



Transformative Research in the Education Sciences Grants Program

CFDA Number: 84.305T

U.S. DEPARTMENT OF EDUCATION

A Product of the National Center for Education Research

Letter of Intent Due:	January 7, 2021	https://iesreview.ed.gov/LOI/LOISubmit
Application Package Available:	December 17, 2020	https://www.grants.gov/
IES Submission Guide Available:	April 1, 2020	https://ies.ed.gov/funding/pdf/submissionguide.pdf
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Part I: Overview and Requirements

A. Purpose of the Transformative Research in the Education Sciences Grants Program

Through its National Center for Education Research (NCER), the Institute of Education Sciences (IES) supports a sustained program of research to build knowledge and understanding of education practice and policy. The program's three intended outcomes are

- 1. Improved academic achievement and access to a high-quality education for all learners from early childhood through adulthood, particularly those at risk of failure
- 2. Reduced gaps in achievement and opportunities between high-performing and low-performing learners
- 3. Improved access to, persistence in, progress through, and successful completion of postsecondary education

In this Request for Applications (RFA), NCER invites applications for research projects that will contribute to its **Transformative Research in the Education Sciences Grants program** (CFDA 84.305T). This program supports innovative or unconventional research that has the potential to lead to new scientific paradigms, novel and more effective approaches to education practice or policy, or transformative technologies that substantially increase learner outcomes. Such innovation may require perspectives and experiences not typically represented in education research, and for that reason, applications are sought that reflect the full diversity of the nation's research workforce. Individuals from diverse backgrounds and from the full spectrum of eligible institutions in all geographic locations are strongly encouraged to apply to this program.

Transformative Research Award applicants should propose research that is substantially different from current research. The innovation may be technical, conceptual, or a combination of both. Applicants must clearly demonstrate the potential to produce a major impact in an area relevant to IES's mission. For this competition, IES defines *major impact* as an unusually broad and meaningful improvement in learner outcomes.

To encourage rigorous education research that is transparent, actionable, and focused on meaningful outcomes, all applications to the FY 2021 Transformative Research in the Education Sciences Grants program are expected to incorporate the principles outlined in the IES-wide Standards for Excellence in Education Research (SEER; https://ies.ed.gov/seer/), as applicable. These principles include

- Pre-registering studies
- Making research findings, methods, and data available to others
- Identifying core intervention components
- Documenting intervention implementation and contrast to inform use in other settings
- Analyzing costs
- Focusing on outcomes meaningful to learners' success (learning outcomes, opportunities in education, or success from education)
- Facilitating generalization of study findings
- Conducting research in a way that informs the future scaling of interventions

B. Program Structure and Award Limits

Applications to the Transformative Research in the Education Sciences Grants program **must** conform to the maximum set for award duration and cost. Budgets should align with proposed project activities. Applicants will be able to request up to \$3,000,000 for a project duration of up to 3 years.

Applicants will propose a set of deliverables and metrics (specified in the Project Narrative) that will enable IES staff to judge whether the project is on track for achieving its objectives. If the project successfully

achieves its objectives, the research team will be eligible to apply for another round of funding for up to a 2-year period. Application requirements for the second phase of work will be announced in a separate request for applications.

C. Getting Started

1. Technical Assistance for Applicants

IES provides technical assistance to applicants that addresses the fit of project ideas to this competition, the transformative potential of the idea, the research approach and its level of rigor and alignment to the project's aims, and other substantive issues. IES program officers work with applicants though a variety of formats up until the time of Grants.gov submission.

The program officer for this competition is

Dr. Erin Higgins

Email: <u>Erin.Higgins@ed.gov</u> Telephone: (202) 706-8509

If you submit a letter of intent (LOI; see Part V.C) on the IES Review webpage (https://iesreview.ed.gov/LOI/LOISubmit), a program officer will contact you regarding your proposed project. IES also provides funding opportunities resources, including webinars (https://ies.ed.gov/funding/webinars/index.asp), that include advice on choosing the appropriate competition, grant writing, and submitting your application.

2. Eligible Applicants

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

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

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

3. RFA Organization and the IES Application Submission Guide

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

1. This RFA – to learn how to prepare an application that is compliant and responsive to the requirements. Part I provides an overview of this grants program. Part II provides details on the application requirements and provides recommendations for preparing a strong application. Part III

provides information about the review process and review criteria for this competition. Part IV provides information about general formatting and the other narrative content for the application, including required appendices. Part V provides general information on competition regulations and the review process. Part VI provides a checklist that you can use to ensure you have included all required application elements to advance to scientific peer review. Part VII provides the project code that you must enter in Item 4b of the SF 424 Application for Federal Assistance form.

2. The IES Application Submission Guide (https://ies.ed.gov/funding/pdf/submissionguide.pdf) – for important information about submission procedures and IES-specific guidance and recommendations to help you ensure your application is complete and received without errors on time through Grants.gov.

We strongly recommend that both the principal investigator (PI) and the authorized organization representative (AOR) read both documents, whether submitting a new or revised application.

4. Ensuring Your Application is Forwarded for Scientific Peer Review

Only compliant and responsive applications received before the date and time deadline are peer reviewed for scientific merit. The PI and the AOR should work together to ensure that the application meets these criteria.

(a) On-time submission

See the separate IES Application Submission Guide (https://ies.ed.gov/funding/pdf/submissionguide.pdf)

 Received and validated by Grants.gov no later than 11:59:59 p.m. Eastern Time on February 25, 2021.

(b) Compliance

- Includes the required project narrative (see <u>Part II</u>)
- Adheres to all formatting requirements (see <u>Part IV</u>)
- Adheres to all page limit maximums for the project narrative and appendices. IES will remove any pages above the maximum before forwarding an application for scientific peer review
- Includes Appendix A: Dissemination History and Plan (see Part IV)

(c) Responsiveness

Meets all competition requirements (see <u>Part II</u>).

Part II: Competition Requirements and Recommendations

A. Competition Requirements

Applications that do not meet these requirements will not be sent forward for peer review.

1. Education Outcomes

Your proposed research **must** address and measure outcomes of learners at any grade or education level between prekindergarten through postsecondary and adult education that are meaningful for education stakeholders.

2. Project Narrative

The project narrative **must** adhere to the formatting guidelines (see <u>Part IV.B</u>) and be no more than 18 pages. If the narrative exceeds this page limit, IES will remove any pages after the 18th page of the narrative. The project narrative **must** include five sections: Significance of the Transformative Idea, Research Approach, Deliverables and Metrics Plan, Personnel, and Resources.

3. Dissemination History and Plan (Appendix A)

Information about what should be included in the Dissemination History and Plan can be found in Part IV.C.1.

B. Recommendations for Strong Applications

This section provides recommendations for the five sections of the project narrative. More information about what should be included in the required and optional appendices is provided in Part IV.C.

1. Significance of the Transformative Idea

Provide a project overview and describe the aims of the project. The text should be clear and accessible even to those who are not in the immediate field of the proposed research.

Describe why the proposed research is well suited to the goals of the Transformative Research in the Education Sciences Grants program rather than other IES research grant programs.

Describe the challenge or opportunity that is the focus of your proposed research.

Describe the most innovative aspects of your application.

Describe the fundamental insight motivating the proposed research. If successful, what would be the contribution to scientific understanding and education practice or policy? How would these insights translate into a major improvement in learner outcomes?

Describe the underlying logic or rationale that provides support for pursuing this insight.

2. Research Approach

The description of your research approach should be clear and compelling to both experts and non-experts.

Provide the underlying logic or rationale for pursuing this project in the manner proposed. Given the high level of innovation expected, conventionally detailed research plans and extensive preliminary or pilot data are not required.

Describe what you believe to be the major challenges or risks in the project and alternate approaches that may need to be pursued. While the application need not provide detailed plans and data, reviewers should have a clear sense of what is being proposed and why it is important, should be convinced that the applicants have thought about how the project is aligned with the overall IES mission and SEER principles

(https://ies.ed.gov/seer/index.asp), and should be satisfied that the research will be conducted in a rigorous manner.

Describe the innovations in your proposed research approach and why they should be considered innovative compared to current approaches, paradigms, practices, or perspectives.

Describe strategies to maintain objectivity for the work proposed.

(a) Timeline

By the end of the project, there should be deliverables that have the potential for transformative impact. Identify where in the timeline you intend to produce the deliverables.

Describe possible alternative paths that may be followed at critical junctures in the project plan in the timeline. Given the high degree of risk involved in applications submitted under the Transformative Research in the Education Sciences Grants program, it is anticipated that investigators will need to continually reassess approaches based on experimental outcomes and potentially alter course to meet project aims.

3. Deliverables and Metrics Plan

Applicants should identify and describe a set of project deliverables and high quality qualitative and quantitative metrics that can be generated by the final year of the grant to inform the extent to which the project is achieving its intended objectives. If the research team decides to apply for another round of funding, this set of deliverables and metrics will be used as evidence that the project is meeting its objectives and has the potential to make an unusually broad and meaningful impact on learner outcomes. Therefore, applicants should choose high quality metrics and deliverables that measure the impact of the transformative idea.

4. Personnel

The purpose of this section is to demonstrate that your team possesses the appropriate training and experience for the innovative and transformative research you propose, the dissemination activities you plan to engage in, and will commit enough time to the project.

Identify and describe the expertise and qualifications of the project team at the primary applicant institution and at any subaward institutions.

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

Describe which members of the project team will carry out your plans to disseminate results as described in the required Appendix A: Dissemination History and Plan.

Including education agencies as partners ensures that researchers focus on outcomes that are meaningful to education practitioners and policymakers. Describe any such partnerships.

Provide a plan for how key personnel will maintain their objectivity in conducting the proposed research and dissemination activities. For example, clearly explain who will assign participants to treatment and comparison conditions, who will supervise outcome data collection and coding, and who will analyze outcome data.

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

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

5. Resources

The purpose of this section is to demonstrate how you have the institutional capacity and access to resources needed to execute a project of this size and complexity and appropriately disseminate findings.

Describe your institution's capacity to manage a grant of this size and your access to resources available at the primary institution and any subaward institutions.

Describe your plan for acquiring any resources that are not currently accessible, will require significant expenditures, and are necessary for the successful completion of the project, such as equipment, test materials, curricula, or training materials.

Describe your access to the settings in which the research will take place. Include Letters of Agreement in Appendix D documenting their participation and cooperation. Convincing letters convey that the organizations understand what their participation in the study will involve, such as annual surveys, assessments, and/or classroom observations.

Describe your access to any necessary datasets. Include Letters of Agreement, data licenses, or existing memoranda of understanding in Appendix D to document that you will be able to access those data for your proposed use.

Describe your resources, including access to specific offices and organizations, to carry out your plans to disseminate results as described in the required <u>Appendix A: Dissemination History and Plan</u>.

Part III: Application Review Criteria

A. Scientific Peer Review Process

IES will forward all applications that are compliant and responsive to this Request for Applications (RFA) to be evaluated for scientific and technical merit. Scientific reviews are conducted in accordance with the review criteria stated below and the review procedures posted on the IES website (https://ies.ed.gov/director/sro/application review.asp) by a panel of experts who have substantive and methodological expertise appropriate to the program of research and this RFA.

Three 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 scientific merit score, for each application they review. Next, IES will calculate an average Significance of the Transformative Idea score for each application based on the initial scores from each reviewer and will prepare a preliminary rank order of applications. IES will also calculate an average overall scientific merit score for each application based on the initial scientific merit scores from the primary reviewers. For those applications that have the most competitive Significance of the Transformative Idea scores, IES will prepare a preliminary rank order of applications based on overall scientific merit. The preliminary rank order 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 have the most transformative potential and to have the highest scientific merit, as determined by the preliminary rank ordering process described above. 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.

B. Review Criteria for the Transformative Research in the Education Sciences Grants Program

Reviewers will assign an independent score for each criterion as well as an overall scientific merit score. The criteria that contribute to the scientific merit of the project include: Significance of the Transformative Idea, Research Approach, Deliverables and Metrics Plan, Personnel, Resources, and Dissemination.

1. Significance of the Transformative Idea

Does the application address an important problem or a critical barrier to transformation in education practice and policy?

Does the application challenge and seek to shift current research or education practice paradigms by proposing novel theoretical concepts, approaches or methodologies, instrumentation, or interventions?

Are the concepts, approaches, methodologies, instruments, or interventions novel to one field of research or novel in a broad sense?

If successful, how will this work lead to substantially improved learner outcomes? How big will that improvement likely be?

Are the scientific rationale and need for this project well supported by prior rigorous research or information in the scientific literature?

If the aims of the project are achieved, how will scientific knowledge, methodological capability, and/or education practice be improved?

Is the proposed research exceptional in terms of its consequences for education practice, policy, or outcomes?

Is the paradigm being challenged or proposed fundamental to the education sciences?

2. Research Approach

Are the overall strategy, methodology, and analyses well-reasoned and appropriate to accomplish the specific aims of the project?

If relevant, have the investigators included plans to address weaknesses in the rigor of prior research that support the proposed project?

Have the investigators presented strategies to maintain their objectivity, as appropriate for the work proposed?

Are potential problems and alternative strategies and solutions presented?

Is the logic of the approach compelling despite the lack of experimental details and preliminary or pilot data?

Is there evidence that the investigators will pursue the project, despite its inherent risks, in a robust and rigorous manner?

Is the projected timeline feasible and well justified? Does the project incorporate efficiencies and utilize existing resources to increase the efficiency of participant recruitment data collection, if applicable?

3. Deliverables and Metrics Plan

Are the deliverables and metrics achievable by the end of the project? Are the metrics high quality and will they address the potential for the project to make an unusually broad and meaningful impact on learner outcomes?

4. Personnel

Is the research team, including the PI and other key personnel, collaborators, and other investigators, well suited to the project?

Does the team have appropriate experience and training?

Has the team demonstrated an ongoing record of accomplishments that have advanced their field(s)?

Does the team have a track record of successful collaboration with education organizations, including schools, colleges, and school districts?

Does the team have any experience with successfully scaling up products from previous research? Do they have experience with bringing products to market?

If the project is collaborative, do the investigators have complementary and integrated expertise; are their leadership approach, governance, and organizational structure appropriate for the project?

Do the key personnel commit sufficient effort to make the proposed research a priority?

5. Resources

Does the institution have the capacity to manage a grant of this size?

Are there sufficient resources available or are there plans provided to acquire resources not currently accessible?

Does the application demonstrate access to the settings in which the research takes place or access to necessary datasets, if applicable?

6. Dissemination

Does the application address the recommendations described in <u>Appendix A: Dissemination History and Plan</u>? Does the applicant present a dissemination plan that is tailored to the purpose of the project and

designed to reach a wide range of audiences? Does the applicant describe a dissemination history that demonstrates past success in sharing results of related education research widely and appropriately?

Part IV: Preparing Your Application

A. Overview

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

B. General Formatting

To ensure that reviewers can read your application and that all applicants have similar expectations for length and space, IES specifies the following formatting conventions. Adherence to type size and line spacing requirements is necessary so that no applicant will have an unfair advantage by using small type or by providing more text in their applications. These requirements apply to the PDF file as submitted, unless otherwise specified. For an application to be compliant and sent forward for review, the applicant should ensure that each narrative section follows both the page limit maximums and the formatting guidelines below unless otherwise specified.

1. Page and Margin Specifications

For all IES grant applications, a "page" is 8.5 in. x 11 in. on one side only with 1-inch margins at the top, bottom, and both sides.

2. Page Numbering

Add page numbers using the header or footer function and place them at the bottom or upper right corner for ease of reading.

3. Spacing

Text must be single spaced.

4. Type Size (Font Size)

Type must conform to the following three requirements:

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

You should check the type size using a standard device for measuring type size, rather than relying on the font selected for a particular word processing/printer combination. Small type size makes it difficult for reviewers to read the application; consequently, the use of small type will be grounds for IES to return the application without scientific peer review.

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

5. Graphs, Diagrams, and Tables

IES encourages you to use black and white in graphs, diagrams, tables, and charts. If color is used, you should ensure that the material reproduces well when printed or photocopied in black and white.

Text in figures, charts, and tables, including legends, may be in a type size smaller than 12-point but must be readily legible.

C. Required and Optional Appendices

The required project narrative (see Part II: Competition Requirements and Recommendations) is followed by several appendices. As noted in Part II, some of these appendices are required, and some are optional. When you submit your application through Grants.gov, you will create a single PDF file that contains the project narrative and all appendices and include it as an attachment in the application package. Include appendices in alphabetical order and simply skip an appendix if it is not required for your application or if you choose not to include one of the optional appendices. See the IES Application Submission Guide (https://ies.ed.gov/funding/pdf/submissionguide.pdf) for more information about preparing and submitting your application using the required application package for this competition through Grants.gov (https://www.grants.gov/).

The project narrative and appendices are critical parts of the IES application because they include the substantive content that will be reviewed for theoretical and practical significance and scientific merit.

1. Appendix A: Dissemination History and Plan (Required)

You **must** include Appendix A after the project narrative. Appendix A includes two sections: Dissemination History and Dissemination Plan. Appendix A **must** meet the general formatting guidelines and be **no more than three pages**, including one page for the Dissemination History and two pages for the Dissemination Plan. If Appendix A exceeds this three-page limit, IES will remove any pages after the third page of the appendix before it is forwarded for scientific peer review.

The Dissemination History and Plan is the only information that may be included in Appendix A; all other materials will be removed prior to review of the application.

(a) Dissemination History

The dissemination history should demonstrate that the research you have conducted in the past has been disseminated in a way that is consistent with the IES mission to promote scientifically valid research findings that provide the basis for improving academic instruction and lifelong learning. Applicants who have never had an IES grant should focus on dissemination history of related, past projects. Reviewers will use this information to determine whether the project personnel have the experience necessary to carry out the proposed dissemination plan.

The dissemination history should include the following:

- A brief description of the outcomes of prior related research, including products developed or tested and how the project's findings and products were disseminated
- For interventions that have evidence of impact on learner outcomes and assessments that are valid and reliable for intended purposes and learners, an explanation for how it has been made available to users, the number of active users of the product, the number of users of the product during its history, and funding agreements or outside investments for commercialization (if applicable)
- Other unique dissemination products or notable presentations of research findings, particularly those that were intended for practitioners, policymakers, parents, students, and/or the general public

(b) Dissemination Plan

Describe your plan to disseminate the findings from the proposed project. Dissemination plans should be tailored to the audiences that will benefit from the findings and reflect the purposes of the project (see Part L.A).

Identify the audiences that you expect will most likely benefit from your research such as federal and state policymakers, education administrators, institutions of higher education, educators, parents, learners, and other education researchers.

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

IES-funded researchers are expected to publish and present in venues designed for policymakers and practitioners in a manner and style useful to and usable by this audience. For example –

- Report findings to the education agencies and schools/colleges that provided the project with data and data-collection opportunities.
- Give presentations and workshops at meetings of professional associations of educators and leaders.
- Publish in practitioner journals.
- Engage in activities with relevant IES-funded Research and Development (R&D) Centers
 (https://ies.ed.gov/ncer/research/randdCenters.asp), Research Networks
 (https://ies.ed.gov/ncer/research/researchNetworks.asp), or Regional Educational Laboratories
 (RELs) (https://ies.ed.gov/ncee/edlabs/).

IES-funded researchers who create products for use in research and practice as a result of their project (such as curricula, professional development programs, measures and assessments, guides, and toolkits) are expected to make these products available for research purposes or (after evaluation or validation) for general use. IES encourages researchers to consider how these products could be brought to market to increase their use.

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

2. Appendix B: Supplemental Charts, Tables, and Figures (Optional)

Appendix B **must** meet the general formatting guidelines and be **no more than 15 pages**. If Appendix B exceeds this page limit, IES will remove any pages after the 15th page of the appendix before it is forwarded for scientific peer review. In Appendix B, you may include figures, charts, or tables with supplementary information like a timeline for your research project, a diagram of the management structure of your project, or examples of measures used to collect data for your project such as individual test items, tests, surveys, and observation and interview protocols.

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

3. Appendix C: Examples of Intervention or Assessment Materials (Optional)

Appendix C **must** meet the general formatting guidelines and be **no more than 10 pages**. If Appendix C exceeds this page limit, IES will remove any pages after the 10th page of the appendix before it is forwarded for scientific peer review. If you are proposing to explore, develop, evaluate, or validate an intervention or assessment, you may include examples of curriculum materials, computer screen shots, assessment items, or other materials used in the intervention or assessment to be explored, developed, evaluated, or validated.

These are the only materials that should be included in Appendix C; all other material will be removed prior to review of the application.

4. Appendix D: Letters of Agreement (Optional)

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

A common reason for projects to fail is loss of participating schools and districts or lack of access to data. While not required for this competition, IES recommends that applicants include letters of agreement in Appendix D to make it clear that participants understand the nature of the commitment of time, space, 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.

IES understands that, due to school closings associated with COVID-19, you may have difficulty providing letters from schools, districts, and other education sites that would participate in or provide data for the proposed research. If you are unable to provide these letters in your application, include a description in Appendix D of why you were not able to obtain letters and your plan for securing them if your application is recommended for funding. Reviewers will be instructed to not penalize applicants for failure to include letters of agreement due to the coronavirus pandemic. NOTE: Special conditions may be placed on the grant awards if these letters are not received before the award date.

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

5. Appendix E: Data Management Plan (Optional)

While not required for this competition, IES encourages applicants to include a data management plan (DMP) and may request that applicants develop one if they are recommended for funding and their project has characteristics similar to projects that are required to have DMPs from other IES grants programs. The costs of the DMP can be covered by the grant and should be included in the budget and explained in the budget narrative. Appendix E must meet the general formatting guidelines and be no more than five pages. If Appendix E exceeds this page limit, IES will remove any pages after the fifth page of the appendix before it is forwarded for scientific peer review.

The DMP should include as many of the following elements as possible, but some may not apply depending on the characteristics of the proposed project:

- Identification of the data repository where you will pre-register your study within the first year of
 the project, following the Standards for Excellence in Education Research (SEER;
 https://ies.ed.gov/seer/preregistration.asp)
- Type and format of data to be shared
- Procedures for managing and for maintaining the confidentiality of Personally Identifiable Information
- Roles and responsibilities of project or institutional staff in the management and retention of research data
- Discussion of any changes to the roles and responsibilities that will occur should the project director/principal investigator and/or co-project directors/co-principal investigators leave the project or their institution
- Expected schedule for data sharing, including how long the data will remain accessible (no later than publication of findings in a peer-reviewed publication and available for at least 10 years) and acknowledgement that the timeframe of data accessibility will be reviewed at the annual progress reviews and revised as necessary
- Dataset documentation to be provided, including any decisions made about the data that would be important in replicating the results
- Method of data sharing, such as through a data archive, and how those interested in using the data can locate and access them
- Whether or not users will need to sign a data use agreement and, if so, what conditions they must meet
- Any circumstances that prevent all or some of the data from being shared. This includes data that may fall under multiple statutes and, hence, must meet the confidentiality requirements for each

applicable statute including data covered by Common Rule for Protection of Human Subjects, FERPA, and HIPAA.

IES program officers will be responsible for reviewing the completeness of the proposed DMP.

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

D. Other Narrative Content

In addition to the project narrative (see <u>Part II: Competition Requirements and Recommendations</u>) and required and optional appendices (see above), you will also prepare a project summary, a bibliography and references cited, an exempt or non-exempt research on human subjects narrative, and biographical sketches for key personnel to include as file attachments in your application. See the IES Application Submission Guide https://ies.ed.gov/funding/pdf/submissionguide.pdf for more information about preparing and submitting your application using the required application package for this competition on Grants.gov https://www.grants.gov/).

1. Project Summary

You **must** submit the project summary as a separate PDF attachment in the application package. If your project is recommended for funding, IES will use this abstract as the basis for the online abstracts that we post when new awards are announced. We recommend that the project summary be one page long and follow the format used for IES online abstracts (https://ies.ed.gov/funding/grantsearch/).

(a) Title

• **Title:** Distinct, descriptive title of the project.

(b) Project Summary

The purpose of the project summary is to provide a high-level overview that is accessible to a range of audiences, such as policymakers, practitioners, and the public. This section should use short, active sentences and describe the following:

- **Purpose**: A brief description of the purpose of the project and its significance for improving education in the United States. This should include why the research is important, what this project will do to address the need, and the general expected outcomes of the project.
- **Project Activities**: An overview of the sample, research design, and methods.
- Products: A brief description of the expected products of the project, including the intervention or assessment to be developed or tested (if applicable) and the information that will be learned and disseminated.

2. Bibliography and References Cited

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

3. Human Subjects Narrative

You **must** submit an exempt or non-exempt human subjects narrative as a separate PDF attachment in the application package. We do not recommend a page length for the human subjects narrative. See *Information About the Protection of Human Subjects in Research Supported by the Department of Education* (https://www2.ed.gov/policy/fund/guid/humansub/overview.html) for a brief overview of principles,

regulations, and policies which affect research involving human subjects in research activities supported by the U.S. Department of Education.

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

The U.S. Department of Education does not require certification of IRB approval at the time you submit your application. However, if an application that involves non-exempt human subjects research is recommended for funding, the designated U.S. Department of Education official will request that you obtain and send the certification to the Department within 30 days of the formal request.

4. Biographical Sketches for Key Personnel

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

Biographical sketches are submitted as separate PDF attachments in the application package. IES strongly encourages applicants to use SciENcv (https://www.ncbi.nlm.nih.gov/sciencv/) where you will find an IES biographical sketch form. IES will accept the SciENcv format for your biographical sketch even though it does not adhere exactly to our general formatting requirements. You may also develop your own biographical sketch format. If you use SciENcv, the information on current and pending support will be entered into the IES biographical sketch template. If you use your own format, you will need to provide this information in a separate table.

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

Provide a list of current and pending grants for the principal investigator, each co-principal investigator, and other key personnel, along with the proportion of their time, expressed as percent **effort over a 12-month calendar year**, allocated to each project. Include the proposed IES grant as one of the pending grants in this list.

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

Part V: Competition Regulations and Application Process

A. Funding Mechanisms and Restrictions

1. Mechanism of Support

IES intends to award cooperative agreements pursuant to this Request for Applications.

2. Funding Available

Although IES intends to support the research projects described in this announcement, all awards pursuant to this Request for Applications are contingent upon the availability of funds and the receipt of meritorious applications. IES makes its awards to the highest quality applications, as determined through scientific peer review.

Please attend to the duration and budget maximums in Part I.

3. Special Considerations for Budget Expenses

(a) Indirect Cost Rate

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

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

(b) Meetings and Conferences

If you are requesting funds to cover expenses for hosting meetings or conferences, please note that there are statutory and regulatory requirements in determining whether costs are reasonable and necessary. Please refer to the Office of Management and Budget's (OMB's) Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (Uniform Guidance), 2 CFR, §200.432 Conferences (https://www.ecfr.gov/cgi-bin/text-idx?SID=dcd3efbcf2b6092f84c3b1af32bdcc34&node=se2.1.200 1432&rgn=div8).

Federal grant funds cannot be used to pay for alcoholic beverages or entertainment, which includes costs for

amusement, diversion, and social activities. In general, federal funds may not be used to pay for food. A grantee hosting a meeting or conference may not use grant funds to pay for food for conference attendees unless doing so is necessary to accomplish legitimate meeting or conference business. You may request funds to cover expenses for working meetings, such as working lunches; however, IES will determine whether these costs are allowable in keeping with the Uniform Guidance Cost Principles. Grantees are responsible for the proper use of their grant awards and may have to repay funds to the Department if they violate the rules for meeting- and conference-related expenses or other disallowed expenditures.

4. Program Authority

20 U.S.C. 9501 et seq., the "Education Sciences Reform Act of 2002," Title I of Public Law 107-279, November 5, 2002. This program is not subject to the intergovernmental review requirements of Executive Order 12372.

5. Applicable Regulations

Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (Uniform Guidance) codified at CFR Part 200. The Education Department General Administrative Regulations (EDGAR) in 34 CFR parts 77, 81, 82, 84, 86 (part 86 applies only to institutions of higher education), 97, 98, and 99. In addition 34 CFR part 75 is applicable, except for the provisions in 34 CFR 75.100, 75.101(b), 75.102, 75.103, 75.105, 75.109(a), 75.200, 75.201, 75.209, 75.210, 75.211, 75.217, 75.219, 75.220, 75.221, 75.222, and 75.230.

B. Additional Requirements

1. Pre-Award

(a) Clarification and Budget Questions

IES uses the scientific peer review process as the first step in making funding decisions. If your application is recommended for funding based on the outcome of the scientific peer review, an IES program officer will contact you to clarify any issues that were raised by the peer reviewers and to address whether the proposed budget adequately supports the scope of work and meets federal guidelines.

(b) Demonstrating Access to Data and Education Settings

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

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

(1) Conducting research in or with education settings

If your application is being considered for funding based on scientific merit scores from the scientific peer review panel and your research relies on access to education settings, you will need to provide documentation that you have access to the necessary settings in order to receive the grant. This means that if you do not have permission to conduct the proposed project in the necessary number of settings at the time of application, you will need to provide documentation to IES indicating that you have successfully recruited the necessary number of settings for the proposed research before the full first-year costs will be awarded. If you recruited a sufficient number of settings prior to the application, IES will ask you to provide documentation that the settings originally recruited for the application are still willing to partner in the research.

(2) Using secondary datasets

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

(3) Building on existing studies

You may propose studies that piggyback on an ongoing study, which will require access to those subjects and data. In such cases, the principal investigator of the existing study should be one of the members of the research team applying for the grant to conduct the new project.

In addition to obtaining evidence of access, IES strongly advises applicants to establish a written agreement, within 3 months of receipt of an award, among all key collaborators and their institutions (including principal and co-principal investigators) regarding roles, responsibilities, access to data, publication rights, and decision making procedures.

(c) Assessment of Past Performance

IES considers the applicant's performance and use of funds under a previous federal award as part of the criteria for making a funding decision. Performance on previous U.S. Department of Education awards is considered as is additional information that may be requested from the applicant, including compliance to the IES Public Access Policy (applicable for all grants funded from 2012 to present; https://ies.ed.gov/funding/researchaccess.asp).

2. Post Award

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

(1) Access to data

You may include an optional <u>data management plan (DMP) in Appendix E</u>. The scientific peer review process will not include the DMP in the scoring of the scientific merit of the application. Instead, if you choose to submit one, IES program officers will be responsible for reviewing the completeness of the proposed DMP. The costs of the DMP can be covered by the grant and should be included in the budget and explained in the budget narrative.

(2) Access to results: Grantee submissions to ERIC

IES requires all grantees to submit the electronic version of peer-reviewed scholarly publications to ERIC (https://eric.ed.gov/), a publicly accessible and searchable electronic database of education research that makes available full-text documents to the public for free. This public access requirement (https://ies.ed.gov/funding/researchaccess.asp) applies to peer-reviewed, original scholarly publications that have been supported (in whole or in part) with direct funding from IES, although it does not apply to book chapters, editorials, reviews, or non-peer-reviewed conference proceedings. **As the designated representative for the grantee institution, IES holds the principal investigator responsible** for ensuring that authors of publications stemming from the grant comply with this requirement.

The author's final manuscript is defined as the final version accepted for journal publication and includes all modifications from the peer review process. Submission of accepted manuscripts for public accessibility through ERIC is strongly encouraged as soon as possible **but must occur within 12 months of the publisher's official date of publication.** ERIC will not make the accepted manuscripts available to the public prior to the end of the 12-month embargo period, unless specified by the publisher.

The ERIC website includes a homepage for the Grantee and Online Submission System (https://eric.ed.gov/submit/), as well as a Frequently Asked Questions page (https://eric.ed.gov/?granteefaq). During the submission process, authors will submit bibliographic information from the publication, including title, authors, publication date, journal title, and associated IES award number(s).

(b) Special Conditions on Grants

IES may impose special conditions on a grant pertinent to the proper implementation of key aspects of the proposed research design or if the grantee is not financially stable, has a history of unsatisfactory

performance, has an unsatisfactory financial or other management system, has not fulfilled the conditions of a prior grant, or is otherwise not responsible.

(c) Attendance at the Annual IES Principal Investigators Meeting

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

C. Application Process and Award Decisions

1. Submitting Your Letter of Intent

Letters of intent (LOIs) are submitted online at the IES Peer Review Information Management Online (PRIMO) system (https://iesreview.ed.gov/LOI/LOISubmit). Select the Letter of Intent form for the competition under which you plan to submit your application. The online submission form contains fields for each of the seven content areas listed below. Use these fields to provide the requested information. The project description should be single-spaced and is recommended to be no more than one page (about 3,500 characters). The LOI is non-binding and optional but strongly recommended. If you submit an LOI, a program officer will contact you regarding your proposed research. IES staff also use the information in the LOI to identify the expertise needed for the scientific peer review panels and to secure a sufficient number of reviewers to handle the anticipated number of applications.

Elements for the Letter of Intent:

- Descriptive title
- Brief description of the proposed project
- Brief explanation of why this project is a good fit to the Transformative Research in the Education
 Sciences Grants program
- Name, institutional affiliation, address, telephone number, and email address of the principal investigator and any co-principal investigators
- Name and institutional affiliation of any key collaborators and contractors
- Duration of the proposed project (attend to the Duration maximum)
- Estimated total budget request (attend to the Budget maximum)

2. Multiple Submissions

You may submit applications to more than one of the FY 2021 IES grant programs. In addition, within a particular grant program, you may submit multiple applications. However, you may submit a given application only once for the FY 2021 grant competitions, meaning you may not submit the same application or similar applications to multiple grant programs, multiple topics, or multiple times within the same topic. If you submit the same or similar applications, IES will determine whether and which applications will be accepted for review and/or will be eligible for funding.

3. Application Processing

Applications must be submitted electronically and received no later than 11:59:59 p.m. Eastern Time on February 25, 2021 through the internet using the software provided on the Grants.gov (https://www.grants.gov/) website. You must follow the application procedures and submission requirements described in the IES Application Submission Guide (https://ies.ed.gov/funding/pdf/submissionguide.pdf) and on Grants.gov (https://www.grants.gov/).

After applications are fully uploaded and validated at Grants.gov, the U.S. Department of Education receives the applications for processing and transfers them to the IES PRIMO system (https://iesreview.ed.gov/). PRIMO allows applicants to track the progress of their application via the Applicant Notification System (ANS).

Approximately one to two weeks after the application deadline, invitation emails are sent to applicants who have never applied to IES before to create their individual PRIMO ANS accounts. Both the PI and the AOR will receive invitation emails. Approximately four to six weeks after the application deadline, all applicants (new and existing ANS users) will begin to receive a series of emails about the status of their application. See the IES Application Submission Guide (https://ies.ed.gov/funding/pdf/submissionguide.pdf) for additional information about ANS and PRIMO.

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

4. Award Decisions

The following will be considered in making award decisions for responsive and compliant applications:

- Significance of the transformative idea as determined by scientific peer review
- Scientific merit as determined by scientific peer review
- Performance and use of funds under a previous federal award
- Contribution to the overall program of research described in this Request for Applications
- Ability to carry out the proposed research within the maximum award and duration requirements
- Availability of funds

Part VI: Compliance and Responsiveness Checklist

Only compliant and responsive applications will be forwarded for scientific peer review. Use this checklist to better ensure you have included all required components for compliance and that you have addressed all general and project narrative requirements for responsiveness.

See the IES Application Submission Guide https://ies.ed.gov/funding/pdf/submissionguide.pdf) for an application checklist that describes the forms in the application package that must be completed and the PDF files that must be attached to the forms for a successful submission through Grants.gov.

Compliance and Responsiveness Checklist

Have you included a project narrative?

Have you included the five required sections of the project narrative?

- Significance of the Transformative Idea
- Research Approach
- Deliverables and Metrics Plan
- Personnel
- Resources

Does your project address and measure education outcomes of learners at any grade or education level between prekindergarten through postsecondary and adult education?

Do the project narrative and other narrative content adhere to all formatting requirements?

Do the project narrative and other narrative content adhere to all page maximums as described in the RFA? IES will remove any pages above the maximum before forwarding an application for scientific peer review.

Have you included Appendix A: Dissemination History and Plan?

Part VII: Project Code

Applications to the **Transformative Research in the Education Sciences Grants program (CFDA 84.305T)** are submitted under a single code in Item 4b of the SF 424 Application for Federal Assistance form (see the IES Application Submission Guide for more information about this form; https://ies.ed.gov/funding/pdf/submissionguide.pdf). All applicants should enter the code "NCER-Transformative" in the field for Item 4b.