IES Funding Opportunities and Resources

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Where to start?



Know Your IES Program Officer

- Email an IES program officer (PO)
 - https://ies.ed.gov/ncer/staff/stafflist.asp
 - https://ies.ed.gov/ncser/staff/stafflist.asp
- IES POs can help you refine your ideas, dispel myths, review drafts, and discuss feedback received from reviewers





Know Your Funding Source

- IES was established in 2002 through the Education Sciences Reform Act (ESRA)
- IES is the statistics, research, and evaluation arm of the U.S. Department of Education.



Public Law 107–279 107th Congress

An Act

Nov. 5, 2002 [H.R. 3801]

To provide for improvement of Federal education research, statistics, evaluation, information, and dissemination, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. TABLE OF CONTENTS.

The table of contents for this Act is as follows:

Sec. 1. Table of contents.

TITLE I—EDUCATION SCIENCES REFORM

Sec. 101. Short title.

Sec. 102. Definitions.

PART A-THE INSTITUTE OF EDUCATION SCIENCES

- Sec. 111. Establishment.
- Sec. 112. Functions.
- Sec. 113. Delegation.
- Sec. 114. Office of the Director.

https://ies.ed.gov/



How does IES Compare to Other Agencies?

Information about
grants found in:

Requests for Applications (RF/

Who manages theOffice of ScienceProgram OfficersCenter for Scientificpeer review process?Review

How competitive?

Very

IES



	NSF	NIH
FAs)	RFPs, Dear Colleague Letters	Parent Announcements

Very	
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Very



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The IES mission and organizational structure





IES Mission

- Describe the condition of American education.
- **Provide scientific evidence** to inform education practice and policy.
- Share this evidence with a wide range of stakeholders through varied parents, policymakers, researchers, and the public).



formats that are useful and accessible to different audiences (educators,

IES Organizational Structure







IES Mission: Scientific Evidence





- The IES <u>What Works Clearinghouse</u> (WWC) vets education research and the evidence it generates
 - "a central and trusted source of scientific evidence on education programs, products, practices, and policies"
- NCER- and NCSER-funded research projects generate evidence to be reviewed by the WWC



IES Mission: Dissemination





- NCEE helps communicate findings through the <u>What Works</u> <u>Clearinghouse (WWC)</u> (including <u>Practice Guides</u>), the <u>National</u> <u>Library of Education (NLE</u>) and <u>ERIC</u>
- NCER and NCSER grantees must comply with the <u>IES Policy Regarding</u> <u>Public Access to Research</u>



IES Public Access Policy

- IES grantees submit peer-reviewed publications to ERIC upon acceptance for publication
- must plan to share final research data
- https://ies.ed.gov/funding/researchaccess.asp



• IES grantees conducting exploratory or impact (efficacy, replication, follow-up) studies



IES Mission: Dissemination (continued)



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- NCER and NCSER applicants must include a **Dissemination History and Plan**
 - Tailor dissemination to audiences that will benefit from the findings and reflect the purposes of the project
 - Dissemination history shows ability and capacity to disseminate research findings to all interested parties (educators, policymakers, parents, and the general public)



Objectives of the IES Research Centers: NCER and NCSER

- Develop or identify education interventions (practices, programs, policies, and approaches) that enhance education outcomes and <u>can be widely deployed</u>
- Identify what works and what doesn't work, and under what conditions, and thereby encourage innovation and further research
- Understand the processes that underlie the effectiveness of education interventions and the variation in their effectiveness
- Develop measures to assess education outcomes and progress





The NCER Mission

- Support field-initiated research
- Transform education into an evidence-based field —
- and adult education



(<u>https://ies.ed.gov/ncer/aboutus/PerformanceMeasures/</u>

Eligible study populations include learners from PreK through postsecondary





The NCSER Mission

- Supports research to
 - improve their developmental, educational, and transitional results
 - Education Act (20 U.S.C. 1400 et seq.)
 - ____ coordination with NCEE
- **Eligible Study Populations:**
 - risk for a disability is identified on an individual basis ____
 - disability categories defined in Public Law 108-446 ____



expand knowledge and understanding of the needs of infants, toddlers, and children with disabilities to

improve services provided under, and support the implementation of, the Individuals with Disabilities

evaluate the implementation and effectiveness of the Individuals with Disabilities Education Act in

(https://sites.ed.gov/idea/regs/b/a/300.8; https://sites.ed.gov/idea/regs/c/a/303.21)



Snapshot of research the Centers are interested in

- NCER PreK through postsecondary and adult education
- NCSER Birth through postsecondary education, with or at risk for disabilities
- Research to improve outcomes that support success in school and afterwards (academic, social/behavioral, progress through education and on to career)
- Measurement, Exploration, Development, and Impact studies
- May focus on students, educators, families, the education system, etc.
- See the IES grant search tool for descriptions of what we have funded <u>https://ies.ed.gov/funding/grantsearch/</u>



he education system, etc. of what we have funded













How to find current funding opportunities

https://ies.ed.gov/funding



How to Identify Funding Opportunities

- Sign up for the <u>IES Newsflash</u>
- •We announce them in *The Federal Register*
- •Find the <u>funding opportunities page</u> on the IES website
- Review <u>current Requests for Applications</u> (RFAs)
- Contact relevant Program Officer(s)



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Resources for Applicants

- Program Officers
- Virtual Office Hours with NCER and NCSER Program Officers
- (SEER principles) into your research



• Resources to help incorporate the IES Standards for Excellence in Education Research



IES methodological resources and data tools







RESOURCES FOR RESEARCHERS





Methodological Resources For methodological resources to assist in preparing an IES research gra











Archived video presentations from previous IES Research Conferences and Summer Research Training Institutes

ES Institute of Education Sciences

https://ies.ed.gov/resourcesforresearchers.asp



cation Sciences EMENU	Search :	Go
OR RESEARCHERS		
IES Research Funding Resources & Technical Assistance To view research funding opportunities webinars, attend virtual office hours, learn about cost process, <u>click here</u> .	analyses, or watch videos demonstrating the submission and	peer review
Methodological Resources For methodological resources to assist in preparing an IES research grant application, <u>click h</u>	<u>here</u> .	
Research Methods Training Programs 2023		
IES is funding four research methods training programs that are holding workshops this sum researchers to expand and upgrade their methodological skills. <u>click here</u> .	mer. These workshops support the training of current education	ı
Available Datasets and Tools		
To learn more about datasets available to researchers, click here.		
Peer Review Process		
For additional information about the IES peer review process for research grants and reports	s, <u>click here</u> .	
Public Access to Research		
For information on IES' policy regarding public access to research, click here		
How Can I Learn About IES Funded Research?		
A listing of education conferences where IES-funded researchers typically present their findin those conferences throughout the year.	ngs, and when available, information about IES-funded present	ations at
lick here for printable flyers about IES resources for researchers and grant applicants.		



SEER complements WWC focus on internal validity

- To promote rigorous education research that is transparent, actionable, and focused on consequential outcomes, SEER encourages researchers to:
 - Pre-register studies _
 - Make findings, methods, and data open ____
 - Address inequities in learners' opportunities, access to resources, and outcomes —
 - Identify interventions' components
 - Document treatment implementation and contrast
 - Analyze interventions' costs
 - Use high-quality outcome measures ____
 - Facilitate generalization of study findings
 - Support scaling of promising interventions





STANDARDS FOR EXCELLENCE IN EDUCATION RESEARCH

About **Pre-registration** Open data Equity Components Implementation Cost analysis Outcomes Generalization Scaling

Analyze interventions' costs

SEER Standards

- cost of those resources.
- · When cost analyses are conducted, researchers must:
 - perspective) and provide the reason for taking this perspective;
 - assumptions,

 - resource requirements and costs of implementing interventions.

Recommendation

- use a 3 percent discount rate to calculate present values.
- intervention relative to the control or comparison condition.

Resources

- Programs



 Researchers must document the type and quantity of resources (e.g., personnel, materials and equipment, facilities, and other inputs) required to implement the interventions they study and document the economic

identify the perspective from which the cost analysis was conducted (e.g., societal perspective, district

clearly state all the assumptions used in estimating costs and offer a justification for those

 describe any adjustments made to prices to amortize costs or to account for inflation, regional price. differences, and the time value of money and explain a rationale for those adjustments; and

present cost metrics and cost breakdowns that help education decisionmakers understand the

· When feasible, researchers conducting a cost analysis should provide a "reference case analysis" in which they adopt a societal perspective (i.e., include costs to all stakeholders), use national average prices, and

• Even if not otherwise required, researchers should consider measuring the cost of components of the

Download the <u>IES Cost Analysis Starter Kit, version 1.0</u> (released April 1, 2020).

Visit the IES-funded Cost Analysis in Practice (CAP) Project, its Resource Page, and the Online Modules.

Read the American Institutes of Research's Standards for the Economic Evaluation of Education and Social

Visit the IES-funded <u>E\$timator</u> tool, hosted by Teachers College, Columbia University.



STANDARDS FOR EXCELLENCE IN EDUCATION RESEARCH

About Pre-registration Open data Equity Components Implementation Cost analysis Outcomes Generalization Scaling

Equity

SEER Standard

opportunities.

Recommendation

- underserved.
- be implemented.

Resources

Summary (November/December 2022)

What We're Reading and Watching

Cerna, O., Conliffe, B., & Wilson, A. (2021). Guiding questions for supporting culturally responsive evaluation practices and an equity-based perspective. New York, NY: MDRC. Retrieved from https://www.mdrc.org/sites/default/files/Equity-Guiding Questions.pdf

Woodson, T. T. (2021). Using a culturally responsive and equitable evaluation approach to guide research and evaluation. Princeton, NJ: Mathematica. Retrieved from https://www.mathematica.org/publications/using-aculturally-responsive-and-equitable-evaluation-approach-to-guide-research-and-evaluation

Visit the NCER/NCSER blog "The 2022 IES PI Meeting: Advancing Equity & Inclusion in the Education Sciences," which includes meeting highlights and links to several presentations of interest.

Last Modified: June 16, 2022



 Researchers who are designing and testing interventions must clearly demonstrate how those interventions address education inequities, such as by improving learners' outcomes and/or their access to resources and

 Researchers should discuss how their study conceptualizes education equity, and how the study's design, sample, measurement, analysis, and reporting align to that conceptualization.

 When feasible, researchers should design studies that allow valid estimates to be calculated for different. groups within the sample to improve our understanding of the extent to which policies, practices, and interventions yield varying outcomes for different groups, especially those groups that have been historically

Researchers should design interventions that take into account the contexts and systems in which they will

 Researchers should describe how they will consider input from learners, educators, and/or other key stakeholders when conceptualizing, designing, and reporting the results of their research, and when considering issues critical for implementation and scaling of interventions

Read <u>Best Practices and Challenges for Embedding Equity in Education Research Technical Working Group</u>



Scientific Peer Review

centers)



Managed by the IES Office of Science (separate from the research



IES Organizational Structure







Scientific Peer Review - continued

- - create grant competitions
 - provide extensive technical assistance to applicants

work with grantees

- Peer review procedures are approved by the National Board for Education Sciences
- More information about the peer review process can be found at <u>https://ies.ed.gov/director/sro/index.asp</u>
- Individuals interested in serving on grant peer review panels can visit https://iesreview.ed.gov/ReviewerRecruitment



• Separate Office of Science allows for objective peer review process and allows Program Officers to



NCER 305A – Numbers of Applications Reviewed and Funded FY2008-FY2021



Note: Due to insufficient funds for new awards, NCER was unable to fund all meritorious applications in FY2013 and FY2014 and did not include Development & Innovation projects in the FY2016 Education Research Grants (305A) competition.





NCSER 324A – Numbers of Applications Reviewed and Funded FY2008-FY2021



Note: Due to insufficient funds for new awards, NCSER was unable to fund all meritorious applications in FY2013 and FY2021, did not hold any research grant competitions in FY2014, and restricted the FY2017 Special Education Research Grants competition topics to projects that focused on teachers or other instructional personnel.





General requirements for main education and special education research grant programs





General Requirements for Education and Special Education Research

- **Eligible Study Populations**
 - Differs by center (NCER or NCSER) ____
 - ____ funded by NCSER
- **Education Outcomes**
 - Differs by center (NCER or NCSER) ____
 - Specified by grant program ____
 - NCER requires learning and achievement outcomes in core academic content areas
- **Education Settings**
- **Project Types**
 - Measurement; Exploration; Development/Innovation; Impact (Efficacy, Replication, Follow-Up)
- **Dissemination History and Plan**

 - <u>History shows ability and capacity to disseminate research findings to a range of audiences</u>



Research focused solely on learners with or at risk for disabilities from birth through postsecondary education must be

Research must be relevant to U.S. education and address factors under the control of U.S. education systems

Plan tailored to audiences who will benefit from the findings and reflect the purposes of the project type



Project Types and Research Topics







Project Types



Based on the Common Guidelines for Education Research and Development and the Companion Guidelines on Replication & Reproducibility in Education Research



Project Types (continued)

- Measurement
 - Develop and validate assessments for use by educators or education researchers _
- Exploration
 - _____
- Development and Innovation
 - Develop and pilot test education interventions to improve learner outcomes



Identify relationships between learner/educator/school/policy characteristics and education outcomes to build theory and inform development and testing of interventions and assessments



Project Types (continued)

- Impact
 - Efficacy
 - outcomes using designs meeting WWC standards
 - Replication
 - least one prior efficacy or replication study and proposed research questions Use design meeting WWC standards
 - Follow-Up

Test longer-term impact of interventions with evidence of beneficial impacts on education outcomes in a previous or ongoing evaluation study





Test education interventions with evidence of positive impact on education outcomes in at

Vary one or more aspects of the previous study(ies) based on theory, available evidence,

Research Topics

• Topics change over time as the needs of the field change and more knowledge is accumulated






Current NCER approach to topics

- Applicants select one topic
- Education outcomes with academic focus (grades/test scores/progression) are required for all topics
- Some topics have additional required education outcomes
- Sometimes an application fits under more than one topic



- Career and Technical Education
- Civics Education and Social Studies
- Cognition and Student Learning
- Early Learning Programs and Policies
- Improving Education Systems
- Literacy
- Postsecondary and Adult Education
- Policies, Practices, and Programs to Support English Learners
- STEM Education
- Social, Emotional, and Behavioral Context for Teaching and Learning
- Teaching, Teachers, and the Education Workforce



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Current NCSER approach to topics

- research focus
 - Cognition and Student Learning
 - Early Intervention and Early Learning
 - Educators and School-Based Service Providers
 - Families of Children with Disabilities
 - Reading, Writing, and Language
 - Science, Technology, Engineering, and Mathematics (STEM) ____
 - Social, Emotional, and Behavioral Competence
 - Systems, Policy, and Finance
 - Transition to Postsecondary Education, Career, and/or Independent Living



Applicants identify a primary research focus and may opt to identify a secondary



Important application content





Important components of the application

- Project Narrative: Significance, Research Plan, Personnel, Resources
- **Required Appendices**
 - **Dissemination History and Plan**
 - Response to Reviewers (resubmissions) ____
 - Data Sharing and Management Plan (depends on project type) ____
- **IES Biosketch**
 - Key personnel and consultants
 - Use SciENcv (https://www.ncbi.nlm.nih.gov/sciencv/) to access the IES Biosketch form
 - _____ new grant award



Include your ORCID iD (<u>https://orcid.org/</u>) – Persistent Digital Identifier (PID) is a condition of receiving a



Project Narrative Components

- Four parts to the narrative:
 - Significance —
 - Research Plan
 - Personnel
 - Resources
- Requirements vary by topic and project type
- give an overall score



Reviewers score each section (and the dissemination history and plan) and



Significance

- Describes the overall project
 - evaluated
- Establishes the importance and provides a compelling rationale for the project
 - projects)
 - Empirical justification
 - Practical justification



 Your research question to be answered involving the measure to be developed and/or validated, factors to be explored, or intervention to be developed or

- Theoretical justification \rightarrow theory of change (Exploration, Development, Impact)



Theory of Change

- A theory of change makes clear what is what order
 - Making it easy for reviewers to un measuring certain outcomes
 - A graphic can be helpful





• A theory of change makes clear what is expected to happen, for whom, where, and in

- Making it easy for reviewers to understand the research plan and why you are





Research Plan

- —
- Make certain the Research Plan is aligned to the Significance section All research questions should be justified in the Significance section
- Describe a step-by-step process
 - A timeline is strongly recommended!
 - do.



Describe the work you intend to do and how you will answer your research questions Describe your sample, research design, methods, and data analysis plans

Organization is critical to ensure reviewers understand what you are proposing to





Personnel

- Describe each team members' role and qualifications to carry out that role, including
 - Content/substantive expertise
 - Cultural and linguistic expertise as it relates to the target population Statistical, methodological, and cost analysis expertise
- If you are an experienced researcher...
 - Show you have adequate time to be PI
 - Make your credentials clear (not all reviewers may know)
- If you are an early career researcher...
 - Show you have adequate expertise not only to do work but to manage the project Include more experienced researchers as Co-PIs (ideally), Co-I, consultants, or advisory board _____ members (for enough time to be taken seriously)





Resources

- the findings
 - Be specific, don't simply list generic resources
- Show that all organizations involved understand and agree to their roles ٠
 - the project
 - attrition



• Show the institutions involved have the capacity to support the work and disseminate

– What will each institution, including partnering education settings, contribute to

Show strong commitment from education settings and alternatives in case of





Dos and Don'ts in the Project Narrative

- Don't assume reviewers know the significance of your work.
- Don't quote back the RFA on *general* importance of a topic.

- Do quote back the RFA if a specific research need is highlighted under a research topic and your work will address that need.
- Do include a theory of change, if relevant.
- Do incorporate SEER principles <u>https://ies.ed.gov/seer/</u>





Common problems in the project narrative

- The "it" is unclear (what is the intervention?)
- The "how" is unclear (how will the intervention be developed and implemented? how are the factors to be explored related to education outcomes?)
- Theory of change is unclear (how do the components fit together? what is the mechanism of action?)







Common problems (continued)

- Misalignment between Significance and Research Plan
 - Broad concept/construct described but narrow or inappropriate measure used - Expectation of an evaluation of a whole-school intervention vs. typical practice but end up with a design that uses classroom-level random assignment

 - Generalizability much less than Significance suggests
- Setting, population, and sample not clearly described
 - Context is unclear (who will be included and excluded in the sample? which variables are available, and which are not available in the existing dataset?)





Recommendations for the measurement plan

- Have measures for both proximal and distal outcomes
- Include measures that will be sensitive to changes you expect to see
- Include measures of broad interest to educators (practical or policy relevant)
- Describe reliability, validity, and relevance of measures selected







Outcome Measures Dos and Don'ts

- Don't choose measures for convenience alone.
- Do use measures that align with your research questions and theory of change.
- Do not take the kitchen sink approach (only include measures linked to research questions).
- Do select measures from ED Instruments (<u>https://edinstruments.com/</u>), a developing library of educational measurement tools





Other considerations

- Use an appropriate research design for your research questions
 - Do not have the design section written independently by a methodologist
 - —
- Common design issues
 - Attrition and missing data
 - Power analysis
- Use a mix of quantitative and qualitative methods



If sections are written by different people have everyone read through the whole application



Application Checklist in RFA

Compliance

Have you included a project narrative?

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? will remove any pages above the maximum before forwarding an application for scientific peer review.

Have you included Appendix A: Dissemination History and Plan?

If you are resubmitting an application, have you included Appendix B: Response to Reviewers?

If you are submitting an Exploration or Impact application, have you included Appendix F: Data Sharing an Management Plan?

General Requirements for Responsiveness

Have you met all the Requirements for an application?

Does your proposed research include measures of academic outcomes?

- If you are applying under the Teaching, Teachers, and the Education Workforce topic, does your proposed research include the additional required measures of educator outcomes?
- If you are applying under the Social, Emotional, and Behavioral Context for Teaching and Learning 1 does your proposed research include the additional required measures of social, emotional, and behavioral competencies?

Is the proposed research relevant to education in the United States, and does it address factors under the co of U.S. education systems?

Have you indicated a single topic for your application?

Have you indicated a single project type for your application?

Does your project narrative include the four required sections and the associated requirements for the select IES Project Type? Did you describe the elements required for each section as listed below?



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- Only compliant and responsive applications will be forwarded for scientific peer review.
- Each RFA includes a Compliance and Responsiveness Checklist – this is an example from the FY24 305A RFA



For Questions and More Information

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- Facebook <u>https://www.facebook.com/IESResearch/</u>



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