

Request for Applications

Research Grants Focused on Systematic Replication

CFDA Number: 84.305R

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Part I: Overview and General Requirements

A. Introduction

The Institute of Education Sciences (IES) provides scientific evidence to improve education practice and policy and shares that evidence in a way that can be used by educators, parents, policymakers, researchers, and the public. Within IES, the National Center for Education Research (NCER) and National Center for Special Education Research (NCSER) have funded over 300 completed studies that have tested whether interventions improve the education outcomes of learners. While many of these interventions had positive outcomes, a large number have been tested only in a single geographical location, in a small number of settings, and/or with a limited variety of educators and learners. Additional evidence is needed to determine whether these interventions are effective for different populations and in different settings. Such evidence is critical to better understand the conditions under which such interventions will likely work and for whom.

1. Research Grants Focused on Systematic Replication (CFDA 84.305R)

In this Request for Applications (RFA), IES invites applications for Research Grants Focused on Systematic Replication (Systematic Replication). Under this competition, IES will support systematic replication studies¹ of IES-identified interventions that have produced beneficial effects on education outcomes in one or more prior IES-funded impact studies. Proposed replication studies will systematically vary at least one aspect of the prior impact study. For example, applicants may vary the geographical location; the population of learners, educators, and/or schools; and/or the intervention delivery. The research will also investigate factors that may lead to and sustain successful implementation.

IES will support replication studies that involve the *independent evaluation* of an intervention when implemented under *routine conditions* (*Effectiveness Replications*). IES will also support replications that provide more support than is typically provided under routine conditions. These *Efficacy Replications* do not necessarily include an independent evaluator.

The research will address questions frequently asked by schools and educators looking to adopt evidence-based interventions, such as the following:

- Does the intervention show positive outcomes for learners like the ones in my class or school?
- Which outcomes does it affect?
- How large are the gains?
- Do the gains last?
- Is the intervention effective when implemented under typical school conditions?
- What are the resources that are necessary for successful and sustained implementation?
- How much does it cost to implement this intervention?

IES encourages researchers to work with education stakeholders to advance the relevance of their work and the accessibility and usability of their findings for the day-to-day work of educators and policymakers. In addition, IES expects researchers to disseminate their results to a wide range of audiences including policymakers, educators, researchers, and the public and to consider how successful interventions can be scaled up and/or commercialized.

Systematic Replication projects will result in more knowledge about what is likely to work for whom and under what conditions. Specifically, the projects should allow for the following:

 $\underline{https://ies.ed.gov/pdf/CompanionGuidelinesReplicationReproducibility.pdf)}.$

¹ Systematic replications are also referred to as conceptual replications (see the *Companion Guidelines on Replication & Reproducibility in Education Research* at

- Identification of the types of settings and learners that are most likely to benefit from the intervention (and conversely where and with whom the intervention is less likely to produce benefits);
- Evidence regarding the impact of an IES-identified intervention on relevant education outcomes relative to a comparison condition using a research design that meets the What Works Clearinghouse (WWC) design standards with or without reservations (<u>https://ies.ed.gov/ncee/wwc</u>);
- Information on how study findings including information on implementation and cost contribute to the larger body of evidence on the intervention; and
- Information needed for the implementation of the intervention.
 - If a beneficial impact is found, the identification of the factors needed for successful implementation and replication of the core components of the intervention; or
 - If no beneficial impact is found, an examination of why the findings differed from those of prior evaluations of the intervention and an analysis of whether further research would be useful to revise the intervention and/or its implementation.

To encourage rigorous education research that is transparent, actionable, and focused on consequential outcomes, all Systematic Replication applications are expected to follow the principles outlined in the IES-wide <u>Standards for Excellence in Education Research</u> (SEER), as applicable. These principles include pre-registering studies; focusing on outcomes meaningful to student success; documenting intervention implementation to inform use in other settings; identifying core components; analyzing costs; facilitating generalization of study findings; making research findings, methods, and data available to others; and conducting research in a way that informs the future scaling of interventions.

For this competition, all awards will be made as cooperative agreements to further IES involvement in the planning and implementation of the replication, including the use of common measures across Systematic Replication projects, the implementation study, and the dissemination of findings.

IES will consider only applications that are compliant and responsive to the requirements described in this Request for Applications (RFA) *and* submitted electronically via <u>Grants.gov</u> by the stated deadline.

2. RFA Organization

This RFA is organized as follows. <u>Part I</u> sets out the general requirements for a grant application. <u>Parts II</u> and <u>III</u> provide further detail on the requirements, including the list of interventions. <u>Part IV</u> provides information about other narrative content for the application, including required appendices. <u>Part V</u> provides general information on competition regulations and the review process. <u>Part VI</u> provides a checklist that you can use to ensure you have included all required application elements to advance to scientific peer review.

3. Eligible Applicants

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

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

applicants are encouraged to review the *Funding Opportunities for Minority Serving Institutions* webinar (available at <u>https://ies.ed.gov/funding/webinars/</u>).

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

4. Technical Assistance for Applicants

IES provides technical assistance to applicants that addresses the appropriateness of project ideas for this competition and methodological and other substantive issues concerning research in education settings. IES Program Officers work with applicants though a variety of formats up until the time of Grants.gov submission. The Program Officer for this competition is:

Dr. Christina Chhin Email: <u>Christina.Chhin@ed.gov</u> Telephone: (202) 245-7736

If you submit a Letter of Intent at <u>https://iesreview.ed.gov</u>, a Program Officer will contact you regarding your proposed project. IES also provides Funding Opportunities Webinars (live and on demand at <u>https://ies.ed.gov/funding/webinars/index.asp</u>) that include advice on choosing the correct competition, grant writing, and submitting your application.

B. Getting Started

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

- 1. This RFA to learn how to prepare an application that is compliant and responsive to the requirements; and
- 2. The IES Application Submission Guide² (<u>https://ies.ed.gov/funding/pdf/submissionguide.pdf</u>) for important information about submission procedures and IES-specific guidance and recommendations to help you ensure your application is complete and received on time without errors through Grants.gov.

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

² Please note that the IES Application Submission Guide includes application submission information that used to be included in the Request for Applications but has now been pulled out as a separate document.

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.

On-Time Submission – see the separate IES Application Submission Guide at https://ies.ed.gov/funding/pdf/submissionguide.pdf

Received and validated by Grants.gov no later than 11:59:59 pm Eastern Time on August 29, 2019.

Compliance

- o Includes the required Project Narrative (see RFA Part II).
- o Includes all required Appendices (see RFA Part IV).
 - Appendix A: Dissemination Plan
 - Appendix B: Response to Reviewers (Resubmissions only)
 - Appendix F: Data Management Plan

Responsiveness

- Meets **General Requirements** for all applications (see <u>Part I</u>).
 - Education Outcomes
 - Education Settings
 - Intervention (select one see Part III)
- Meets Project Narrative Requirements (see Part II).

C. General Requirements

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

1. Education Outcomes

All research supported under the Systematic Replications program **must** address reading or mathematics outcomes for learners. Other outcomes may be measured as appropriate.

2. Education Settings

Proposed research must be relevant to education in the United States and **must** address factors under the control of U.S. education systems.

Education in the U.S. is delivered in a wide range of formal settings, such as center-based prekindergarten, public and private K-12 schools, community colleges, and 4-year colleges and universities. In addition, there are also formal programs under the control of education agencies that take place out of school including after-school, distance learning, online programs, and adult literacy programs run through community-based organizations. IES does not support research that occurs in informal contexts outside of education systems and outside the control of education agencies. Contact an IES Program Officer if you have questions about whether the education setting you have identified for your proposed research fits this constraint.

3. Interventions

The proposed replication **must** evaluate an intervention identified in the tables in <u>Part III</u>. IES selected interventions for this competition based on a number of criteria, including the following:

• The intervention focuses on reading or math.

- A causal-impact study funded by IES is completed, and a paper describing the results has been published.
- The causal-impact study described in the paper has been reviewed by the WWC and meets WWC design standards with or without reservations (using version 2.0 or later of the standards).
 - Note: Some of the reviews were conducted for internal purposes and are not published on the WWC website.
- IES has determined that there were beneficial and meaningful impacts on education outcomes targeted by the intervention.
- The intervention is ready to be implemented (for example, it is available publicly or by request).
- There have been no recent studies supported by IES or other funding sources to test the effectiveness of the intervention at scale.
- There have not already been multiple replications of the intervention supported by IES.

More detail regarding each intervention can be found in Part III.

D. Award Limits

Applications to the Systematic Replications program **must** conform to the following limits on award duration and cost.

Type of Replication	Maximum Duration	Maximum Grant Award
Efficacy	5 years	\$3,600,000
Effectiveness	5 years	\$4,000,000

Part II: Project Requirements and Recommendations

A. Requirements

In addition to the **General Requirements** above, applications **must meet the requirements set out under (1) Project Narrative and (2) Data Management Plan** in order to be responsive and sent forward for scientific peer review. The requirements are the minimum necessary for an application to be sent forward for scientific peer review. In order to improve the quality of your application, IES offers recommendations following each set of requirements.

1. Project Narrative

The Project Narrative (recommended length: no more than 25 pages) **must** include four sections – Significance, Research Plan, Personnel, and Resources.

- **Significance** The purpose of this section is to explain why the proposed study is needed.
 - You must describe
 - the intervention to be evaluated, selected from the tables under Part III;
 - the evidence from prior impact studies of the intervention;
 - the components of the prior study or studies that will be systematically varied; and
 - whether the proposed study is an Effectiveness or Efficacy Replication.
- **Research Plan** The purpose of this section is to describe the evaluation of the intervention.
 - You must describe
 - the sample;
 - the setting;
 - the research design;
 - the power analysis;
 - the data analysis procedures;
 - a plan for an implementation study;
 - a cost analysis plan; and
 - a cost-effectiveness analysis plan.
- **Personnel** The purpose of this section is to demonstrate that your team possesses the appropriate training **and** experience for the research and dissemination you propose and will commit enough time to the project.
 - You **must describe**
 - the project team.
- **Resources** The **purpose** of this section is to demonstrate how you have the institutional capacity and access to resources needed to execute the project and disseminate findings.
 - You **must describe**
 - the resources to conduct the project.

2. Data Management Plan

All Systematic Replication applications must include a <u>Data Management Plan (DMP) placed in Appendix</u> <u>F</u>. Your DMP describes your plans for making the final research data from the proposed project accessible to others. IES Program Officers will be responsible for reviewing the completeness of the proposed DMP, and it is not considered in the review of scientific merit of your application. If your application is being considered for funding based on the scores received during the scientific peer review process but your DMP is determined incomplete, you will be required to provide additional detail regarding your DMP. See the Recommendations for Strong Applications section below for additional detail regarding your DMP.

B. Recommendations for Strong Applications

These recommendations are intended to improve the quality of your application, and the peer reviewers are asked to consider these recommendations in their evaluation of your application. IES strongly encourages you to incorporate the recommendations into your Project Narrative and relevant appendices. Where appropriate, recommendations are aligned with the SEER Principles (<u>https://ies.ed.gov/seer.asp</u>) to ensure that research is transparent, actionable, and focused on meaningful outcomes that have the potential to dramatically improve education.

1. Project Narrative

• Significance

- Describe the intervention, including the following:
 - Its components;
 - The processes and materials that will be used to support implementation (for example, training and coaching processes, websites, and supporting manuals);
 - Findings from prior impact studies of the intervention, including any unanswered questions that would benefit from systematic replication; and
 - Evidence that it is ready for implementation with the proposed population, in the proposed setting and delivery context, and under the proposed conditions.
- Describe the context in which the intervention will be evaluated in the current study, specifically noting which aspects of the prior study or studies will be systematically varied and which will remain the same.
 - Describe the target population(s) and whether/how it differs from prior studies of the intervention. For example, you may propose to implement and evaluate the intervention with a different population of learners, such as those from different racial/ethnic groups, or learners who demonstrate different levels of achievement.
 - Describe where implementation will take place and whether/how the geographic location and/or types of settings (for example, rural vs. urban schools) differ from prior studies of the intervention.
 - Identify who will implement the intervention and how this compares to prior impact studies. For example, you may propose to test the intervention when it is implemented by general education teachers as opposed to special education teachers.
 - Describe how the intervention will be delivered and discuss any variations to the delivery. For example, you might propose using technology to substitute for some functions performed by school personnel in a prior study.
 - Describe whether the intervention will be implemented under ideal (or non-routine conditions) that may include more implementation support or under routine conditions that reflect everyday practice. These conditions may differ from the prior study or studies, for example shifting from active support by an intervention developer to implementation under routine conditions.
- Describe and justify any changes that are needed to make the intervention appropriate for implementation under the proposed conditions and/or with the proposed population.
- Justify the practical and theoretical importance of the proposed variation(s) between the prior study and the proposed study, including how it expands our understanding of the conditions under which the intervention is likely to work and for whom.

- Discuss how the results of this systematic replication will increase the potential for scalability, including, for example, a better specification of the types of settings or learners that are most likely to benefit from this intervention or the identification of the resources and organizational structure necessary for the wider adoption and implementation of the intervention.
- Discuss how these results will help identify the market for this intervention and improve commercial opportunities.
- In <u>Appendix A: Dissemination Plan</u>, discuss how you will make the results of your proposed research available to a wide range of audiences.

Research Plan

Timeline

- Provide a timeline for each step in your evaluation, including sample selection and assignment, baseline data collection, intervention implementation, ongoing data collections, the study of fidelity of implementation and comparison group practice, impact analyses, implementation analyses, moderator and/or mediator analyses, cost analysis, costeffectiveness analysis, and dissemination.
- Charts, tables, and figures representing your project's timeline can be placed in either the Project Narrative or <u>Appendix C: Supplemental Charts, Tables, and Figures</u>. However, discussion of your project's timeline is only allowed in the Project Narrative.

Sample and Setting

- Discuss the population you intend to study and how your sample and sampling procedures will allow you to draw inferences for this population, including justification for exclusion and inclusion criteria.
- Discuss how similar or different the proposed sample is from the prior impact study (or studies) of the intervention and identify the factors that are being systematically manipulated in this replication study.
- Describe strategies to increase the likelihood that participants (for example, schools, educators, and/or learners) will join the study and remain in the study over the course of the evaluation.
- Describe the setting in which the study will take place, including the size and characteristics of the school and/or the surrounding community and how this will help better identify the learners or settings for which the intervention is most likely to work.

Research Design

- Discuss how similar or different the proposed research design is from the prior impact study (or studies) of the intervention.
- Discuss how your study, if well implemented, will meet WWC design standards with or without reservations.³
- Describe and justify the counterfactual. Compare the counterfactual in the proposed study to that in the previous study (or studies).
- Describe strategies or existing conditions that will reduce potential contamination between treatment and comparison groups.
- IES encourages you to include plans for looking at longer term outcomes to determine if short-term changes in education outcomes found immediately following the intervention are sustained over time. Depending on your design, you may be able to include additional follow up data collection within your current study or, if that is not possible, include activities that

³ Applications will be reviewed against the WWC design standards in effect at the time of RFA publication. See <u>https://ies.ed.gov/ncee/wwc/Handbooks</u>.

may help you apply to IES for an additional follow-up grant. Such activities may include planning your sample size for additional data collection in the future and maintaining contact with schools and your study participants.

Power Analysis

- Discuss the statistical power of the research design to detect a reasonably expected and minimally important effect of the intervention on the focal education outcomes and consider how the clustering of participants will affect statistical power.
- Identify the minimum effect you will be able to detect, justify why this level of effect would be expected, and explain why this would be a practically important effect.
- Detail the procedure used to calculate either the power for detecting the minimum effect or the minimum detectable effect size. Include enough information so that reviewers can duplicate your power analysis.
- Provide a similar discussion regarding power for any causal analyses to be done using subgroups of the proposed sample and any tests of mediation or moderation, even if those analyses are considered exploratory/secondary.

Outcome Measures

Outcome measures should align with those used in the prior impact study or studies. Variations in outcome measures from the prior studies should be identified and discussed in relation to replicability.

- Describe all outcome measures and the constructs they assess.
- If you propose to include additional or different outcome measures than prior studies, justify their inclusion, discuss how they are linked to the intervention, and describe their reliability and validity.

Fidelity of the Intervention and Comparison Group Practice

- Fidelity studies examine the extent to which the intervention was implemented at a level needed to produce beneficial learner outcomes.⁴ Studies of comparison-group practice help confirm that there is a difference between what the treatment and comparison group receive and in turn help explain differences in outcomes. Beneficial results can be more confidently attributed to the intervention if comparison and intervention group practices differ. Negative or zero impact findings can be expected if fidelity is not high in the intervention group or if intervention and comparison group practices do not differ.
- o Identify the measures of intervention fidelity and comparison group practice.
 - Describe how fidelity measures capture the core components of the intervention. If the intervention includes training of the intervention's end users, also identify the measures of fidelity for the training/trainers.
 - Show that fidelity measures of the intervention and comparison group practice are sufficiently comprehensive and sensitive to identify critical differences between what the intervention and comparison groups receive.
- Describe your plan for determining the fidelity of the intervention in the treatment group and the identification of practice in the comparison group.
 - Include a plan for how you would respond if you found either low fidelity or similar comparison group practice early in the study period.

⁴ Weiss, Bloom, and Brock (2014) provide a framework for understanding implementation within program evaluation.

Implementation Study

An implementation study documents the process by which the intervention is implemented and identifies key factors that affect fidelity of initial and/or sustained implementation and the adaptations made in response to the local context. These factors could include end-user characteristics as well as classroom, school, and district organizational factors. The results of the implementation study could be used to improve the efficacy, efficiency, and scalability of the intervention. Relatedly, the results are expected to improve the intervention's theory of change and may inform future designs of this and other interventions.

• Explain how you will study the implementation of the intervention.

Data Analysis

- o Make clear how the data analyses directly answer your research questions.
- Detail your data analysis procedures for all quantitative and qualitative analyses, including your impact study, implementation study, subgroup analyses, analysis of baseline equivalence, and your fidelity of implementation study.
- Describe how the data from the proposed study will be compared and analyzed with respect to prior impact studies of the intervention.
- Describe any mediators or moderators that will be included in your analysis and your rationale for focusing on these variables.
- o Describe your plan for incorporating the fidelity measures into your impact analysis.
- Address any clustering of learners in classes and schools.
- o Discuss how exclusion from testing and missing data will be handled in your analysis.
- If you intend to link multiple datasets, provide sufficient detail for reviewers to judge the feasibility of the linking plan.
- Explain how you will measure and report effect sizes in ways that policymakers and educators can readily understand.

Cost Analysis

The cost analysis is intended to help schools, districts, and states understand the monetary costs of implementing the intervention. It documents expenditures for personnel, facilities, equipment, materials, training, and other relevant inputs.

- Describe how you will identify all potential expenditures and compute the following costs within the proposed study:
 - Annual cost and cost across the lifespan of the program;
 - The overall cost and the cost at each level, including state, district, school, classroom, and learner, as appropriate;
 - If an intervention is composed of multiple components, cost per component; and
 - Breakdown between start-up costs and maintenance costs;
- Intervention costs may be contrasted with the costs of comparison group practice to reflect the difference between them.
- Describe what population of districts, schools, classrooms, and/or learners will be captured by your cost analysis.

Cost-effectiveness Analysis

The cost-effectiveness analysis provides schools, districts, and states with information about the costs to achieve a particular impact.

- A cost-effectiveness analysis is required only for the primary learner outcome measure(s). The analysis should be conducted at the level that is most relevant for the intervention being studied, whether the school, classroom, or individual learner level.
- o Describe the cost-effectiveness method you intend to use.
- If you are evaluating the impact of any specific component(s) of the intervention in addition to the overall impact of the intervention you should provide additional cost-effectiveness analyses for the separate components evaluated.

Personnel

- Identify and describe the following for all key personnel, including the Principal Investigator, Co-Principal Investigators, and Co-Investigators on the project team regardless of whether they are located at the primary applicant institution or a subaward institution:
 - Roles and responsibilities within the project and qualifications necessary to carry out the proposed work;
 - Percent of time in calendar months per year (academic plus summer) to be devoted to the project;
 - Past success at disseminating research findings in peer-reviewed scientific journals and other venues targeting policymakers and educators; and
 - Practical and theoretical contributions made by previous work evaluating interventions.
- Identify the key personnel responsible for the cost analysis and cost-effectiveness analysis and describe their qualifications to carry out these analyses.
- Describe additional personnel at the primary applicant institution and any subaward institutions along with any consultants, including personnel who will coordinate data collection and personnel who will assist in carrying out the data management plan.
- o If an independent evaluation is proposed:
 - Show that the key personnel who are responsible for the design of the evaluation, the assignment to treatment and comparison groups, and the data analyses did not and do not participate in the development or distribution of the intervention and do not have a financial interest in the intervention.
 - The developer or distributor of the intervention cannot serve as Principal Investigator on the project. However, the developer or distributor of the intervention may be a part of the project team if they are providing routine implementation support, such as professional development, that is no greater than a district or school would routinely receive if they were not taking part in the study. If the developer or distributor is included in this way, discuss how their involvement will not jeopardize the objectivity of the evaluation of the impact of the intervention.
- If an independent evaluation is <u>not</u> proposed and key personnel were involved in the development of the intervention, are from entities involved in the commercial production or distribution of the intervention, or have a financial interest in the outcome of the research, include a plan to ensure the objectivity of the research.
- Identify the management structure and procedures that will be used to keep the project on track and ensure the quality of its work. This is especially important for projects involving multiple institutions carrying out different tasks that must be coordinated and/or integrated.
- If key personnel have previously received one or more IES grants, briefly discuss the outcomes of that research, including products developed or tested and how the project's findings and products were disseminated, in order to demonstrate your ability to produce and disseminate project outcomes consistent with the mission of IES.

Resources

Resources to Conduct the Project

- o Describe your institution's capacity and experience to manage a grant of this size.
- Describe your access to resources available at the primary institution and any subaward institutions.
- Describe your plan for acquiring any resources that are not currently accessible, will require significant expenditures, and are necessary for the successful completion of the project, such as equipment, test materials, curriculum, or training materials.
- Describe your access to the settings in which the research will take place. Include Letters of Agreement in <u>Appendix E</u> documenting the participation and cooperation of the schools. Convincing letters will convey that the organizations understand what their participation in the study will involve, such as random assignment, surveys, assessments, and classroom observations.
 - Include information about incentives for participation, if applicable.
- Describe your access to any datasets that you will require. Include Letters of Agreement, data licenses, or existing Memoranda of Understanding in <u>Appendix E</u> to document that you will be able to access the data for your proposed use.

Resources to Disseminate the Results

- Describe your resources to carry out your plans to disseminate results from your evaluation, as described in the required <u>Appendix A: Dissemination Plan</u>.
 - Describe any offices or organizations expected to take part in your dissemination plans.
 - Describe resources to support dissemination through electronic means such as a website, social media account(s), electronic newsletter, listserv, or other electronic dissemination approach.

2. Data Management Plan⁵

Data management plans (DMP) are expected to differ depending on the nature of the project and the data collected. By addressing the items identified below, your DMP describes how you will meet the requirements of IES policy for data sharing.

Items for the DMP

- Plan for pre-registering the study in an education repository following the Standards for Excellence in Education Research (SEER) (<u>https://ies.ed.gov/seer.asp</u>). One such repository designed explicitly for education research is the SREE Registry of Efficacy and Effectiveness Studies <u>https://www.sree.org/pages/registry.php</u>.
- Type 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, including a 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.

⁵ Resources that may be of interest to researchers in developing a data management plan can be found at <u>https://ies.ed.gov/funding/datasharing_policy.asp</u>.

- Expected schedule for data access, including how long the data will remain accessible (at least 10 years) and acknowledgement that the timeframe of data accessibility will be reviewed at the annual progress reviews and revised as necessary.
- Format of the final dataset.
- Dataset documentation to be provided, including any decisions made about the data that would be important in replicating the results.
- Method of data access, 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 made accessible. 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.

The costs of the DMP can be covered by the grant and should be included in the budget and explained in the budget narrative. IES Program Officers will be responsible for reviewing the completeness of the proposed DMP. If your application is being considered for funding based on the scores received during the scientific peer review process but your DMP is determined incomplete, you will be required to provide additional detail regarding your DMP.

C. Award Limits

Applications **must** conform to the following limits on duration and cost:

Duration Maximums

• The maximum duration of an Efficacy or Effectiveness Replication is 5 years.

Cost Maximums

- The maximum award for an Efficacy Replication is \$3,600,000 (total cost = direct costs + indirect costs).
- The maximum award for an Effectiveness Replication is \$4,000,000 (total cost = direct costs + indirect costs).

Part III: Interventions for Systematic Replication

The following tables include the interventions that were developed and/or tested with funding from the National Center for Education Research (NCER) or the National Center for Special Education Research (NCSER) and that IES is interested in having systematically replicated. Applications submitted under the Systematic Replication grants program **must** evaluate an intervention identified in the table below. In addition to the interventions listed under NCER, applicants may also choose to replicate an intervention listed under NCSER for learners without disabilities.

Intervention Name	IES-Funded Causal Impact Paper	WWC Review	Outcomes Positively Impacted	Availability
	Read	ding	•	
Targeted Reading Intervention (TRI)	Vernon-Feagans, L., Bratsch- Hines, M., Varghese, C., Cutrer, E.A., and Garwood, J.D. (2018). Improving Struggling Readers' Early Literacy Skills Through a Tier 2 Professional Development Program for Rural Classroom Teachers: The Targeted Reading Intervention. <i>The Elementary</i> <i>School Journal, 118</i> (4), 525-548.	<u>WWC single</u> study review	Alphabetics; comprehension	Directly from researcher, Lynne Vernon- Feagans
Kindergarten Peer-Assisted Learning Strategies (PALS)	Stein, M.L., Berends, M., Fuchs, D., McMaster, K., Sáenz, L., Yen, L., and Compton, D.L. (2008). Scaling up an Early Reading Program: Relationships Among Teacher Support, Fidelity of Implementation, and Student Performance Across Different Sites and Years. <i>Educational</i> <i>Evaluation and Policy Analysis</i> , <i>30</i> (4), 368-388.	<u>WWC review</u> for an intervention report	Alphabetics	PALS website
Read Well Kindergarten	Gunn, B., Smolkowski, K., and Vadasy, P. (2010). Evaluating the Effectiveness of Read Well Kindergarten. Journal of Research on Educational Effectiveness, 4(1), 53-86.	<u>WWC review</u> for a practice guide	Letter names and sounds; word reading	<u>Voyager Sopris</u> Learning
Intelligent Tutoring for Structure Strategy (ITSS)	Wijekumar, K.K., Meyer, B.J., andLei, P. (2012). Large-ScaleRandomized Controlled Trial With4th Graders Using IntelligentTutoring of the Structure Strategyto Improve Nonfiction ReadingComprehension. EducationalTechnology Research and	<u>WWC single</u> study review	Comprehension	Directly from researcher, Kay Wijekumar

NCER

Systematic Replication Grants / Awards Beginning FY2020

	<u>Development, 60(6), 987-1013.</u>			
Strategic Adolescent Reading Intervention (STARI)	Kim, J.S., Hemphill, L., Troyer, M., Thomson, J.M., Jones, S.M., LaRusso, M.D., and Donovan, S. (2017). Engaging Struggling Adolescent Readers to Improve Reading Skills. <i>Reading Research</i> <i>Quarterly, 52</i> (3), 357-382.	<u>WWC review</u> <u>for a grant</u> competition	Alphabetics	STARI website
Promoting Acceleration of Comprehension and Content Through Text (PACT)	Vaughn, S., Swanson, E.A., Roberts, G., Wanzek, J., Stillman- Spisak, S.J., Solis, M., and Simmons, D. (2013). Improving Reading Comprehension and Social Studies Knowledge in Middle School. <i>Reading Research</i> <i>Quarterly, 48</i> (1), 77-93.	<u>WWC single</u> study review	Comprehension; social studies achievement	PACT website

NCSER

Intervention Name	IES-Funded Causal Impact Paper	WWC Review	Outcomes Positively Impacted	Availability
	Read	ding		
Early Reading Intervention	Simmons, D.C., Coyne, M.D., Hagan-Burke, S., Kwok, O., Simmons, L., Johnson, C., Zou, Y., Taylor, A.B., McAlenney, A.L., Ruby, M., and Crevecoeur, Y.C. (2011). Effects of Supplemental Reading Interventions in Authentic Contexts: A Comparison of Kindergarteners' Response. <i>Exceptional Children</i> , <i>77</i> (2), 207-228.	<u>WWC review</u> for a practice guide	Phonology	Directly from researcher, Deborah Simmons
SRA Early Interventions in Reading	Allor, J.H., Mathes, P.G., Roberts, J.K., Cheatham, J.P., and Champlin, T.M. (2010). Comprehensive Reading Instruction for Students With Intellectual Disabilities: Findings From The First Three Years of a Longitudinal Study. <i>Psychology</i> in the Schools, 47(5), 445-466.	WWC review for an IES performance measure (not published on the website)	Phonological awareness; phonemic decoding	<u>McGraw-Hill</u>
Enhanced Core Reading Instruction (ECRI)	Smith, J.L.M., Nelson, N.J., Smolkowski, K., Baker, S.K., Fien, H. and Kosty, D. (2016). Examining the Efficacy of a	WWC review for an IES performance measure	Alphabetics	ECRI website

	Multitiered Intervention for At- Risk Readers in Grade 1. <u>Elementary School Journal,</u> <u>116(4), 549-573.</u>	(not published on the website)		
	Math			
Moving Up! Mathematics (originally called ROOTS)	<u>Clarke, B., Doabler, C.,</u> <u>Smolkowski, K., Kurtz Nelson, E.,</u> <u>Fien, H., Baker, S.K., and Kosty,</u> <u>D. (2016). Testing the</u> <u>Immediate and Long-Term</u> <u>Efficacy of a Tier 2 Kindergarten</u> <u>Mathematics Intervention.</u> <u>Journal of Research on</u> <u>Educational Effectiveness, 9(4),</u> <u>607-634.</u>	WWC review for an IES performance measure (not published on the website)	Math achievement	<u>Moving Up!</u> <u>Mathematics</u> <u>website</u>
Enhanced Anchored Instruction	Bottge, B.A., Ma, X., Gassaway, L., Toland, M.D., Butler, M., and Cho, S.J. (2014). Effects of Blended Instructional Models on Math Performance. <i>Exceptional</i> <i>Children, 80</i> (4), 423-437.	WWC review for an IES performance measure (not published on the website)	Math problem solving	Directly from researcher, Brian Bottge
Fraction intervention	Fuchs, L.S., Schumacher, R.F., Long, J., Namkung, J., Hamlett, C.L., Cirino, P.T., and Changas, P. (2013). Improving At-Risk Learners' Understanding of Fractions. <i>Journal of</i> <u>Educational Psychology, 105(3),</u> 683.	<u>WWC single</u> study review	Math achievement	Directly from researcher, Lynn Fuchs
Pre-K Mathematics Tutorial (PKMT)	Barnes, M.A., Klein, A., Swank, P., Starkey, P., McCandliss, B., Flynn, K., Zucker, T., Huang, C., Fall, A., and Roberts, G. (2016). Effects of Tutorial Interventions in Mathematics and Attention for Low-Performing Preschool Children. Journal of Research on Educational Effectiveness, 9(4), 577-606.	<u>WWC review</u> for an IES performance measure	Math achievement; social-emotional development	Directly from researcher, Marcia Barnes

Part IV: Appendices and Other Narrative Content

A. Required and Optional Appendices

The required Project Narrative – Significance, Research Plan, Personnel, and Resources – that is described under <u>Part II</u> is followed by several appendices. Some of these appendices are required, and some are optional. When you submit your application through Grants.gov, you will create a single PDF file that *contains the Project Narrative and all appendices* and include it as an attachment in the application package. Include appendices in alphabetical order and simply skip an appendix if it is not required for your application or if you choose not to include one of the optional appendices. See the IES Application Submission Guide (<u>https://ies.ed.gov/funding/pdf/submissionguide.pdf</u>) for more information about preparing and submitting your application using the required application package for this competition through Grants.gov (<u>https://www.grants.gov/</u>).

1. Appendix A: Dissemination Plan (Required)

You **must** include Appendix A after the Project Narrative. We recommend that Appendix A be no more than two pages. In Appendix A, describe your plan to disseminate the findings from the proposed project. Dissemination plans should be tailored to the audiences that will benefit from the findings and reflect the unique purpose of your project.

- Identify the audiences that you expect will most likely benefit from your research, such as federal policymakers and program administrators, state policymakers and program administrators, state and local school system administrators, school administrators, teachers and other school staff, parents, students, 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 produce.
 - IES-funded researchers are expected to publish and present in venues designed for policymakers and practitioners in a manner and style useful and usable to this audience. For example:
 - Report findings to the education agencies and schools that provided the project with data and data-collection opportunities.
 - Give presentations and workshops at meetings of professional associations of teachers and leaders.
 - o Publish in practitioner journals.
 - Engage in activities with relevant IES-funded Research and Development (R&D) Centers, Research Networks, or Regional Educational Laboratories (RELs)
 - R&D Centers: <u>https://ies.ed.gov/ncer/research/randdCenters.asp</u>
 - Research Networks: <u>https://ies.ed.gov/ncer/research/researchNetworks.asp</u>
 - RELs: <u>https://ies.ed.gov/ncee/edlabs/</u>
- 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. Consistent with existing guidelines, IES encourages researchers to consider how these products could be brought to market to increase their dissemination and use.
- IES-funded researchers are expected to publish their findings in scientific, peer-reviewed journals and present them at conferences attended by other researchers.

Your dissemination plan should reflect the purpose of a Systematic Replication project. Such projects are intended to evaluate the impact of an intervention on education outcomes. IES considers all types of findings from these projects to be potentially useful to researchers, policymakers, and practitioners and expects that these findings will be disseminated in order to contribute to the full body of evidence on the intervention and will form the basis for recommendations. The costs of interventions need to be measured and communicating the costs and cost-effectiveness of interventions should be part of dissemination work.

- Findings of a beneficial impact on learner outcomes could support the wider use of the intervention and the further adaptation of the intervention for different conditions.
- Findings of no impact on learner outcomes (with or without impacts on more intermediate outcomes such as a change in teacher instruction) are important for decisions regarding the ongoing use and wider dissemination of the intervention, further revision of the intervention and its implementation, and revision of the theory of change underlying the intervention.

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

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

If your application is a resubmission of a previous application that proposed to replicate an intervention listed in Part III (for example, as part of a Replication: Efficacy and Effectiveness project under the Education (84.305A) or Special Education (84.324A) Research Grants programs), you **must** include Appendix B. We recommend that Appendix B be no more than three pages. Use Appendix B to describe the required response to reviewers, which details how the revised application is responsive to prior reviewer comments.

If you have submitted a somewhat similar application in the past but are submitting the current application as a new application, you should use Appendix B to provide a rationale explaining why the current application should be considered a "new" application rather than a "resubmitted" application. This response to the reviewers or justification to be considered a new application is the only information that should be included in Appendix B.

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

We recommend that Appendix C be no more than 15 pages. In Appendix C, you may include figures, charts, or tables with supplementary information like a timeline for your research project, a diagram of the management structure of your project, or examples of measures used to collect data for your project such as individual test items, tests, surveys, and observation and interview protocols. These are the only materials that should be included in Appendix C.

4. Appendix D: Examples of Intervention Materials (Optional)

We recommend that Appendix D be no more than 10 pages. In Appendix D, you may include examples of curriculum materials, computer screen shots, or other materials used in the intervention to be evaluated. These are the only materials that should be included in Appendix D.

5. Appendix E: Letters of Agreement (Optional)

We do not recommend a page length for Appendix E. Use this appendix to provide copies of Letters of Agreement from schools and districts who will participate in or provide data for the proposed research or serve as consultants. Ensure that the letters reproduce well so that reviewers can easily read them. Do not reduce the size of the letters. See the <u>IES Application Submission Guide</u> for guidance regarding the size of file attachments.

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

6. Appendix F: Data Management Plan (Required)

Systematic Replication applications **must** include Appendix F. We recommend that Appendix F be no more than five pages.

Include your Data Management Plan (DMP) in Appendix F. The content of the DMP is discussed under Data Management Plan in <u>Part II</u>. These are the only materials that should be included in Appendix F.

B. Other Narrative Content

In addition to the Project Narrative (see <u>Part II</u>) and required and optional <u>Appendices</u>, you will also prepare a Project Summary/Abstract, a Bibliography and References Cited, and an Exempt or Non-Exempt Research on Human Subjects Narrative (see the <u>IES Application Submission Guide</u> for information on what to include in this narrative) to include as file attachments in your application. See the IES Application Submission Guide (<u>https://ies.ed.gov/funding/pdf/submissionguide.pdf</u>) for more information about preparing and submitting your application using the required application package for this competition on Grants.gov (<u>https://www.grants.gov/</u>).

1. Project Summary/Abstract

You must submit the Project Summary/Abstract as a separate PDF attachment. We recommend that the Project Summary/Abstract be one-page long and include the following information.

- Title: A distinct, descriptive title of the project.
- **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.
- **Setting**: A brief description of the location (identified at the state level) where the research will take place and other important characteristics of the locale, such as whether it is rural or urban.
- **Population/Sample**: A brief description of the sample including number of participants; the composition of the sample including age or grade level, race/ethnicity; and the population the sample is intended to represent.
- Intervention: A brief description of the intervention the research team will evaluate.
- **Control Condition**: A brief description of the control or comparison condition, including the participants and what they will experience.
- **Research Design and Methods**: A brief description of the major features of the design and methodology. For example, specify whether you will use a randomized controlled trial or a quasi-experimental design. Describe design and methods year by year, in terms of steps or phases.
- **Key Measures:** A brief description of key measures, including what constructs the measures assess and whether those constructs are study outcomes.
- **Data Analytic Strategy**: A brief description of the data analytic strategies that the research team will use to answer research questions.
- Cost Analysis: A brief description of the cost analysis and cost-effectiveness plan.

See the IES online <u>search engine of funded research grants</u> for examples of the content to be included in your Project Summary/Abstract.

2. Bibliography and References Cited

You must submit the Bibliography and References Cited as a separate PDF attachment in the application package. We do not recommend a 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 for more information about what to include in this narrative.

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

Part V: Competition Regulations and Review Criteria

A. Funding Mechanisms and Restrictions

1. Mechanism of Support

IES intends to award grants pursuant to this Request for Applications.

2. Funding Available

Although IES intends to support the research 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.

The size of the award depends on the type of replication (Efficacy or Effectiveness) and scope of the project. Please attend to the duration and budget maximums set for each type of replication in Part II.

3. Special Considerations for Budget Expenses

Indirect Cost Rate

When calculating your expenses for research conducted in field settings, you should apply your institution's federally negotiated off-campus indirect cost rate. Questions about indirect cost rates should be directed to the U.S. Department of Education's Indirect Cost Group https://www2.ed.gov/about/offices/list/ocfo/fipao/icgindex.html.

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

Meetings and Conferences

If you are requesting funds to cover expenses for hosting meetings or conferences, please note that there are statutory and regulatory requirements in determining whether costs are reasonable and necessary. Please refer to the Office of Management and Budget's (OMB's) Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (Uniform Guidance), 2 CFR, <u>§200.432 Conferences</u>.

In particular, federal grant funds cannot be used to pay for alcoholic beverages or entertainment, which includes costs for amusement, diversion, and social activities. In general, federal funds may not be used to pay for food. A grantee hosting a meeting or conference may not use grant funds to pay for food for conference attendees unless doing so is necessary to accomplish legitimate meeting or conference business. You may request funds to cover expenses for working meetings, 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 Award Requirements

1. Attendance at the Annual IES Principal Investigators Meeting

The Principal Investigator (PI) is required to attend one meeting each year (for up to 2 days) in Washington, DC with other IES grantees and IES staff. The project's budget should include this meeting. Should PIs not be able to attend the meeting, they may designate another person who is key personnel on the research team to attend.

2. Public Availability of Data and Results

You must include a Data Management Plan (DMP) in Appendix F. The scientific peer review process will not include the DMP in the scoring of the scientific merit of the application. Instead, 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.

All Principal Investigators are required to submit the electronic version of their final manuscripts upon acceptance for publication in a peer-reviewed scholarly publication to <u>ERIC</u>, a publicly accessible and searchable electronic database of education research that makes available full text documents to the public for free. This <u>public access requirement</u> applies to peer-reviewed, original scholarly publications that have been supported (in whole or in part) with direct funding from IES, although it does not apply to book chapters, editorials, reviews, or non-peer-reviewed conference proceedings. **Principal Investigators must submit any peer-reviewed scholarly publications to ERIC**.

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

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

3. 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.

4. Demonstrating Access to Data and Education Settings

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

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

- Conducting research in or with education settings If your application is being considered for funding based on scientific merit scores from the scientific peer review panel and your research relies on access to education settings, you will need to provide documentation that you have access to the necessary settings in order to receive the grant. This means that if you do not have permission to conduct the proposed project in the necessary number of settings at the time of application, you will need to provide documentation to IES indicating that you have successfully recruited the necessary number of settings for the proposed research before the full first-year costs will be awarded. If you recruited sufficient numbers of settings prior to the application, IES will ask you to provide documentation that the settings originally recruited for the application are still willing to partner in the research.
- Using secondary data sets If your application is being considered for funding based on scientific merit scores from the scientific peer review panel and your research relies on access to secondary data sets (such as state or district administrative data), you will need to provide documentation that you have access to the necessary data sets in order to receive the grant. This means that if you do not have permission to use the proposed data sets at the time of application, you must provide documentation to IES from the entity controlling the data set(s) before the grant will be awarded. This documentation must indicate that you have permission to use the data for the proposed research for the time period discussed in the application. If you obtained permission to use a proposed data set prior to submitting your application, IES will ask you to provide updated documentation indicating that you still have permission to use the data set to conduct the proposed research during the project period.

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 decisionmaking procedures.

C. Overview of Application and Scientific Review Process

1. Submitting Your Letter of Intent

Letters of Intent are submitted online at <u>https://iesreview.ed.gov</u>. Select the Letter of Intent form for the program under which you plan to submit your application. The online submission form contains fields for each of the six 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 Letter of Intent is non-binding and optional but strongly recommended. If you submit a Letter of Intent, a Program Officer will contact you regarding your proposed research. IES staff also use the information in the Letters of Intent to identify the expertise needed for the scientific peer review panels and to secure a sufficient number of reviewers to handle the anticipated number of applications.

Elements for the Letter of Intent

- Descriptive title
- Brief description of the proposed project, including the type of replication, the intervention to be replicated, and the research design
- Name, institutional affiliation, address, telephone number, and email address of the Principal Investigator and any Co-Principal Investigators
- Name and institutional affiliation of any key collaborators and contractors
- Duration of the proposed project (attend to the Duration maximums for each project type)
- Estimated total budget request (attend to the Budget maximums for each project type)

2. Resubmissions and Multiple Submissions

If you intend to revise and resubmit an application that was submitted to a previous IES competition but that was not funded, you **must** indicate on the SF 424 Application for Federal Assistance Form in the application package (see <u>IES Application Submission Guide</u>) that the FY 2020 application is a resubmission (Item 8) and include the application number of the previous application (an 11-character alphanumeric identifier beginning "R305" or "R324" entered in Item 4a). Prior reviews will be sent to this year's reviewers along with the resubmitted application. You **must** describe your response to the prior reviews using <u>Appendix B: Response to Reviewers</u>. Revised and resubmitted applications will be reviewed according to this FY 2020 Request for Applications.

If you submitted a somewhat similar application in the past and did not receive an award but are submitting the current application as a new application, you should indicate on the application form (Item 8) that your FY 2020 application is a new application. In Appendix B, you should provide a rationale explaining why your FY 2020 application should be considered a new application rather than a revision. If you do not provide such an explanation, then IES may send the reviews of the prior unfunded application to this year's reviewers along with the current application.

You may submit applications to more than one of the IES FY 2020 grant programs. You may also submit multiple applications within a particular grant program. However, you may submit a given application only once for the FY 2020 grant competitions, meaning you may not submit the same application or similar applications to multiple grant programs or multiple times within the same program. 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 August 29, 2019 through Grants.gov (<u>https://www.grants.gov/</u>). You must follow the application procedures and submission requirements described in the IES Application Submission Guide (<u>https://ies.ed.gov/funding/pdf/submissionguide.pdf</u>) and on Grants.gov (<u>https://www.grants.gov/web/grants/applicants/apply-for-grants.html</u>).

After applications are fully uploaded and validated at Grants.gov, the U.S. Department of Education receives the applications for processing and transfer to the IES Peer Review Information Management Online (PRIMO) system (<u>https://iesreview.ed.gov/</u>). PRIMO allows applicants to track the progress of their application via the Applicant Notification System (ANS).

Approximately 1 to 2 weeks after the application deadline, invitation emails are sent to applicants who have never applied to IES before to create their individual PRIMO ANS accounts. Both the PD/PI and the AOR will receive invitation emails. Approximately 4 to 6 weeks after the application deadline, all applicants (new and existing ANS users) will begin to receive a series of emails about the status of their application. See the <u>IES Application Submission Guide</u> for additional information about ANS and PRIMO.

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

4. Scientific Peer Review Process

IES will forward all applications that are compliant and responsive to this Request for Applications to 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 (<u>https://ies.ed.gov/director/sro/peer_review/application_review.asp</u>) by a panel of scientists who have substantive and methodological expertise appropriate to the program of research and Request for Applications (<u>https://ies.ed.gov/director/sro/previous_reviewers.asp</u>).

At least two primary reviewers will complete written evaluations of the application, identifying strengths and weaknesses related to each of the review criteria. Primary reviewers will independently assign a score for each criterion, as well as an overall score, for each application they review. Based on the overall scores assigned by primary reviewers, IES calculates an average overall score for each application and prepares a preliminary rank order of applications before the full scientific peer review panel convenes to complete the review of applications.

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

5. Review Criteria for Scientific Merit

The purpose of IES-supported research is to contribute to solving education problems and to provide reliable information about the education practices that support learning and improve academic achievement and access to education for all learners. IES expects reviewers for all applications to assess the following aspects of an application in order to judge the likelihood that the proposed research will have a substantial impact on the pursuit of that purpose. Information pertinent to each of these criteria is described in Part II.

Significance

Does the applicant address the recommendations described in the Significance section?

Research Plan

Does the applicant address the recommendations described in the Research Plan section?

Personnel

Does the applicant address the recommendations described in the Personnel section?

Resources

Does the applicant address the recommendations described in the Resources section?

6. Award Decisions

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

- scientific merit as determined by scientific peer review;
- performance and use of funds under a previous federal award;
- contribution to the overall program of research described in this Request for Applications;
- ability to carry out the proposed research within the maximum award and duration requirements; and
- availability of funds.

Part VI: Compliance and Responsiveness Checklist

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

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

Compliance			
Have you includ	Have you included a Project Narrative?		
Have you includ	ed Appendix A: Dissemination Plan?		
If you are resub	mitting an application, have you included Appendix B: Response to Reviewers?		
Have you includ	ed Appendix F: Data Management Plan?		
	Responsiveness		
Have you met	all the General Requirements for an application?		
o Does yo	our proposed research include measures of reading or mathematics outcomes?		
RFA? Is	propose to conduct your research in an education setting as described in this s this research relevant to education in the United States? And does it address under the control of U.S. education systems?		
o Have yo	ou specified an intervention to replicate from the tables under Part III?		
Does your Projection required for each contract the second s	ect Narrative include the four required sections? Did you describe the elements the section?		
	Required Project Narrative Elements		
Significance	 The intervention to be evaluated, selected from the tables under <u>Part III</u> Evidence from prior impact studies of the intervention Components of the prior study or studies that will be systematically varied Whether the proposed study is an Effectiveness or Efficacy Replication 		
Research Plan	Research Plan• Sample • Setting • Research design • Power analysis • Data analysis procedures • Plan for an implementation study • Cost analysis plan • Cost-effectiveness analysis plan		
Personnel	Project team		
Resources	Resources to conduct the project		