INSTITUTE OF EDUCATION SCIENCES

REQUEST FOR APPLICATIONS

Statistical and Research Methodology in Education

CFDA Number: 84.305D

COMPETITION ROUND	**JUNE**
Letter of Intent Due Date (https://ies.constellagroup.com/)	04/29/2010
Application Package Available (http://www.grants.gov/)	04/29/2010
Application Due Date (http://www.grants.gov/)	06/24/2010

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 2011 competition, the Institute will consider only applications that meet the requirements outlined below under **Part II Statistical and Research Methodology in Education** and **Part III Requirements of the Proposed Research**.

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 methodologies 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. However, the Institute is interested in a wide range of topics, and applicants are not limited to the examples described below.

The Institute is very interested in the development of practical statistical and methodological tools that can be used by mainstream education researchers (rather than by statisticians or researchers with highly sophisticated statistical skills) to improve the design of their studies, analysis of their data, and interpretation of their findings. For example, a new statistical program that is based on software already widely used by education researchers, rather than on software that is primarily used by specialists, is more likely to be used by education researchers. Similarly, easily accessible, stand alone software with documentation written for a general research audience that is disseminated through well-established websites is more likely to gain wide use by education researchers than are programs designed for use by highly trained statisticians. Tools and resources that are designed to help mainstream education researchers are more likely to have a broader impact on education research. For example, the ability of education researchers to determine adequate sample sizes for cluster randomized trials has been enhanced through the development of the Optimal Design software (freely available with documentation at http://sitemaker.umich.edu/group-based/optimal_design_software) and the ongoing compilation catalogs of intraclass correlations for different types of outcomes and different types of schools or other

clusters (e.g., Hedges & Hedberg, 2007). Similarly, interpretation of effect sizes would be improved if education researchers could drop the use of Cohen's 1988 rule of thumb and have access to better information to determine the importance of improvements in education outcomes found in their study, for example, by comparing their results to average annual student gains on standardized achievement tests (e.g., Hill, Bloom, Black, & Lipsey, 2008).

Mandated by Congress, the National Assessment of Educational Progress (NAEP) surveys the education achievement of students in the United States, and monitors their progress over time. Widely 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 invites proposals to develop tools or methods for making the analysis and interpretation of NAEP data easier for education leaders and decision makers or to permit advanced analytic techniques to be readily applied to NAEP data. The Institute is also interested in the development of methodological and analytic procedures relevant to NAEP. For example, applicants 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 others cases, random 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 proposals 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 very interested in applications to identify ways to increase the power of studies to detect effects. Education evaluations can be expensive 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.

Differential attrition can compromise an experimental 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 what data should be collected from the start of the study in case differential attrition forces researchers to rely on alternative analysis.

When random assignment is not feasible to evaluate the impact of an intervention, nonexperimental comparison group methods (e.g., instrumental variables, propensity score matching, fixed effects models) are typically employed. The Institute strongly encourages research that examines nonexperimental comparison group methods 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 20** of this program announcement. Information on obtaining IES restricted-use data licenses is available at http://nces.ed.gov/statprog/rudman/.

The Institute will also accept applications to conduct methodological research that piggybacks onto an existing study. For example, a researcher might propose to conduct systematic variation of strategies to enhance recruitment and retention of participants, to examine the influence of different consent procedures, or to test alternative data collection procedures.

As a final example, 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 many analytical challenges, such as violations of assumptions of traditional inferential statistics (e.g., independence between observations). 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.

As previously noted, the Institute is interested in a wide range of topics and applicants are not limited to the examples described above.

PART III REQUIREMENTS OF THE PROPOSED RESEARCH

4. GENERAL REQUIREMENTS OF THE PROPOSED RESEARCH

A. Basic Requirements

a. Resubmissions

Applicants who intend to revise and resubmit a proposal that was submitted to one of the Institute's previous competitions but that was not funded must indicate on the application form that their FY 2011 proposal is a revised proposal. Their prior reviews will be sent to this year's reviewers along with their proposal. Applicants should indicate the revisions that were made to the proposal on the basis of the prior reviews using no more than 3 pages of Appendix A.

Applicants who have submitted a somewhat similar proposal in the past but are submitting the current proposal as a new proposal must indicate on the application form that their FY 2011 proposal is a new proposal. Applicants should provide a rationale explaining why the current proposal should be considered to be a "new" proposal rather than a "revised" proposal at the beginning of Appendix A using no more than 3 pages. Without such an explanation, if the Institute determines that the current proposal is very similar to a previously unfunded proposal, the Institute may send the reviews of the prior unfunded proposal to this year's reviewers along with the current proposal.

b. Applying to multiple competitions or topics

Applicants may submit proposals to more than one of the Institute's competitions or topics in a given fiscal year. In addition, within a particular competition or topic, applicants may submit multiple proposals. However, in any fiscal year, applicants may submit a given proposal only once (i.e., applicants may not submit the same proposal or very similar proposals to multiple topics or to multiple goals in the same topic or to multiple competitions). If the Institute determines prior to panel review that an applicant has submitted the same proposal or very similar proposals to multiple topics within or across competitions within a given fiscal year and the proposal is judged to be compliant and responsive to the submission rules and requirements described in the Request for Applications, the Institute will select one version of the application to be reviewed by the appropriate scientific review panel. If the Institute determines after panel review that an applicant has submitted the same proposal or very similar proposals to multiple

topics within or across competitions and if the proposal is determined to be worthy of funding, the Institute will select the topic under which the proposal will be funded.

B. Requirements for the Proposed Project

The Institute intends to fund research projects intended 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.

a. Significance of the project

Applicants must provide a compelling justification for the proposed project. In this justification, applicants should address the practical importance of the proposed work and its potential contribution to the advancement of education and special education research, evaluation, and statistics. In particular, applicants should address the relevance of the proposed work to the type of work that the Institute funds. If the proposed research will be conducted outside of the United States or using non-U.S. data, applicants must include a justification indicating why the work is relevant to education in the United States.

b. Methodological requirements

(i) Research questions

Applicants should pose clear, concise hypotheses or research questions.

(ii) Research plan

Applicants should describe their research plan clearly and in sufficient detail for reviewers to understand what the applicants are proposing to undertake and to judge the degree to which following the plan will yield answers to the posed hypotheses or research questions. The research plans should provide evidence that the applicant anticipates and has alternative approaches if difficulties are encountered.

Applicants proposing secondary data analyses should describe clearly 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 the applicant does not already have access to it. The data set should be described in sufficient detail to allow reviewers to be able 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, applicants should provide sufficient detail for reviewers to be able to judge the feasibility of the plan.

Applicants may propose to collect original data. The applicant should carefully 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.

(iii) Access to data

Applicants proposing secondary data analyses must provide sufficient documentation (e.g., letters of agreement) to assure reviewers that they already have access to the data or that access can be obtained and the project can be carried out in a timely fashion.

Applicants may propose to conduct a methodological research study that piggybacks onto an existing, on-going study (i.e., requires access to subjects and data from another study that is currently in progress). 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 a methodological research study.

(iv) Data analysis

The applicant must include detailed descriptions of data analysis procedures. Data analytic plans must have sufficient detail to permit reviewers to judge the appropriateness and adequacy of the plan for addressing the hypotheses or research questions. Where analyses of existing or new data sets are included, strong applications will include an explicit discussion of how exclusion from testing, or missing data, will be handled within the statistical analyses.

c. Personnel

Competitive applicants will have research teams that collectively demonstrate expertise required to conduct the proposed project. Applicants who were (or are) Principal or Co-Principal Investigators on previous Institute awards should briefly describe the results (e.g., findings, products, what was accomplished) from the prior awards.

d. Resources

Competitive applicants will have access to institutional resources that adequately support research activities and, if applicable, access to data sets, schools, or other resources necessary to conduct the proposed research.

e. Awards

Typical awards for Statistical and Research Methodology projects are $75,000 to $400,000 (total cost = direct + indirect costs) per year for up to 3 years. Larger awards will be considered. The size of the award depends on the scope of the project.

PART IV GENERAL SUBMISSION AND REVIEW INFORMATION

5. MECHANISM OF SUPPORT

The Institute intends to award grants pursuant to this request for applications. The maximum length of the award period is three years.

6. FUNDING AVAILABLE

Typical awards are $75,000 to $400,000 (total cost = direct + indirect costs) per year for up to 3 years. Larger awards will be considered. The size of the award depends on the scope of the project.

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

7. 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.

8. SPECIAL REQUIREMENTS

Research supported through this program must be relevant to U.S. schools.

Recipients of awards are expected to publish or otherwise make publicly available the results of the work supported through this program. Institute-funded investigators should 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 Institute will make the manuscript 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.

Applicants must budget for one meeting each year in Washington, D.C., with other grantees and Institute staff for a duration of up to three days of meetings. At least one project representative must attend the three-day meeting.

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

Applicants may propose studies that piggyback onto an existing study (i.e., requires 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.

If an application is being considered for funding based on the technical merit scores from the scientific peer review panel and the research relies on access to secondary data sets, the applicant will need to provide documentation that they have access to the necessary data sets in order to receive a grant. This means that if an applicant does not have permission to use the proposed data sets at the time of application, the applicant will need to provide documentation to the Institute from the entity controlling the data set(s) indicating that the applicant has permission to use the data for the proposed research for the time period discussed in the proposal before the grant will be awarded.

The Institute strongly advises applicants to establish a written agreement 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 within three months of receipt of an award.

9. DESIGNATION OF PRINCIPAL INVESTIGATOR

The applicant institution is responsible for identifying 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. An applicant institution may elect to designate more than one Principal Investigator. In so doing, the applicant 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.

10. LETTER OF INTENT

The Institute asks all applicants to submit a letter of intent by 4:30 p.m. Washington D.C. time on the relevant due date for the competition to which they plan to submit. The information in the letters of intent enable Institute staff to identify the expertise needed for the scientific peer review panels and secure sufficient reviewers to handle the anticipated number of applications. The Institute encourages all interested applicants to submit a letter of intent, even if they think that they 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://ies.constellagroup.com. Receipt of the letter of intent will be acknowledged via email.

A. Content

The letter of intent should include:

a. Descriptive title
b. Brief description of the proposed project
d. Name, institutional affiliation, address, telephone number and e-mail address of the Principal Investigator(s)
e. Name and institutional affiliation of any key collaborators and contractors
f. Duration of the proposed project
g. Estimated total budget request (the estimate need only be a rough approximation).

B. Format and Page Limitation

Fields are provided in the letter of intent for each of the content areas described above. The project description should be single-spaced and should not exceed one page (about 3,500 characters).

11. MANDATORY SUBMISSION OF ELECTRONIC APPLICATIONS

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

Applications submitted in paper format will be rejected unless the applicant (a) qualifies 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 (CFDA Number 84.305D) competitions described in this Request for Applications and (b) submits, no later than two weeks before the application deadline date, a written statement to the Institute that documents that the applicant qualifies for one of these exceptions.

For more information on using Grants.gov, applicants should visit the Grants.gov web site.

12. APPLICATION INSTRUCTIONS AND APPLICATION PACKAGE

A. Documents Needed to Prepare Applications

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

- The *Request for Applications* for the Statistical and Research Methodology in Education program (CFDA 84.305D) describes the substantive requirements for a research application.

  ✓ Request for Applications http://ies.ed.gov/funding/

- The *IES Grants.gov Application Submission Guide* provides the instructions for completing and submitting the forms.

  ✓ IES Grants.gov Application Submission Guide http://ies.ed.gov/funding/

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

  ✓ Grants.gov User Guide http://www.grants.gov/help/user_guides.jsp

- The *Application Package* provides all of the forms that need to be completed and submitted. 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). The applicant must follow the directions in **Section C** below 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 the following date:

Application Package Available by	April 29, 2010

C. Download Correct Application Package
a. CFDA number
Applicants must first search by the CFDA number for each IES Request for Applications *without* the alpha suffix to obtain the correct downloadable Application Package. 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 Grants Request for Applications, applicants must download the package for the appropriate deadline marked:

Application Package:	**CFDA 84.305D — June Statistical and Research Methodology in Education Application Package**

In order for the application to be submitted to the correct grant competition, applicants must download the Application Package that is designated for the grant competition and competition deadline. Using a different Application Package, even if that package is for an Institute competition, will result in the application being submitted to the wrong competition; applications submitted to the wrong competition may not be reviewed for the Statistical and Research Methodology in Education competition.

13. SUBMISSION PROCESS AND DEADLINE

Applications must be submitted **electronically and received by 4:30:00 p.m.**, **Washington, D.C. time** on the application deadline date, using the standard forms in the Application Package and the instructions provided on the Grants.gov website.

Potential applicants should check this site for information about the electronic submission procedures that must be followed and the software that will be required.

14. 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) bibliography, (d) Appendix A, and (e) Appendix B. Instructions for all other documents to be included in the application (e.g., forms, budget narrative, human subjects narrative) are provided in the IES Application Submission Guide.

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

a. Page and margin specifications
For the purposes of applications submitted under this RFA, a "page" is 8.5 in. x 11 in., on one 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 three requirements:

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

Applicants should check the type size using a standard device for measuring type size, rather than relying on the font selected for a particular word processing/printer combination. The type size used must conform to all three requirements. Small type size makes it difficult for reviewers to read the application; consequently, the use of small type will be grounds for the Institute to return the application without peer review.

Adherence to type size and line spacing requirements is necessary so that no applicant will have an unfair advantage, by using small type or by providing more text in their applications. **Note, these requirements apply to the PDF file as submitted**. 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
Applicants must use only black and white in graphs, diagrams, tables, and charts. The application must contain only material that reproduces well when photocopied in black and white.

C. Project Summary/Abstract
a. Submission
The project summary/abstract will be submitted 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 above.

c. Content
The project summary/abstract should include:

(1) Title of the project
(2) Brief description of the purpose of the project
(3) If applicable, brief description of the population(s) from which the participants of the study (ies) will be sampled (grade level or age groups, race/ethnicity, SES) or dataset to be used
(4) 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

The project narrative will be submitted as a .PDF attachment.

b. Page limitations and format requirements

The project narrative is limited to **25 single-spaced pages** for all applicants. If the narrative for the Statistical and Research Methodology in Education program is determined to exceed the 25 single-spaced page limit, the Institute will remove any pages after the twenty-fifth page of the narrative.

The 25-page limit for the project narrative does not include any of the SF 424 forms, the one-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.

Reviewers are able to conduct the highest quality review when applications are concise and easy to read, 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, applicants should 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

To be compliant with the requirements of the Request for Applications, the project narrative must include four sections: (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** and in specific requirements in **Part II Statistical and Research Methodology in Education**. Incorporating the requirements outlined in these sections provides the majority of the information on which reviewers will evaluate the proposal.

E. Bibliography and References Cited

a. Submission

The section will be submitted as a .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 14.B. General Format Requirements**.

c. Content

Applicants 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 research narrative.

F. Appendix A

a. Submission

Appendix A should be included at the end of the Project Narrative and submitted 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 14.B. General Format Requirements**.

c. Content

(i) Purpose

The purpose of Appendix A is to allow the applicant to include any figures, charts, or tables that supplement the research text, examples of measures to be used in the project, letters of agreement from partners (e.g., schools) and consultants, and letters of permission to use confidential data sets. In addition, in the case of a resubmission, the applicant may use up to 3 pages of the appendix to describe the ways in which the revised proposal is responsive to prior reviewer feedback. Similarly, applicants who have submitted a somewhat similar proposal in the past but are submitting the current proposal as a *new* proposal may use up to 3 pages of Appendix A to provide a rationale explaining why the current proposal should be considered to be a "new" proposal rather than a "revised" proposal. These are the only materials that may be included in Appendix A; all other materials will be removed prior to review of the application. Narrative text related to any aspect of the project (e.g., descriptions of the proposed sample, the design of the study, or previous research conducted by the applicant) must be included in the research narrative.

(ii) Letters of agreement/permission to use data sets

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. The Institute recognizes that some applicants may have more letters of agreement than will be accommodated by the 15-page limit. In such instances, applicants should include the most important letters of agreement and may list the letters of agreement that are not included in the application due to page limitations. Letters of permission to use secondary data sets should include sufficient information to make clear that the applicant will have access to the data set for the research proposed in the application and for the time period discussed in the application.

G. Appendix B (Optional)

a. Submission
If applicable, Appendix B should be included at the end of the Project Narrative, following Appendix A, and submitted 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 14.B. General Format Requirements.**

c. Content
The purpose of Appendix B is to allow applicants to include examples of curriculum material, computer screens, assessment items, or other materials used in an intervention or assessment that is pertinent to the proposed project. 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 (e.g., rationale for choosing a particular instrument) must be included in the 25-page research narrative.

15. APPLICATION PROCESSING

Applications must be submitted electronically and received by **4:30:00 pm, Washington, D.C. time** on the application deadline date listed in the heading of this request for applications. Upon receipt, each application will be reviewed 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.

16. PEER REVIEW PROCESS

Applications that are compliant and responsive to this request will be evaluated for scientific and technical merit. Reviews will be 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 application will be 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, an average overall score for each application will be calculated and a preliminary rank order of applications will be prepared 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 proposal that he or she believes merits full panel review but would not have been included in the full panel meeting based on its preliminary rank order.

17. REVIEW CRITERIA FOR SCIENTIFIC MERIT

The purpose of Institute-supported research is to contribute to the solution of 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. Reviewers for all applications will be expected 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 and in Part II Statistical and Research Methodology in Education.

A. Significance

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

B. Research Plan

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

C. Personnel

Does the description of the personnel make it apparent that the Principal Investigator, project director, 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?

18. RECEIPT AND START DATE SCHEDULE

A. Letter of Intent Receipt Date

April 29, 2010

B. Application Deadline Date

June 24, 2010

C. Earliest Anticipated Start Date

March 1, 2011

D. Latest Possible Start Date

September 1, 2011

19. 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
- Availability of funds

20. INQUIRIES MAY BE SENT TO

Dr. Allen Ruby
Institute of Education Sciences
555 New Jersey Avenue, NW
Washington, D.C. 20208

Email: Allen.Ruby@ed.gov
Telephone: (202) 219-1591

21. 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.

22. 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.

23. REFERENCES

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