submitted electronically and received by 4:30:00 p.m., Washington, D.C. time** on the application deadline date.

Grant applications must be submitted electronically through the Internet using the software and application package provided on the Grants.gov website: <http://www.grants.gov/>. You must follow the application procedures and submission requirements described in the Institute's Grants.gov Application Submission Guide and the instructions in the User Guides provided by Grants.gov.

Please note that to submit an electronic application through Grants.gov, your institution must be registered with Grants.gov (http://www.grants.gov/applicants/organization_registration.jsp).

To register with Grants.gov, your institution must have

- a valid Duns and Bradstreet Data Universal Numbering Systems (DUNS) number, and
- an active registration with the Central Contractor Registration (CCR).

Your institution is strongly encouraged to start the Grants.gov registration process at least four weeks prior to the application due date.

Applications submitted in paper format will be rejected unless you (a) qualify for one of the allowable exceptions to the electronic submission requirement described in the Federal Register notice announcing the Statistical and Research Methodology in Education Grant (CFDA Number 84.305D) competition described in this Request for Applications and (b) submit, no later than two weeks before the application deadline date, a written statement to the Institute that documents that you qualify for one of these exceptions. For more information on using Grants.gov, you should visit the Grants.gov website.

17. TECHNICAL ASSISTANCE FOR APPLICANTS

The Institute encourages you to contact the Institute's program officers as you develop your application. Program officers can offer advice on choosing the appropriate grant program to apply under and preparing applications. They can also offer substantive advice on your research idea and draft project narrative. To identify the appropriate program officer for your research idea, see *Section 24*.

In addition, you are encouraged to sign up for the Institute's funding opportunities webinars for advice on choosing the correct research program, grant writing, or submitting your application. For more information regarding webinar topics, dates, and registration process, see <http://ies.ed.gov/funding/webinars/index.asp>.

18. WRITING YOUR APPLICATION: CONTENT AND FORMATTING REQUIREMENTS

A. Overview

In this section, the Institute provides instructions regarding the content of the (a) project summary/abstract, (b) project narrative, (c) Appendix A, (d) Appendix B, (e) Appendix C, and (f) bibliography and references cited. Instructions for all other documents to be included in the application (i.e., the SF-424 forms, biographical sketches, narrative budget justification, and human subjects narrative) are provided in the *IES Grants.gov Application Submission Guide*.

B. General Format Requirements

Margin, format, and font size requirements for the project summary/abstract, project narrative, Appendix A, Appendix B, Appendix C, and bibliography are described in this section. You must adhere to the type size and format specifications for the entire narrative, including footnotes, to ensure that your text is easy for reviewers to read and that all applicants have the same amount of available space in which to describe their projects.

a. Page and margin specifications

For the purposes of applications submitted under this RFA, a "page" is 8.5 in. x 11 in., on 1 side only, with 1-inch margins at the top, bottom, and both sides.

b. Spacing

Text must be single spaced in the narrative.

c. Type size (font size)

Type must conform to the following 3 requirements:

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

To ensure your font meets these requirements, you should check the type size using a standard device for measuring type size, rather than relying on the font selected for a particular word processing/printer combination. The type size used must conform to all three requirements. These requirements apply to the PDF file as submitted.

When applicants use small type size, it is difficult for reviewers to read the application, and applicants may receive an unfair advantage by allowing for more text in their applications. Consequently, the use of small type font is grounds for the Institute to not accept an application for review.

As a practical matter, applicants who use a 12-point Times New Roman font without compressing, kerning, condensing, or other alterations typically meet these requirements. Figures, charts, tables, and figure legends may be in a smaller type size but must be readily legible.

d. Graphs, diagrams, tables

The Institute encourages applicants to use black and white in graphs, diagrams, tables, and charts. If you choose to use color, you must ensure that the material reproduces well when photocopied in black and white.

C. Project Summary/Abstract

a. Submission

You must submit the project summary/abstract as a separate .PDF attachment.

b. Page limitations and format requirements

The project summary/abstract is limited to one single-spaced page and must adhere to the margin, format, and font size requirements described in *Section 18.B General Format Requirements*.

c. Content

The project summary/abstract should include the following:

- 1) Title of the project
- 2) The Request for Applications (Statistical and Research Methodology in Education)
- 3) A brief description of the purpose of the project
- 4) If applicable, a brief description of the sample that will be involved in the study (e.g., age or grade level, race/ethnicity, SES)
- 5) If applicable, a brief description of the dataset(s) to be used
- 6) A brief description of the primary research method

Please see the website <http://ies.ed.gov/ncer/projects> for examples of project summaries/abstracts.

D. Project Narrative

a. Submission

You must submit the project narrative as a separate .PDF attachment.

b. Page limitations and format requirements

The project narrative is limited to **25 single-spaced pages** for all applicants. The 25-page limit for the project narrative does not include any of the SF-424 forms, the 1-page summary/abstract, the appendices, research on human subjects information, bibliography, biographical sketches of senior/key personnel, narrative budget justification, subaward budget information, or certifications and assurances. If the Institute determines that the narrative exceeds the 25 single-spaced page limit, the Institute will remove any pages after the twenty-fifth page of the narrative.

To help the reviewers locate information and conduct the highest quality review, you should write a concise and easy to read application with pages numbered consecutively using the top or bottom right-hand corner.

c. Format for citing references in text

To ensure that all applicants have the same amount of available space in which to describe their projects in the project narrative, you should use the author-date style of citation (e.g., James, 2004), such as 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 the Request for Applications: (a) Significance, (b) Research Plan, (c) Personnel, and (d) Resources. Information to be included in each of these sections is detailed in *Part III Requirements of the Proposed Research*. The information you include in each of these four sections will provide the majority of the information on which reviewers will evaluate the application.

E. Appendix A (Required for Resubmissions, Optional Otherwise)

a. Submission

If you have an Appendix A, you must include it at the end of the project narrative and submit it as part of the same .PDF attachment.

b. Page limitations and format requirements

Appendix A is limited to 15 pages. It must adhere to the margin, format, and font size requirements described in *Section 18.B General Format Requirements*.

c. Content

(i) Required Content for Resubmissions

Appendix A is required if you are resubmitting an application or are submitting an application that is similar to an application you submitted previously. If you are resubmitting an application, you must provide a description (up to 3 pages in length) of how the revision 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 must provide a rationale (up to 3 pages in length) explaining why the current application should be considered a "new" application rather than a "resubmitted" application.

(ii) Optional Content for All Applications

You may also include figures, charts, or tables that supplement the project narrative as well as examples of measures (e.g., tests, surveys, observation and interview protocols) to be used in the project in Appendix A. These are the only materials that may be included in Appendix A; all other materials will be removed prior to review of the application. You should include narrative text in the 25-page project narrative, not in Appendix A.

F. Appendix B (Optional)

a. Submission

If you choose to have an Appendix B, you must include it at the end of the project narrative, following Appendix A (if included), and submit it as part of the same .PDF attachment.

b. Page limitations and format requirements

Appendix B is limited to 10 pages. It must adhere to the margin, format, and font size requirements described in *Section 18.B General Format Requirements*.

c. Content

The purpose of Appendix B is to allow you to include examples of how the research products will be made easily usable by education researchers (e.g., through a user interface, a table of results). These are the only materials that may be included in Appendix B; all other materials will be removed prior to review of the application. Narrative text regarding these materials must be included in the 25-page project narrative.

G. Appendix C (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 (or if no Appendix B is included, then Appendix C should follow Appendix A if it is included) and submit it as part of the same .PDF attachment.

b. Page limitations and format requirements

Appendix C does not have a page limit. Appendix C contains letters of agreement from research partners (e.g., schools, districts, states, other data sources, consultants). You must ensure that the letters reproduce well so that reviewers can easily read them. Do not reduce the size of the letters.

c. Content

You should include in Appendix C the letters of agreement from partners (e.g., schools and districts), data sources (e.g., state agencies holding administrative data), and consultants.

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, activities, and resources to the research project that will be required if the application is funded. 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.

H. Bibliography and References Cited

a. Submission

You must submit this section as a separate .PDF attachment.

b. Page limitations and format requirements

There are no limitations to the number of pages in the bibliography. The bibliography must adhere to the margin, format, and font size requirements described in *Section 18.B General Format Requirements*.

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.

19. APPLICATION PROCESSING

Applications must be **submitted electronically and received by 4:30:00 p.m., Washington, D.C. time** on the application deadline date listed in the heading of this request for applications. After receiving the applications, Institute staff will review each application for completeness and for responsiveness to this Request for Applications. Applications that do not address specific requirements of this request will be returned to the applicants without further consideration.

Once you formally submit an application, Institute personnel will not comment on its status until the award decisions are announced except with respect to issues of completeness and eligibility.

20. PEER REVIEW PROCESS

The Institute will forward all applications that are compliant and responsive to this request to be evaluated for scientific and technical merit. Reviews are conducted in accordance with the review criteria stated below 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 Institutes calculates an average overall score for each application and prepares a preliminary rank order of applications before the full peer review panel convenes to complete the review of applications.

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

21. 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 III Requirements of the Proposed Research*.

A. Significance

Does the applicant provide a compelling rationale for the significance of the project as defined in the Significance section?

B. Research Plan

Does the applicant meet the methodological requirements described in the Research Plan section?

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?

D. Resources

Does the applicant have the facilities, equipment, supplies, and other resources required to support the proposed activities? Do the commitments of each partner show support for the implementation and success of the project?

22. RECEIPT AND START DATE SCHEDULE

A. Letter of Intent Receipt Date

April 19, 2012

B. Application Deadline Date

June 21, 2012

C. Earliest Anticipated Start Date

March 1, 2013

D. Latest Possible Start Date

September 1, 2013

The grant review and award process takes approximately eight months from the time of submission of the application. Applicants will be notified about funding decisions via email *no later than* the earliest anticipated start date (March 1, 2013).

23. AWARD DECISIONS

The following will be considered in making award decisions:

- Scientific merit as determined by peer review,
- Responsiveness to the requirements of this request,
- Performance and use of funds under a previous Federal award,
- Contribution to the overall program of research described in this request, and
- Availability of funds.

24. INQUIRIES MAY BE SENT TO

Dr. Phill Gagné
Institute of Education Sciences
400 Maryland Ave, SW
CP - 619
Washington, DC 20202

Email: Phill.Gagne@ed.gov
Telephone: (202) 219-1412

25. 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.

26. APPLICABLE REGULATIONS

The Education Department General Administrative Regulations (EDGAR) in 34 CFR parts 74, 77, 80, 81, 82, 84, 85, 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.

27. REFERENCES

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

Bloom, H. S., Michalopoulos, C., Hill, C. J., & Lei, Y. (2002). *Can Nonexperimental Comparison Group Methods Match the Findings From a Random Assignment Evaluation of Mandatory Welfare-to-Work Programs?* MDRC Working Papers on Research Methodology. Downloaded from <http://www.mdrc.org/publications/66/full.pdf> on August 26, 2008.

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

Hedges, L. V., & Hedberg, E.C. (2007). Intraclass Correlation Values for Planning Group-Randomized Trials in Education. *Educational Evaluation and Policy Analysis, 29*, 60-87.

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Raudenbush, S. W., Martinez, A., & Spybrook, J. (2007). Strategies for Improving Precision in Group-Randomized Experiments. *Educational Evaluation & Policy Analysis*, 29(1), 5-29.