

Request for Applications

Research Training Programs in the Education Sciences

CFDA Number: 84.305B

U.S. DEPARTMENT OF EDUCATION

A Product of the National Center for Education Research

Letter of Intent Due:	June 11, 2020	https://iesreview.ed.gov/LOI/LOISubmit
Application Package Available:	June 11, 2020	https://www.grants.gov/
IES Submission Guide Available:	April 1, 2020	https://ies.ed.gov/funding/pdf/submissionguide.pdf
Application Deadline:	11:59:59 p.m. Eastern Time on August 20, 2020	https://www.grants.gov/
Possible Start Dates:	July 1 - September 1, 2021	

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Part I: Overview and General Requirements

A. Purpose of the Research Training Programs in the Education Sciences

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) supports research focused on practices and policies that improve education outcomes and access to education opportunities for all learners from early childhood through adulthood, particularly those at risk of failure. The specific purpose of IES-supported training programs is to further the training of education researchers, including **state and local education agency staff**. In doing so, IES aims to increase the quality, accessibility, use, and relevance of education research.

In this Request for Applications (RFA), NCER invites applications for training projects that will contribute to its Research Training Programs in the Education Sciences (Research Training).

For FY 2021, IES is accepting applications for training under three programs:

- Pathways to the Education Sciences (Pathways Training Program)
- <u>Postdoctoral Research Training in the Education Sciences</u> (Postdoctoral Training Program)
- <u>Methods Training Program for Education Researchers</u> (Methods Training Program)

IES training programs prepare individuals to conduct rigorous education research supported by IES across its research competitions, advance knowledge within the field, and address issues important to education policymakers and practitioners. As part of the programs, IES supports

- Training that adopts new approaches to find and mentor students and researchers from diverse backgrounds to encourage their entry into and success in education research careers
- Training that includes new ideas, approaches, and perspectives to address long-standing education issues
- Training that helps researchers, including state and local education agency research staff, acquire skills necessary to obtain, evaluate and generate evidence needed for policy and programmatic decisions

Separate funding announcements are available on the IES website (https://ies.ed.gov/funding) that pertain to other discretionary grant competitions funded through the National Center for Education Research (https://ncer.ed.gov) and the National Center for Special Education Research (https://ncser.ed.gov). An overview of IES research grant programs is available at https://ies.ed.gov/funding/overview.asp.

All applications for the FY 2021 Research Training Programs are expected to provide training that supports researchers' understanding of and ability to use the new IES-wide *Standards for Excellence in Education Research* (SEER), as appropriate, when carrying out education research. SEER principles include pre-registering studies; making research findings, methods, and data available to others; identifying core intervention components; documenting intervention implementation to inform use in other settings; analyzing costs; focusing on outcomes meaningful to learners' success; facilitating generalization of study findings; and conducting research in a way that informs the future scaling of interventions. Additional information about the SEER standards is available on the IES website

(https://ies.ed.gov/seer.asp). Expectations regarding SEER for each of the training programs are detailed in the sections below.

B. General Requirements

1. Programs

Your application **must** be directed to one of the following training programs listed below and meet the requirements set out for each program as described in <u>Part II</u> to be sent forward for scientific peer review.

The **Pathways Training Program** funds training programs at minority-serving institutions (MSIs) and institutions of higher education that partner with MSIs. These programs are open to all students and are designed to provide upper-level undergraduate students, recent graduates, and/or master's students with education research experience and professional development in order to prepare these students to pursue doctoral study in the education sciences or in fields relevant to education research. The program places special emphasis on recruiting students from underrepresented groups, including racial/ethnic minorities, first-generation college students, economically disadvantaged students, veterans, and students with disabilities.

The **Postdoctoral Training Program** funds programs to prepare researchers with a doctoral degree to conduct high-quality education research that advances knowledge within the field of education sciences and addresses issues important to education leaders and practitioners. These researchers are expected to learn how to conduct independent research, take on leadership positions within research teams, work directly with practitioners and policymakers, and clearly communicate their findings to multiple audiences.

The **Methods Training Program** funds programs to help current education researchers, **including state and local education agency research staff**, maintain and upgrade their research and analysis skills in order to conduct rigorous and relevant education research.

2. Award Limits

Applications to the Research Trainings Programs competition **must** conform to the following limits on award duration and cost.

Program	Maximum Grant Duration	Maximum Grant Award
Pathways Training Program	5 years	\$1,560,000
Postdoctoral Training Program	5 Years	\$800,000
Methods Training Program	3 Years	\$800,000

C. Getting Started

1. Technical Assistance for Applicants

IES provides technical assistance to applicants that addresses the appropriateness of project ideas for this competition and substantive issues concerning research training in the education sciences. IES program officers work with applicants though a variety of formats up until the time of Grants.gov submission. If you submit a letter of intent (LOI) at https://iesreview.ed.gov/LOI/LOISubmit, a program officer will contact you regarding your proposed project. IES also provides Funding Opportunities Webinars (live and on demand at https://ies.ed.gov/funding/webinars/) that include advice on choosing the correct competition, grant writing, and submitting your application.

2. Eligible Applicants

IES **does not provide funds directly to individuals seeking training**. IES provides funds to institutions to establish training programs and independently recruit and train participants for those programs. See Part II: Training Program Requirements for information about eligible institutions for the different types of training programs.

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

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

3. RFA Organization and the IES Application Submission Guide

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. Part I provides an overview of the NCER Training Programs and sets out the general requirements for your grant application. Part II provides detail on the specific requirements of each training program. Part III provides information about general formatting and the other narrative content for the application, including required appendices. Part IV provides information on competition regulations and the review process. Part V provides a checklist that you can use to ensure that you have included all required application elements to advance to scientific peer review. Part VI provides the program codes that you must select from and enter the appropriate code in Item 4b of the SF 424 Application for Federal Assistance form.

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

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

4. Ensuring Your Application is Forwarded for Scientific Peer Review

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

(a) On-time submission

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

• Received and validated by Grants.gov no later than 11:59:59 p.m. Eastern Time on August 20, 2020

(b) Compliance

- Includes the **required project narrative** (see <u>Part II</u>)
- Adheres to all formatting requirements (see <u>Part III</u>)
- Adheres to all page limit maximums for the project narratives and appendices. IES will remove any pages above the maximum before forwarding an application for scientific peer review
- Includes all required appendices (see <u>Part III</u>)
 - o Appendix A: Dissemination History and Plan (Methods Training Program only)
 - o Appendix B: Response to Reviewers (Resubmissions only)
 - o Appendix C: Summary of Research and Training Projects (All Applications)
 - Appendix D: Example Letter of Agreement for Fellows (Pathways and Postdoctoral Training Applications only)
 Appendix E: Letters of Agreement from Training Partners (Pathways and Methods Training Applications only)

(c) Responsiveness

- Meets the **General Requirements** for all applications (see <u>Part I:B</u>)
- Meets the Training Program Narrative Requirements for the selected Training Program (see Part II)

D. Changes in the FY 2021 Request for Applications

All applicants and staff involved in application preparation and submission, whether submitting a new application or submitting a revised application, **should carefully read all relevant parts of this RFA**. Major changes to the FY 2021 RFA for the Research Training Programs in the Education Sciences (CFDA 84.305B) competition are listed below and described fully in the relevant sections of the RFA.

• IES has page limits for the project narrative and some appendices. If the project narrative or an appendix exceeds the limits discussed in this RFA, IES will remove any pages after the

maximum for the project narrative or appendix. IES also has formatting guidelines, as discussed in <u>Part IV.B</u> that applicants must attend to.

- For the Pathways Training Program, IES intends to make no more than five awards.
 However, should funding become available, IES may consider making additional awards to high-quality applications that remain unfunded after five awards have been made.
 - a. The maximum award amount for the Pathways Training Program has increased to \$1.56 million.
 - b. The maximum for participant support costs has increased to \$13,000 per fellow, resulting in a new maximum of \$780,000 total for participant support costs.
 - c. The maximum program support costs have also increased to \$780,000.
- The maximum award for Postdoctoral Training Programs has increased to \$800,000, and IES
 specifies its maximum contribution towards postdoctoral fellows' fringe/benefits and their
 research and training support.

For Methods Training Program applications peer reviewers will now consider Dissemination as a separate review criterion. IES is committed to broadening access to IES-funded methods training programs beyond those able to attend your trainings synchronously, whether the trainings are offered online or in person. IES requires all applicants to the Methods Training topic to present a plan to disseminate training products to a wider audience. In addition, applicants are asked to describe experiences with disseminating products from any prior methods training activities. Peer reviewers will score Dissemination as a separate criterion in the review process. Applications submitted under the Methods Training topic that do not contain a Dissemination History and Plan in Appendix A will not be peer reviewed.

- All fellows in the Pathways and Postdoctoral training programs must have ORCID numbers (Open Researcher and Contributor ID, https://orcid.org/). Programs must ensure that their fellows create these numbers during their training, if they do not already have them.
- IES understands that COVID-19 closures may inhibit applicants' ability to gather the letters of
 agreement that would typically appear in <u>Appendix E: Letters of Agreement</u> and has
 provided additional guidance around this issue in the description of the Appendix in Part IV.

E. Common Applicant Questions

May I submit an application if I did not submit a letter of intent (LOI)?

Yes. However, IES strongly encourages you to submit one. If you miss the deadline for submitting an LOI, contact the appropriate program officer.

May I submit the same application to more than one of the IES grant programs? No. Please see <u>Part III.C.2 Multiple Submissions</u>.

May I submit multiple training applications to the same program?

It depends on the program. An institution may submit only one application to the Pathways Training Program. An institution may submit multiple applications to the Postdoctoral Training Program or Methods Training Program **only if** the applications are substantively different from one another *and*

do not include any core trainers (for Postdoctoral Training Programs) or key personnel (for Methods Training Programs) that are also on another application to the same program.

May I submit applications to more than one training program or to a training program and a research grant program?

Yes. An institution may submit separate applications to more than one training program. Submitting an application to any training grant program has no bearing on applying to the research grant programs.

May I apply if I intend to copyright products (for example, curriculum) developed using grant funds? Yes. Products derived from IES-funded grants may be copyrighted and used by the grantee for proprietary purposes, but the U.S. Department of Education reserves a royalty-free, non-exclusive, and irrevocable right to reproduce, publish, or otherwise use such products for Federal purposes and to authorize others to do so [2 C.F.R. § 200.315(b)(2014); https://www.ecfr.gov/cgi-bin/text-idx?node=2:1.1.2.2.1.4.30.16&rgn=div8].

May I apply if I am not located in the United States?

No. Training grants are awarded only to institutions within the territorial United States.

Part II: Training Program Requirements and Recommendations

A. Applying to a Training Program

For the FY 2021 Research Training Programs, you **must** submit your application to one of the three research training programs. You must identify your chosen topic area on the SF-424 Application for Federal Assistance form (Item 4b) in the Application Package for this competition (see the IES Application Submission Guide, https://ies.ed.gov/funding/pdf/submissionguide.pdf), or IES may reject your application as nonresponsive to the requirements of this RFA. IES **strongly encourages** you to contact the relevant program officer to discuss the appropriateness of your proposed program for submission under a specific training program topic.

The programs differ by eligible applicants, individuals being trained, the training to be provided, and the outcomes expected.

Across all programs, in order to be sent forward for scientific peer review, you must

- Meet the general requirements outlined in Part I.B
- Meet relevant program requirements listed under Part II

For each training program, refer to the following:

- The Purpose section for the types of research training each training program supports
- **The Requirements section** for the specific content that you must address in the training program narrative in order to be sent forward for scientific peer review
- The Award Limits section for duration and cost maximums and additional parameters.
- The Recommendations for Strong Applications section for recommendations to improve the quality of your application. The peer reviewers are asked to consider these recommendations in their evaluation of the quality of your application. IES strongly encourages you to incorporate the recommendations into your project narrative and relevant appendices. Where appropriate, recommendations are included for training programs to support researchers learn how to implement the SEER Principles (https://ies.ed.gov/seer.asp) to ensure that research is transparent, actionable, and focused on meaningful outcomes that have the potential to dramatically improve education.

Each program name is linked to the program page on the IES website, where you can find more information and view the abstracts of previously funded projects.

NCER's training programs aim to prepare participants to conduct the type of work that NCER supports through its research grant programs. Thus, NCER training programs should not focus primarily **on students with or at risk for disabilities**. NCER training programs may prepare fellows to conduct research that includes **subgroups of children**, **youth**, **or adults with or at risk for disabilities**, but such subgroups **must not be the primary focus** of the training program or research projects **unless**

the training is preparing researchers to work with learners who are over 16-years old and enrolled in adult education programs¹.

If you are interested in preparing participants to conduct **work primarily on students with or at risk for disabilities from birth through K-12 or in postsecondary education**, you should refer to separate training grant programs run by the National Center for Special Education Research (https://ies.ed.gov/ncser/).

¹ For the purposes of this RFA, *adult education programs* refer to the programs defined in Title II of the 2015 Workforce Innovation and Opportunities Act (WIAO), such as adult basic education, adult secondary education, and adult English literacy programs.

B. Pathways to the Education Sciences

Program Officer: Dr. Katina Stapleton (202-245-6566; Katina.Stapleton@ed.gov)

1. Purpose

The Pathways to the Educations Sciences program (Pathways; https://ies.ed.gov/ncer/projects/program.asp?ProgID=95) develops a pipeline of talented education researchers who bring fresh ideas, approaches, and perspectives to addressing the issues and challenges faced by the nation's diverse students and schools. The Pathways Training Program seeks to (a) increase the number of fellows from groups underrepresented in doctoral study, including racial and ethnic minorities, first-generation college students, economically disadvantaged students, veterans, and students with disabilities and (b) provide greater diversity in the types of institutions that provide IES-funded research training.

Pathways Training Programs

prepare undergraduate, post-baccalaureate, and master's students for doctoral study in education research and target students who are underrepresented in such study.

The Pathways Training Program grants will be awarded to minority-serving institutions (MSIs) and other institutions of higher education in partnership with MSIs. The goal is to provide students—especially students from historically underrepresented groups—with an introduction to education research and scientific methods, meaningful opportunities to participate in education research studies, professional development, and mentoring that lead to doctoral study.

Pathways training program formats may vary but must include a required research apprenticeship and training in an education problem or issue chosen as the research theme of the training program; methodological knowledge and skills; and career development. Training participants (known as *Pathways fellows*) may include upper-level undergraduates (juniors and seniors), post-baccalaureate students (within 5 years of receiving a bachelor's degree), or students enrolled in master's degree programs. Fellows who complete their Pathways Training Program should be prepared to enter a doctoral program in which they can pursue a future career in education research.

In the final performance report submitted to IES, all grantees under the Pathways Training Program topic will describe

- The implemented training program, including descriptions of all key components discussed in the original application, the fellows accepted to the program, who completed and who did not, and their research products
- The program's success in recruiting and training fellows and the measures used
- The program's success in preparing fellows with the appropriate skills and knowledge to pursue a graduate education in education research including -
 - Fellows' contributions to practice and policy, including the results of their apprenticeship
 - o Fellows' application and acceptance to graduate programs
 - o Fellows' contributions to the field of education sciences
- Analysis of the cost per fellow training year including recruitment efforts
- Recommendations for future pathways training programs

2. Requirements

Applications under the Pathways Training Program topic must meet the requirements for the (a) Eligible Applicants and (b) Training Program Narrative to be sent forward for scientific peer review.

(a) Eligible Applicants

The Pathways to the Education Sciences Research Training Program requires a minority-serving institution (MSI) to be the applicant or be included as a partner institution. Therefore, the applicant institution must supply the principal investigator (PI) and **must be** one of the following:

- A minority-serving institution (MSI) located in the territorial United States that confers bachelor's or master's degrees in academic fields relevant to education
- An academic institution located in the territorial United States that confers bachelor's or master's degrees in academic fields relevant to education and that partners with an eligible MSI

To qualify as an MSI for the purpose of the Pathways Training Program, the institution must already have been certified as an MSI and must be on one or more of the following lists:

- The U.S. Department of Education's Office of Postsecondary Education (OPE) certifies institutions across several categories of MSIs as part of its annual Designation as an Eligible Institution for Title III and Title V Program process. For the purposes of this competition, institutions included on the Office of Postsecondary Education's FY20 or FY19 lists of Title III and Title V eligible institutions will be considered MSIs. For more information, see http://www2.ed.gov/about/offices/list/ope/idues/eligibility.html#el-inst.
- The White House Initiative on Historically Black Colleges and Universities' maintains the list of accredited HBCUs: https://sites.ed.gov/whhbcu/one-hundred-and-five-historically-black-colleges-and-universities/
- The White House Initiative on American Indian and Alaskan Native Education maintains the list
 of tribal colleges and universities: https://sites.ed.gov/whiaiane/tribes-tcus/tribal-colleges-and-universities/

Any partner institution included in the application must supply a co-principal investigator (Co-PI) and must be an academic institution located in the territorial United States that confers bachelor's or master's degrees in academic fields relevant to education.

If the MSI is serving as the partner in your application, you must designate someone from the MSI to serve as the co-principal Investigator and include funds in your budget for the MSI co-principal Investigator to attend the PI meeting.

Other academic and non-academic institutions may participate as collaborators (e.g., refer students or provide additional training or mentoring) without supplying a Co-PI.

IES is accepting applications for new Pathways training programs and applications to renew existing training programs. An academic institution may host no more than one IES-supported Pathways Training Program at a time. This restriction applies to both applicants and their partner institutions. Therefore,

- An academic institution may submit only one application. Should an academic institution be included as the applicant or partner institution in more than one application, the academic institution will have to choose which application will be reviewed.²
- Academic institutions that currently have a Pathways training program that will still be operating in August 2021 can apply only to renew the existing training program. The research training and budget narratives should describe how the applicant proposes to transition the training program from the existing grant to the new award.

Core Faculty

The participating faculty members who conduct education research and will conduct the training activities including teaching courses, mentoring fellows, supervising research, and monitoring fellows' progress.

(b) Training Program Narrative

The project narrative must adhere to the font guidelines (see Part III.B) and be no more than 20 pages. If the narrative exceeds this page limit, IES will remove any pages after the 20th page of the narrative. The project narrative **must** include four sections: Significance, Research Plan, Personnel, and Resources.

(1) Significance

The purpose of this section is to describe the focus of your training program, how it will prepare fellows for acceptance into doctoral programs and for graduate study related to education research, the specific skills and knowledge fellows will receive in order to conduct research in general education, and the training program's potential contribution to increasing diversity in the field of education sciences.

You **must describe** the education research focus of your training program and how this focus relates to improving the U.S. education system (prekindergarten through high school and/or postsecondary and/or adult education).

(2) Research Training Plan

The purpose of this section is to outline the specific activities your training program will provide from fellow recruitment to post-fellowship career development.

You must describe

- a program that will train a minimum of 40 fellows over 5 years. Each cohort's training will last between 8 weeks and 1 calendar year.
- A recruitment plan that provide specific strategies for promoting diversity in its program and recruiting fellows from diverse groups underrepresented in doctoral programs
- The research training activities, including mentoring and a research apprenticeship (**note:** providing independent study opportunities does not fulfill this requirement.)
- The financial support to be provided to individual fellows and to the overall training program

² We strongly suggest that you contact your institution's sponsored projects office to determine if there are multiple Pathways applications being developed that include your institution as the applicant or as a partner institution. We also strongly suggest limiting the number of official "partner institutions" included in your application in order to reduce the risk of your application being considered ineligible for review due to overlap with another application that includes your partner.

- A plan for tracking fellows' progress in completing training requirements and acceptance to graduate school.
- A plan for determining the success of the training program in meeting program goals and objectives.

(3) Personnel

The purpose of this section is to describe your training team, including their relevant expertise, responsibilities, and time commitments to the training program.

You **must describe** all key personnel on the project team including the PI, any Co-PIs, program coordinator (if there is one), and Core faculty (including research apprenticeship supervisors and mentors) ensuring the following:

- A training team of **core faculty** who conduct education research, including at least one core faculty member with expertise in research methodology and statistics
- A training team that includes **core faculty** members from both the applying academic institution and the partner MSI, if the applying academic institution is not an MSI

(4) Resources

The purpose of this section is to describe your access to the institutional resources that will support the implementation of your training program and your access to research sites and data sets where applicable.

You **must describe** the institutional resources of both the primary applicant institution and any subaward institutions.

3. Award Limits

Awards made under the Pathways Training Program **must** conform to the following limits on duration and cost.

(a) Duration Maximums

The maximum duration of a Pathways Training Program project is 5 years.

(b) Cost Maximums

The maximum award for a Pathways Training Program project is **\$1,560,000** (total cost = direct costs + indirect costs). See the discussion of Indirect Cost Rate for training grants in <u>Section IV</u>.

NOTE: IES expects that most training programs funded will not enroll fellows in the first year of the grant. As a result, requests for Year 1 funding are expected to be lower than the following years as expenditures will primarily be for program development and recruitment costs rather than fellowship costs.

(c) Maximum Number of Awards

IES intends to make **no more than five awards**. However, should funding be available, IES may consider making additional awards to high-quality applications that remain unfunded after five awards have been made.

4. 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.

(a) Significance

(1) Training Program Focus and Framework

Describe your goals for the training program, including the knowledge and skills you believe are important for students to have when they are considering or beginning doctoral study.

Present a conceptual framework that ties together the training needs of the fellows you intend to serve, the training to be provided to them, and the specific skills and knowledge they are to learn. Explain how these elements will lead to their development as students capable of doctoral study in fields related to education.

Present a well-defined common education research theme that provides a focus to the training and builds rapport among the fellows. Your training program's theme may be broad (for example, "Using Research to Improve Urban Schools" or "Research Practicum on Problems in American Education") or more narrow (for example, "Quantitative Methods to Assess School Performance," "Can Education Technology Help Students Learn?", or "Studying the Education Needs of English Language Learners"). Describe your training program's theme and why it is important.

Describe how the theme of the training program will develop fellows whose research will be useful to practitioners and policymakers in improving students' education outcomes.

(2) Skills and Knowledge

Describe the skills and knowledge to be taught by your training program and explain their importance for preparing fellows for graduate study and future careers as researchers. These should include the following:

- Research skills and knowledge, such as specific content and methodological expertise
- Professional skills, such as study skills; presentation skills; collaborating with other students, education researchers, and/or practitioners; writing essays for graduate school applications; writing research results for course assignments or publication

(3) Fellows

Discuss your approach to identifying and preparing a diverse group of fellows for doctoral study in fields relevant to education.

(b) Research Training Plan

(1) Recruitment Plan, Eligibility Requirements, and Selection Criteria

Discuss your proposed strategies to recruit candidates from multiple disciplines, departments, and institutions.

Identify the underrepresented groups you intend to recruit fellows from and describe your strategies to recruit students from these groups. IES encourages you to consider strategies—consistent with constitutional and statutory limitations—to reach out to groups traditionally underrepresented in graduate education and in the education sciences:

- Racial or ethnic minority (i.e., American Indian/Alaska Native, Black/African American, Hispanic/Latino, Asian American/Pacific Islander)
- First-generation college students
- Economically disadvantaged students³
- Veterans
- Students with disabilities

Provide a timeline delineating the expected recruitment and training of each fellow.

NOTE: Pathways Training Programs can begin between July 1 to September 1, 2021. IES encourages new programs to use the first 6 to 12 months of the grant for recruitment with fellows starting in 2022.

(2) Research Training Activities

Research apprenticeships:

Identify and describe the research apprenticeship placements, making clear the type of work fellows will be expected to do, how they will be supervised or mentored, and how their research skills will be developed (use the required table in <u>Appendix C</u> to provide the details). Apprenticeship placements can include, but are not limited to, the following:

- Core faculty members' research projects that fellows will work on
- Research experiences designed specifically for the training program
- Research apprenticeships conducted at other institutions (e.g., other colleges/universities, state or local education agencies, consortia, nonprofit and for-profit institutions) that partner with your institution (Letters of Agreement from partners should be provided in Appendix E).

Mentoring

IES expects programs to provide high-quality mentoring as part of the training experience. Describe such mentoring activities, including mentor selection and assignment, mentor training, the mentorfellow ratio, the mentorship process, and expectations of mentors and mentees.⁴

Additional research training activities:

Explain any additional research training activities you will provide to fellows. These may include, but are not limited to, the following:

- An ongoing lecture series or proseminar (or more formal curriculum)
- Activities designed to assist fellows in securing admission to and financial assistance for enrollment in doctoral programs

Describe how the research training activities you provide will complement one another as well as ensure that fellows receive training in education research and learn the four types of knowledge and skills listed in the box at the end of the Recommendations for Research Training Activities.

³ If enrolled in an undergraduate program within the last 5 years, eligible for the Pell grant during the most recent academic year enrolled.

⁴ For guidance on designing the mentoring component of your Pathways program, see National Academies of Sciences, Engineering, and Medicine. (2019). *The Science of Effective Mentorship in STEMM*. Washington, DC: The National Academies Press. https://doi.org/10.17226/25568.

If you propose a lecture series, proseminar, or curriculum, provide as much detail as possible on the expected content, how often it will be offered, and how it will be coordinated or integrated with the research experiences.

Recommended Knowledge and Skills to be Learned through the Research Training Activities

Subject-matter and methodological knowledge and skills: Fellows should gain knowledge about some of the major education challenges or issues in the United States and an awareness of how scientific education research addresses these challenges or issues. Fellows may also receive instruction in research methods or statistics to help them prepare for doctoral study.

Research experiences: Research experience should be gained through the required research apprenticeships. In addition to apprenticeships with Core Faculty, training programs may also offer apprenticeships with state and local education agencies, research firms, regional laboratories, and research consortia. To supplement their apprenticeships, fellows may also gain research experience through independent study or by initiating and conducting individual or joint research projects.

Communication skills (both written and oral): Programs should provide opportunities for fellows to learn, practice, and apply skills needed to communicate with, education policymakers and practitioners, other researchers, and the public. Examples of such activities may include attending workshops to learn communication fundamentals, writing project documents and presenting to project staff, giving mock presentations or presentations at seminars and meetings (including practitioner-oriented meetings), and writing for publication (both peer-reviewed journals and more popular outlets, including publications geared toward policymakers and practitioners).

Information about graduate school and careers: Programs should provide fellows with support for their application to graduate school, including help with identifying appropriate graduate programs; writing a statement of purpose and securing strong recommendations; applying for financial aid, graduate scholarships, and fellowships; and preparing for graduate entrance exams. Career development activities should encourage fellows to pursue doctoral study in fields relevant to education research.

If you propose to provide training during the academic year, describe how your program will train fellows who attend other institutions during the school year and may not be able to return easily to your campus.

Describe any career development activities and academic advising offered as part of the training program, the knowledge and skills the activities will provide, and how the program will monitor the contribution to the fellows' overall professional development and ability to enroll in graduate school.

If fellows are offered the option of academic credit for participating in the training program, describe how credits will be awarded.

If you propose to include a mix of undergraduate, post-baccalaureate, and/or masters students as fellows in the training program, describe how your program will accommodate their different levels of

preparation and training needs. If your program includes undergraduate students who will graduate mid-program, describe how they will continue the fellowship program after graduation.⁵

If you propose to recruit fellows from multiple universities or multiple campuses with the same university system, describe how your program will create a community for these fellows and discuss how your program will address fellows' differing logistical and administrative needs.

(3) Financial Support

Describe both the overall allocation of funds for supporting the fellows and the training program and the specific uses of the funds. Specify the length of the fellowship to be provided for each fellow.

Describe how the program funds will be used, such as for recruitment or training purposes.

Be sure to meet the Additional Budget Parameters and Award Requirements.

Note whether your institution is providing supplementary support funding and, if so, how it will be used.

(4) Tracking Fellows' Progress and Program Success

Discuss how you will identify each fellow's strength and weakness upon entry to the program and how opportunities will be aligned with those strengths and needs.

Describe how you will track each fellow's progress in completing fellowship requirements and success in being admitted to graduate school.

Describe the measures you will use to determine that the training program is successful in meeting program goals.

(c) Personnel

Identify and briefly describe the following for all key personnel:

- Qualifications to carry out the proposed work
- Roles and responsibilities within the project
- Percent of time and calendar months per year to be devoted to the project
- Past success at mentoring undergraduate, post-baccalaureate, and/or masters students

Discuss how the collective research and training expertise and experience of your team (including non-key personnel and/or visiting scholars.) align with and support the content and methodological foci of your training program and the expected training outcomes for your fellows.

If this training grant involves partners, discuss the proposed management structure of the training program and how partners will collaborate to conduct training activities.

(d) Resources

Describe the institutional resources available to support the training program at the participating academic institution(s), including academic advising; research opportunities with faculty, other

⁵ At the graduate level, the Pathways program requires full-time or part-time enrollment in a master's degree program. If a fellow graduates with a master's degree mid-program, the fellow is no longer eligible for most Pathways funding. See Additional Budget Parameters and Award Requirements.

research institutions, and/or state and local education agencies; and access to field settings (such as, schools or districts) or data sources that may be used to support fellows' research experiences.

If your training program includes online training, describe your resources to conduct such training.

Describe the ongoing education research projects led by the core faculty that fellows are likely to work on as part of their research apprenticeships (detailed in <u>Appendix C</u>) and how they align with the focus of your training program.

Describe the success of any previous Pathways Training Grants you or the other core faculty have received from IES (these are to be detailed in your <u>Appendix C</u>). Also describe any lessons learned from these grants and discuss how you incorporated into the proposed training program.

NOTE: Descriptions of the success of previous fellows should include fellows' completion of training and fellows' application and acceptance into graduate school, but can also include publications, fellowships and grants, changes in LEA/SEA practice and policy based on fellows' research, and employment in research careers.

5. Additional Budget Parameters and Award Requirements

The following requirements for Pathways Training Program applications will not be used in determining responsiveness to the RFA, but applications recommended for funding will be required to adjust their plans and budgets, if necessary, to meet them before receiving grant funds.

Pathways Training Program grant expenditures can be categorized as direct support to the fellows (stipend, tuition and benefits, travel, and research support) and support to the training program. The award can be used to support a maximum of \$13,000 in direct support costs per fellow (\$780,000 maximum) and a maximum of \$780,000 in program costs (including indirect costs). Your requested budget should depend upon the number of fellows to be supported, the length of support for each fellow, and the training program support funds requested.

(a) Fellow Requirements

If you receive an award under the Pathways Training Program, you will have to certify that your training participants (fellows) meet the following requirements:

- Pathways fellows must be citizens or permanent residents of the United States/
- Pathways fellows must meet at least one of the following:
 - o be a junior or senior enrolled part-time or full-time in a bachelor's program
 - have received a bachelor's degree within 5 years prior to participation in the training program
 - o be enrolled part-time or full-time in a master's program.
- Pathways fellows' research conducted as part of the training program must be relevant to practical issues in U.S. education.
- If Pathways fellows have peer-reviewed scholarly publications stemming from their fellowship
 activities, they must follow the IES policy on making research publicly available. See <u>Part IV</u> for
 more details.
- Pathways fellows are also expected to respond to periodic surveys and other requests for information from IES.

 All Pathways fellows must have an ORCID number (Open Researcher and Contributor ID, https://orcid.org/). If the fellow does not have one upon entering the program, the training program must ensure that the fellow creates one during training.

(b) Program Size

The maximum award (direct and indirect) for a Pathways Training Program project is \$1.56 million. However, individual awards are further constrained by the number of fellows proposed.

(1) Pathways fellows

For the Pathways Training Program topic, a Pathways fellow is defined as a participant who receives 8 weeks to 1 year of training. Programs can request up to \$13,000 per fellow for direct support costs for up to \$780,000 maximum (See <u>Direct Support for Fellows</u> below for details).

Pathways fellowships

can last from 8 weeks to 1 year

per fellow. As noted in the

Program Size section, the

minimum number of fellows that can be proposed for support by a

Pathways Training Program grant

is 40 fellows for at least 8 weeks

apiece and the **maximum**

amount of direct support costs for fellows is \$780,000.

(2) Cohorts

IES requires Pathways training programs to have at least four cohorts of fellows over the period of award. Although IES expects that cohort sizes may vary within and across training programs, typical cohorts should be between 8 and 15 fellows depending on program size and training model.

(3) Minimum Program Size

IES requires Pathways training programs to have a minimum of 40 fellows, who receive 8 weeks to 1 year of training. In practice, this means the smallest allowable program (40 fellows) could have 4 cohorts of 10 fellows over the award (or 5 cohorts of 8 fellows).

(4) Maximum Program Size

There is no maximum number of fellows that the Pathways training program can support. However, a program requesting the maximum amount of direct support per fellow (\$13,000) would be limited to 60 fellows (\$13,000 X 60 = \$780,000). In practice, this means that a program with 60 fellows could have 4 cohorts of 15 fellows (or 5 cohorts of 12 fellows). Programs can exceed 60 fellows if they have lower participant support costs or cost-share.

(c) Direct Support for Fellows (Participant Support Costs):

The focus of a Pathways training program is the student experience, and the budget must reflect this principle. Pathways training programs are strongly discouraged from creating financial burdens for students to participate in the training.

Programs have the following restrictions on costs they can charge to participants:

- You may not charge students fees to apply to the program.
- Your institution may not charge fellows tuition as a requirement for participation (although it is permissible to offer students the option of paying tuition to earn academic credit).⁶

⁶ Paying tuition to receive credit must be completely optional. Programs cannot require fellows to pay tuition and receive credit for participation. Programs also cannot include tuition costs for part-time or full-time undergraduate or graduate students as part of the grant. However, programs may propose to pay tuition and/or fees for post-baccalaureate students as part of their stipend

- Your institution may not charge fellows for access to campus facilities such as libraries or athletic facilities.
- Without preapproval from IES, you may not require fellows to pay for their own transportation cost to/from summer research training programs.

If stipends or other funds are provided to fellows, you are encouraged to pay fellows these funds on an incremental basis (such as every-other-week or monthly) rather than as a lump sum at the end of the summer or semester.⁷

Direct support of fellows is contingent on fellows' making satisfactory progress in their research activities. IES allows for up to \$13,000 per fellow for direct support costs, including participant stipends, housing, meals, travel, and research support costs. IES anticipates that direct support costs will vary based on the program model and the training program's physical location. Therefore, IES provides the following broad guidelines on how the direct support costs can be allocated per fellow. Applicants may propose alternate allocations as long as the total direct support costs do not exceed \$13,000 per fellow and \$780,000 overall.

(1) Participant Stipends and Fees (estimated \$4,000 to \$6,000 per fellow)

Student stipends for summer research apprenticeships:

If you propose a summer research apprenticeship, you may provide fellows with stipends. IES suggests such stipends be approximately \$400 to \$600 per student per week (for 8 to 10 weeks). For example, the total stipend for a 10-week summer program at \$600 per week would be \$6,000.

Student stipends for research apprenticeships during the academic year:

If you propose a semester-long or academic year-long research apprenticeship, you may provide fellows with stipends. IES suggests such stipends be no more than \$2,500 per semester.

Programs can propose to have research apprenticeships both during the academic year and the summer; however, IES suggests that the stipend does not exceed \$6,000 per fellow.

(2) Housing and Sustenance⁸ (estimated \$5,000 per fellow)

If you propose summer research training, you may provide fellows with campus housing and associated meal plans. IES estimates this amount to be \$5,000 per fellow. However, actual costs may vary depending on the length of the summer training programs and the programs' physical locations.

NOTE: Due to the budget constraints of the training programs, IES discourages programs from providing housing/sustenance during the academic year unless associated with onsite training conducted during winter or spring breaks (or intersessions).

(3) Travel, Research, and Professional Development (estimated \$2,000 per fellow)⁹

package in order to allow postbaccalaureate students to fully participate in the program. IES will review these requests on a case-by-case basis.

⁷ Applicants are strongly urged to consult with their universities' financial aid offices to determine the potential impact of fellows' financial aid. If selected for funding, programs will be allowed to adjust fellow packages to minimize negative impact on financial aid.

⁸ If selected for funding, IES will review all housing/sustenance requests to ensure that they are allowable, allocable, and reasonable.

⁹ Fellows can use these funds for allowable purposes for up to 6 months after successful completion of the fellowship. This requires pre-approval from IES if the fellow has graduated from a master's program.

You are strongly encouraged to provide costs for fellows to travel to/from their homes to summer residential programs (namely, programs where fellows live on-campus during the summer).

If your program includes an academic/semester research experience, you may provide local travel costs for fellows to travel to/from their homes to training program activities (such as costs for subway or bus passes).

You may also provide local travel costs for fellows to participate in professional development and research activities that take place off-campus.

You may provide funds to support individual fellows' ability to conduct research including laboratory fees, software licenses, database access, etc.¹⁰

You may provide funds for fellows to present their research at conferences and participate in training activities at other institutions.

You may provide funds to support fellows taking graduate entrance exams, including exam fees as well as funds for graduate school application fees.

The academic institution may supplement the direct support of fellows. Such a supplement would be considered cost-sharing and should be described in your training program narrative and noted in your budget and budget narrative.

(d) Support for Programs (Program Costs)

Costs in budget categories outside Participant Support (namely Program Costs) must be reasonable and appropriate. You may request up to an additional \$780,000 for training program support. These funds can be used to cover the following:

(1) A Limited Set of Personnel Costs

- Up to 3 months of salary support per year for the PI (or distributed among the PI and Co-PIs) to support recruitment, program management, teaching the course/seminar, and similar operational activities
- Up to \$30,000 per year to provide stipends to research mentors (\$150,000 total) **NOTE:** An individual mentor may receive no more than \$2,500 per year (\$10,000 total) from grant funds. Institutions may determine the form of reimbursement (stipends, honoraria, and salary including fringe benefits, etc.). In addition, institutions may also reimburse mentors from other sources such as through cost sharing or in-kind contributions. Regardless of compensation method used, the federal government contribution cannot exceed the maximums per award or per mentor. Although in-kind contributions and cost sharing are allowed, they do not increase the competitiveness of the application.
- Up to 12-months of salary support per year combined for a program coordinator to provide
 logistical and clerical support for the program, and/or for other personnel to support
 recruitment, implementation of the research experiences or academic counseling
 NOTE: You may request additional months if your program is a partnership or collaboration
 between two or more institutions.

¹⁰ Resources meant to support the research activities of the fellows as a whole are considered program costs.

- Up to 1 FTE for a graduate assistant to support implementation of the program and/or to provide peer mentorship to fellows.
- The PI's **required** attendance at one meeting (for up to 3 days) each year in Washington, DC with other PIs and IES staff
 - **NOTE:** If your program is a partnership between two or more institutions, the Co-PIs are also required to attend, so you should also budget for the co-principal investigator to attend the PI meeting.
- Short-term visiting faculty who will provide training activities
- Guest speakers or trainers
- Professional development for mentors
- Travel to support training program activities

(2) Examples of Other Program Costs

- Recruitment of fellows, such as printing recruitment brochures, advertising in college newspapers, making visits to college campuses to speak with potential applicants
- Additional training activities run by the program such as research apprenticeships, workshops, colloquia, seminars, fellows' presentations, professional development activities, and activities designed to guide fellows in ways to secure admission to and financial assistance for enrollment in doctoral programs¹¹
- Website design and maintenance
 - **NOTE:** Applicants are expected to budget some of the training program support funds for the development and maintenance of a training program website that, at a minimum, includes an overview of the training program and information about the coursework/seminar, curriculum, opportunities for research, fellowship requirements, fellowship benefits, and how to apply.
- Program assessment to cover the program's tracking of the fellows' progress and the program's short-term success
- Indirect costs. See the discussion of Indirect Cost Rate for training grants in Part IV.

(e) General Restrictions on the Use of Funds

Grant funds **must not** be used for the following:

- Faculty research
- Faculty salaries for purposes outside the limited set of personnel expenditures allowed
- Facility construction, renovation, or maintenance
- Laptop computers, tablets, or other hardware for individual fellows (though programs *may* propose to buy such tools that will be used throughout the lifecycle of the award and by multiple fellows)
- Food, refreshments, and entertainment¹²

¹¹ With IES preapproval, programs can use program funds to allow alumni fellows to also participate in these activities.

¹² Although the informal seminars, field trips, and similar gatherings through which students interact and become attuned to the culture of research and their discipline may contribute to the success of research experiences, applicants are reminded that costs of entertainment, amusement, diversion, and social activities, and any expenses directly associated with such activities (such as meals, lodging, rentals, transportation, and gratuities) are **unallowable** in the application budget. However, costs of "working meals" at seminars and other events at which student participation is required and for which there is a formal agenda may be allowable with IES pre-approval.

C. Postdoctoral Research Training Program in the Education Sciences

Program Officers: Dr. Meredith Larson (202-245-7037; Email: Meredith.Larson@ed.gov)
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1. Purpose

The Postdoctoral Training Program (https://ies.ed.gov/ncer/projects/program.asp?ProgID=14) supports training programs¹³ that prepare researchers with a doctoral degree to conduct high-quality education

research that advances knowledge within the field of education sciences and addresses issues important to education policymakers and practitioners.

Postdoctoral Training programs support the training of fellows who have high potential but may need more research experience and mentoring in the education sciences before launching their careers. IES encourages recruitment—consistent with constitutional and statutory limitations—of fellows from groups underrepresented in education research (for example, racial/ethnic minorities, first generation college graduates, veterans, individuals from low-income backgrounds, and

Postdoctoral Training Programs

prepare researchers with a doctoral degree to conduct the type of research IES funds under its research grant programs and that is important to practitioners and policymakers.

individuals with disabilities). Fellows who complete an IES-funded postdoctoral training program will have gained the skills necessary to carry out research that meets the requirements and recommendations of the IES research grant programs and to communicate their research findings effectively to researchers, education policymakers, practitioners, and the public. In addition, fellows will have built professional skills and networks that support working with other researchers, practitioners, policymakers, and other education stakeholders.

In the Final Performance Report submitted to IES, Postdoctoral Training Program grantees will describe

- The implemented training program, including descriptions of all key components discussed in the original application (such as research projects, professional development opportunities, methodological workshops)
- The fellows accepted to the program and their status (completer/non-completer, etc.), their post-fellowship employment, and their research products, including presentations, publications, and other work, such as web-based tools, mobile apps, datasets, or patents
- The measures used to track the progress of fellows through the training program as well as data demonstrating the program's level of success in recruiting, training, and placing fellows
- The program's success in preparing fellows with the skills and knowledge aligned with the content area and methodological focus of the training program
- The cost of training per fellow, including recruitment efforts, broken down by training year
- Recommendations for future Postdoctoral Training Program projects

¹³ IES **does not directly fund individuals** seeking postdoctoral support through 84.305B. Individuals seeking such support are encouraged to contact the directors of current IES training programs (https://ies.ed.gov/ncer/projects/program.asp?ProgID=14).

2. Requirements

Applications under the Postdoctoral Training Program must meet the requirements listed below for the (a) Eligible Applicants and (b) Training Program Narrative to be sent forward for scientific peer review.

(a) Eligible Applicants

The applicant **must** be an academic institution located in the United States and its territories that confers doctoral degrees in fields relevant to education.

The organization/institution submitting the application may hold more than one Postdoctoral Training Program award from IES and may submit more than one Postdoctoral Training Program application as long as each actual or proposed training program has a different training focus and no overlap of core trainers (PI, Co-PI, and other mentors).

An applicant may partner with another institution that will provide fellows with research opportunities aligned with the training program focus.

Core Trainers

The individual(s)
responsible for the
mentoring and main
training activities, typically
the PI, Co-PI(s), and other
mentors.

(b) Training Program Narrative

The project narrative **must** adhere to the font guidelines (see <u>Part III.B</u>) and be **no more than 20 pages**. If the narrative exceeds this page limit, IES will remove any pages after the 20th page of the narrative. The project narrative **must** include four sections: Significance, Research Plan, Personnel, and Resources.

(1) Significance

This section describes the focus of the training program and how it will develop researchers capable of conducting and communicating high-quality scientific research on issues important to education policymakers and practitioners. In it, describe the specific skills and knowledge fellows will gain and the training program's potential contribution to the education sciences. Discuss how the focus of the program, knowledge and skills to be taught, and type of fellows to be recruited differ from and improve upon what is available in postdoctoral programs and fills a need in the field of education sciences.

You **must describe** the content area and methodological focus of your training program, which **must** include at least one from each of the categories in the table below in order to meet the requirements.

List of Content Areas and Methodological Focuses for Postdoctoral Training Grants for FY 2021

Content Areas	Methodological Focus	
Adult Learners with Low Skills	Exploration	
Career and Technical Education	Development and Innovation	
Education Leadership	Efficacy	
English Learners	Replication	
	Measurement	

Content Areas for FY 2021:

 Adult Learners with Low Skills: addresses the academic outcomes of adults with low skills, defined as any student who is 16-years old or older, is outside of the K-12 system, and is at or

- below basic skills (may include students in adult education, career and technical education, or remedial postsecondary education)
- 2. **Career and Technical Education:** addresses education and training in the academic, technical, and employability skills and knowledge required to enter and succeed in specific occupations for secondary and/or postsecondary students
- 3. **Education Leadership:** addresses K-12 and postsecondary leaders' role in creating safe and supportive learning environments for students, improving the skills of their staffs, implementing policies and programs, managing systems efficiently, and leading organizational change that improves student outcomes
- 4. **English Learners:** addresses students whose home language is not English and whose English language proficiency hinders their ability to meet learning and achievement expectations for students at their grade level

Methodological Focus:14

- **Exploration:** hypothesis-generating research based on analysis of primary and/or secondary data or on meta-analysis of existing studies
- **Development and Innovation:** the development and piloting of new education interventions
- **Efficacy:** the initial evaluation of the impact of an education intervention on student outcomes
- **Replication**: the further evaluation of the impact of an education intervention on student outcomes
- **Measurement:** the development and validation of assessments

(2) Research Training Plan

This section outlines the specific activities and mentoring your training program will provide.

You must describe

- A recruitment plan (see the section on <u>Additional Budget Parameters and Application</u> <u>Requirements</u> for eligibility requirements/considerations for fellows)
- Research training activities, which must include opportunities to work on new or ongoing research projects on which a core trainer is the PI or Co-PI¹⁵
- At least one research project that will be **active during the first 2 years** of the training grant and that is aligned with the content area and methodological focus of the program ¹⁶
- The financial support to be provided to individual fellows and to the overall training program
- A plan for tracking fellows' progress and determining the success of the training program

(3) Personnel

This section describes your training team, which may include people from academic and nonacademic settings. The team will include one or more core trainers, defined as the individual(s) responsible for the mentoring and main training activities, namely the PI, Co-PI(s), and other mentors. The team may

¹⁴ For more information on the methodological focus areas see the Request for Applications for the Education Research Grants (84.305A), and Replication RFA (84.305R) available here: https://ies.ed.gov/funding/.

¹⁵ All training activities, including the research projects, must attend to the restrictions on research on students with disabilities. Training may prepare fellows to conduct research that includes subgroups of children, youth, or adults with or at risk for disabilities, but such subgroups **must not** be the primary focus of the training program or research projects unless the training is preparing researchers to work with learners who are over 16-years old and enrolled in adult education programs as defined in Title II of the 2015 Workforce Innovation and Opportunities Act (WIAO).

¹⁶ This may be one project that contains both the content area and the methodological focus or two projects with one for the content focus and one for the methodological focus.

also include additional staff who provide auxiliary support to the fellows or the program such as methods consultants, career coaches, or program assistants. This section discusses the team's relevant expertise, responsibilities, and time commitments and how combined the team members will provide the services fellows may require.

You **must describe**

- Each of the core trainers on the project team, confirming that none are or will be core trainers on another IES-funded postdoctoral training grant concurrent with the proposed training grant
- Any other individuals who may provide additional substantive support to the program or fellows but who are not considered core trainers

(4) Resources

This section describes your access to institutional resources at the participating institution and any subaward institutions and your access to schools and data sets where applicable.

You **must describe** the institutional resources of both the primary applicant institution and any subaward institutions.

3. Award Limits

A Postdoctoral Training Program project must conform to the following limits on duration and cost.

(a) Duration Maximums

The maximum duration of a Postdoctoral Training Program is 5 years.

(b) Cost Maximums

The maximum award for a Postdoctoral Training Program project is **\$800,000** (total cost = direct costs + indirect costs). See the discussion of Indirect Cost Rate for training grants in <u>Section IV</u>.

The award can be used to support a maximum of 8 fellowship years. Your requested budget should depend upon the number of fellows to be supported, the number of years of support for each fellow, and the training program support funds requested.

4. Recommendations for a Strong Application

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.

(a) Significance

(1) Training Program Focus and Framework

Describe the content and methodological focus of your training program and justify the need for researchers prepared to do research within these.

- If you propose to focus wholly on one of the four required content areas, discuss the relevance of that content area to U.S. education more broadly.
- If you propose to include a related area to one of the four (such as including a line of literacy research with English learner research or a line of social/behavioral research along with leadership research) or if you propose to have more than one of the four content areas options in the same program, discuss how these combined areas form a cohesive training program for

the fellows and describe the synergies between the topics and their **joint** relevance to U.S. education more broadly

Successful programs typically have a clear training theme and connection among projects, and they avoid including research projects that do not align with the other projects.

Discuss how your selected content area and methodological focus will develop fellows whose research will be useful to other education researchers, practitioners, and policymakers in improving students' education outcomes.

Describe how the activities you are proposing will prepare fellows to submit competitive applications for research funding in the content area and methodological focus of your program.

Describe how your training program will provide fellows with opportunities to

- work directly with education policymakers and practitioners
- conduct independent research
- take on leadership positions within research teams
- learn to communicate their findings to multiple audiences

Describe how your training program will provide opportunities for fellows to explore careers and make connections outside of academia.

Identify the types of fellows that you are likely to train, including existing skills and expertise and potential gaps in these areas, and discuss how your training program would benefit them. Discuss what will distinguish your training program from other postdoctoral training programs both in the training provided and the expectations for the fellows' future work.

Describe a framework that ties together the training needs of the fellows, the training they will receive, the specific skills and knowledge they will learn, and their future work.

(2) Skills and Knowledge

Describe the skills and knowledge fellows are expected to master and explain their importance to education research and practice. These should include the following:

- **research skills and knowledge**, such as developing a research agenda and gaining specific content and methodological expertise
- **leadership and entrepreneurial skills**, such as networking, conducting needs assessments and market analyses, developing and testing products, communicating and collaborating with stakeholders, forming and working with teams inside or outside of academia, and training and mentoring others
- **skills related to SEER principles**, as described at https://ies.ed.gov/seer.asp
- professional skills, such as preparing grant applications; collaborating with other researchers
 and with education practitioners and policymakers; disseminating research findings to a wide
 audience including researchers, policymakers, practitioners, and the public; managing
 research projects and grants; and writing articles for publication.

(b) Research Training Plan

(1) Recruitment Plan, Eligibility Requirements, and Selection Criteria

Identify the underrepresented groups from which you will recruit (such as racial/ethnic minorities, first in their families to graduate college, veterans, individuals with

disabilities) and describe your plan to recruit and retain fellows from these groups.

Describe how your recruitment plan will locate fellows who have high potential but may need more research experience and mentoring. IES encourages programs to consider fellows who may come from smaller or less well-known doctoral programs, including those at minority-serving institutions (MSIs).

Describe how you will recruit candidates from multiple disciplines (if applicable).

Describe how you will recruit non-traditional candidates such as practitioners, administrators, or researchers from industry or business who might be interested in shifting career focus to the education sciences.

Discuss the criteria that you will use to select fellows.

Examples of Training Activities

- Participating in research projects
- Attending seminars
- Auditing courses
- Building cultural competency
- Teaching courses
- Reviewing journal articles
- Learning how to manage grants and budgets
- Collaborating with policymakers
- Delivering practice job talks
- Presenting work at conferences
- Refining communication skills for non-technical audiences
- Writing or revising grant applications

Provide a timeline (either in the Research Training Plan or <u>Appendix F</u>) that shows when you expect to recruit and train each fellow.

NOTE: Postdoctoral Training Programs can begin anytime between July 1 to September 1, 2021. IES encourages programs to use the first 6 to 12 months of the grant for recruitment with fellows starting in 2021.

(2) Research Training Activities

Describe the specific training activities, including research projects, and how they align with the program's content and methodological focuses, how they will contribute to the development of the fellows' skills and knowledge, how you will decide which fellows will participate in them, and how the program will monitor their contribution to the fellows' professional development.

Applicants are expected to provide fellows with research training through participation in

- Research that involves working with education policymakers and practitioners
- Research grants or contracts under which the applicant carries out the type of research supported by IES
- Other research training opportunities provided within or outside the organization/institution, including state or local education agencies, institutions or higher education, and firms that develop and deploy education related products

Applicants are expected to provide fellows with additional professional development activities such as

- Experience disseminating research to a wide audience, including non-researchers
- Training and experience developing, scaling up, and commercializing interventions and other products

- Independent research
- Lead authorship on articles submitted for publication to peer-reviewed journals
- Completion and submission of manuscripts for publication based on fellows' dissertations, if applicable
- Training in career opportunities and support for transition to new positions outside the organization/institution after the fellowship ends

Describe the ongoing education research projects that fellows are likely to work on, including the content and methodological focuses of the projects, possible roles fellows could have, and competencies they could potentially gain through working on the project.

Describe the specific activities to support the postdoctoral fellows' transition to their next positions after the fellowship. The training program should help fellows learn how to identify and obtain career opportunities both within and outside of academia.

If fellows will be offered opportunities to teach courses or perform consulting work for additional remuneration, discuss how these activities contribute to the program's training focus and do not detract from the fellows' research responsibilities and training activities. Programs will need to justify the value of such activities to IES before allowing fellows to engage in them.

(3) Financial Support

Describe both the use of funds for supporting the fellows and those used for the training program itself.

Describe whether your institution is providing supplementary support funding and, if so, how it will be used. Such funds can supplement Participant Support Costs, Training Program Costs, or both.

Describe how the program funds (up to \$16,000 a year) will be used to support program expenses, such as recruitment and administrative support. Be sure to meet the <u>Additional Budget Parameters and Application Requirements</u>.

Specify the length of the fellowship to be provided for each fellow.

NOTE: Fellowships can last from 1 to 3 years per fellow. A Postdoctoral Training Program grant is permitted to support up at most 8 fellowship years (for instance, 8 fellows at 1 year each, 4 fellows at 2 years each, etc.). Applications may propose to support fewer than 8 fellowship years.

(4) Tracking Fellows' Progress and Program Success

Discuss how you will identify each fellow's strengths and weaknesses upon entry to the program and how opportunities will be aligned with those strengths and needs.

Describe how you will track each fellow's progress.

Describe the measures you will use to determine that the training program is developing researchers who can conduct high-quality research that is aligned with both the content area and methodological focus of the program.

(c) Personnel

Identify and briefly describe the following for all core trainers (the PI, Co-PI(s), and other mentors):

- Qualifications to carry out the work
- Roles and responsibilities within the training program

- Percent of time and calendar months per year to be devoted to the training program
- Past success at mentoring postdoctoral fellows
- Past success at collaborating on research with and disseminating findings to policymakers and practitioners
- Past success at disseminating research findings in peer-reviewed scientific journals

Discuss how the collective research and training expertise and experience of your team (including non-core trainers, visiting scholars, etc.) align with and support the content and methodological focus of your training program.

Provide information about the additional members of the training team who are not considered mentors (key personnel) but who will provide additional resources, opportunities, consultation, or other resources to the fellows or the program as a whole.

(d) Resources

Describe the institutional resources available to support the training program at the participating institution(s), including research collaborations with state and local education agencies, education-related organizations, and other institutions.

Describe your access to field settings, such as schools and districts, or data sources that may be used to support fellows' research projects.

Describe partnerships you have with schools, agencies, or organizations that would provide fellows with opportunities to work with education policymakers and/or practitioners and discuss how these partnerships align with the focus of your training program.

Describe the success of any previous Postdoctoral Training grants the PI, Co-PIs, or the other core training faculty have received from IES. For these other training grants -

- Describe previous fellows' success in traditional academic terms through publishing in peerreviewed journals and applying for and receiving grants.
- Describe previous fellows' other accomplishments (such as developing and sharing programming code, acquiring patents, creating videos or multimedia dissemination products, blogging, working with practitioners or policymakers, disseminating to non-academics) as evidence of their success.

Describe lessons learned from these grants and how you incorporated into them into the proposed training program.

5. Additional Budget Parameters and Application Requirements

The following requirements for postdoctoral training program applications will not be used in determining responsiveness to the RFA, but PIs whose applications are recommended for funding will be required to adjust their plans and budgets, if necessary, to meet them before receiving grant funds.

(a) Fellow Requirements

In addition to the PI, the postdoctoral fellows will attend the annual IES PI meeting (for up to 3 days) in Washington, DC with other IES grantees and IES staff.

All fellows **must have an ORCID number** (Open Researcher and Contributor ID, https://orcid.org/). If the fellow does not have one upon entering the program, the training program must ensure that the fellow creates one during the first year of training.

IES expects postdoctoral fellows to respond to periodic surveys and other requests for information.

If you receive an award under the Postdoctoral Training Program, you will have to certify that your training participants (fellows) meet the following requirements:¹⁷

- Postdoctoral fellows' research **must** be relevant to education in the United States.
- Postdoctoral fellows **must** be citizens or permanent residents of the United States.
- Postdoctoral fellows **must** have received their doctorate prior to beginning the fellowship.

In the following cases, IES must approve a candidate for a fellowship before an offer is made:18

- The candidate has received postdoctoral support through any other federal training programs
- The candidate has received support through an IES predoctoral training program
- The candidate has or had a professional or personal relationship with a core trainer, including a previous training or mentoring relationship
- If the candidate is to be hired for a time period different from the primary training model proposed in the application (for example, if the program wishes to hire him/her for 1 year in a typical 2-year training model)

(b) Participant Support Costs

Participant Support Costs are the funds that the individual fellows received as part of their participation in the training program. In general, IES allows for fellows to carryover their own funds (for example, unspent travel funds from one year to the next training year) contingent on making satisfactory progress within their training. IES does not allow programs to transfer funds across fellows (for example, redistributing a fellow's unspent travel funds to other fellows) without prior approval.

IES has set maximums for how much it will contribute toward Participant Support Costs in three categories described below. For each of these categories, applicants may provide supplemental funds. However, such supplemental funds must be available to all fellows equally. For example, you may not propose to pay fellows from one field of study a different stipend than fellows from another field of study. For example, you may use supplemental funds to increase the base stipend of all fellows, but all fellows must have equal stipend offers.

IES considers this supplemental funding to be cost sharing. Applicants should describe cost sharing in the training program narrative and note it in the budget and budget narrative. Although cost sharing is allowed, IES does not considerate it during the review of the application nor during funding decisions.

IES will contribute a **maximum of \$90,000 per fellow per year** towards Participant Support Costs to be allocated as described below. Each program can request **up to 8 training years for a total of \$720,000** towards Participant Support Costs. Programs may propose fellowships that last 1- to 3-years. Below is a description of the maximums by Participant Support Cost category.

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¹⁷ Grant funds expended on fellows who do not meet these requirements will be disallowed (namely, you will have to return such expended funds).

¹⁸ IES may deny the request.

(1) Fellow Stipend

The maximum IES contribution is **\$60,000 per fellow per year (12 months)** for up to 3 years of training per fellow.

(2) Fringe/Benefits

The fellowship **must include fringe benefits**, such as health insurance, at the level afforded to other employees of the applicant institution who are at a similar level as the postdoctoral fellows.

The maximum IES contribution towards these costs is \$20,000 per fellow per year.

(3) Research and Training Support

Support for other training activities including fellows' independent research; ¹⁹ membership in professional organizations or societies; and registration and attendance at workshops, seminars, and professional meetings that provide complementary training. Fellows must have sufficient funds to cover travel to the Annual IES PI Meeting, a 3-day meeting held in DC for every year of their fellowships.

The maximum IES contribution towards fellows' individual research and training activities is \$10,000 per fellow per year.

(c) Training Program Costs

You may request **up to \$16,000 per training program year** (not per fellow year) to support related program expenses. The maximum number of years a program can last is 5 years, making **\$80,000 the maximum** an applicant can request for Training Program Costs.

Examples of allowable expenses include the following:

- Recruitment of fellows, including advertising, campus visits, and other expenses
- The PI's travel to the annual IES PI meeting
- Administrative support for the postdoctoral fellowship program
- Honoraria for invited speakers
- Convening events for the fellows that include researchers, education practitioners, and/or policymakers
- Tracking fellows' progress and the success of the training program
- Indirect costs

(d) General Restrictions on the Use of Funds

Grant funds **must not** be used for the following:

- Tuition for semester/quarter-based, credit-bearing courses offered by the grantee institution
 NOTE: Fellows are expected to audit any courses that are part of their training. Fellows may
 use grant funds to attend workshops or courses at other institutions.
- Faculty research
- Facility construction, renovation, or maintenance
- Travel funds for key personnel other than for travel to the IES annual meeting

¹⁹ IES expects fellows to be working primarily on the funded research projects of the PI, Co-PIs and other core training faculty. Direct support funds can support independent projects (e.g., local travel to research sites, materials, personal computer).

D. Methods Training for Education Researchers

Program Officer: Dr. Phill Gagné (202-245-7139; Phill.Gagne@ed.gov)

1. Purpose

The Methods Training Program

(https://ies.ed.gov/ncer/projects/program.asp?ProgID=82) supports training of current education researchers to expand and upgrade their methodological skills. Education researchers include individuals located in colleges and universities as well as individuals working in state and local education agencies, education-focused organizations, and companies that have developed and deployed education related products and services. Supported training should respond to the

Methods Training helps current education researchers expand and upgrade their research

ongoing development and adaptation of methods concerning the design of education studies, data analysis, and practical interpretation of the results of analyses.

IES encourages applications that will provide training intended to do one or both of the following:

- (1) Support researchers and state and local education agency staff to acquire skills necessary to obtain, evaluate, and generate the evidence needed for policy and programmatic decisions, such as the following:
 - Creating and analyzing longitudinal data sets based on state, district or postsecondary administrative data
 - Designing and implementing rigorous education research
 - Carrying out cost analyses and cost-effectiveness analyses of education programs and policies and building the capacity to conduct such analyses
 - Evaluating fidelity of implementation, including methods for interpreting findings when interventions are not properly implemented
 - Designing and implementing quick low-cost evaluations of interventions implemented by education agencies and postsecondary systems using administrative data
 - Exploring approaches to strengthening studies' external validity

(2) ensure that education researchers keep up with advances in the field, such as the following:

- Examining the variation in impacts across sites in experimental and quasi-experimental studies
- Designing, evaluating, and implementing replication studies
- Combining qualitative and quantitative methods to examine the effects of education policy, program implementation, and context on the impact of interventions
- Analyzing large administrative data sets
- Understanding and using alternatives to traditional null hypothesis significance testing

You may also propose training in other methods and should document the need for the training and how it will advance the field. IES is interested in projects that provide researchers with targeted, relevant training they can immediately apply in their work.

State and local education agencies are being asked to take on greater decision-making authority under the Every Student Succeeds Act (ESSA) of 2015 and other legislation. You should include training opportunities for state and local education agency staff responsible for implementing agency programs and policies and for reviewing how well their agencies perform. IES encourages you to invite agency

staff to participate, to include both agency staff and education researchers in training or require teams of agency staff and researchers to work together.

IES encourages you to provide methods training opportunities for researchers at minority-serving institutions (MSIs) in order to increase the capacity of their faculty and research staff to carry out rigorous education research and to prepare participants for more advanced training.²⁰

In the Final Performance Report submitted to IES, all Methods Training Program grantees will describe

- Description of the implementation of all key components discussed in the original application
- The program's success in recruiting and training participants and their perceived value of the training
- The program's success in preparing participants with the skills described in the original application
- The program's success in meeting the participants' professional goals and/or the goals of the organizations the participants represent
- Opportunities for non-participants to benefit from the project (for example, preparing online videos of the training to share publicly, availability of comprehensive training materials or manual)
- Cost per participant, including recruitment efforts
- Recommendations for future Methods Training programs

2. Requirements

Applications under the Methods Training program **must** meet the requirements listed below for (a) Eligible Applicants and (b) Training Program Narrative to be sent forward for scientific peer review.

(a) Eligible Applicants

Applicants located in the territorial United States that have the ability and capacity to conduct training in scientific research methods are eligible to apply.

An applying institution may hold more than one award from IES and may submit more than one application as long as each actual or proposed training program addresses a different issue and includes a different set of key personnel.

(b) Training Program Narrative

The project narrative **must** adhere to the font guidelines (see <u>Part III.B</u>) and be **no more than 20 pages**. If the narrative exceeds this page limit, IES will remove any pages after the 20th page of the narrative. The project narrative **must** include four sections: Significance, Research Plan, Personnel, and Resources.

²⁰ For an example, see the 2014 Research Design Workshop for Faculty from Minority-Serving Institutions hosted by Michigan State University and Northwestern University as part of their IES grant (R305U110001) to conduct training on randomized control trials: https://ies.ed.gov/ncer/whatsnew/conferences/14MSIworkshop/.

(1) Significance

The purpose of this section is to describe the focus of your training program (the methodological training to be provided) and justify why this focus is important to improving the fields of education research and practice.

You **must describe** the specific methodologies that will be the focus of your training program and the intended participants.

(2) Research Training Plan

The purpose of this section is to describe the training to be provided, including recruitment for and outcomes of the training.

You **must describe** the following:

- A recruitment plan
- The training content, format, and activities
- A plan for determining the success of the training program

(3) Personnel

The purpose of this section is to describe the relevant expertise of your research team, the responsibilities of each team member, and the time commitments of each team member.

You **must** describe all key personnel on the project team, including the PI, any Co-PIs, and other trainers.

Applications **must** name the experts in specific methodologies who will provide the training.

Letters of Agreement from key relevant training personnel **must** be included in Appendix E.

The application will be considered non-responsive to the RFA if the application proposes to hire methods experts after the grant is received.

(4) Resources

The purpose of this section is to describe both how you have the institutional capacity to complete a project of this size and complexity and your access to the resources you will need to successfully complete this project.

You **must describe** the institutional resources of both the primary applicant institution and any subaward institutions.

3. Award Limits

A Methods Training Program must conform to the following limits on duration and cost.

(a) Duration Maximums

The maximum duration of a Methods Training Program is 3 years.

(b) Cost Maximums

The maximum award for a Methods Training Program is **\$800,000** (total cost = direct costs + indirect costs). See the discussion of Indirect Cost Rate for training grants in <u>Section IV</u>.

4. Recommendations for a Strong Application

In order to improve the quality of your application, IES offers recommendations following each set of the Training Program Narrative requirements.

(a) Significance

Detail the specific methods that the training will teach and their importance to improving education research and/or the use of research in education practice. When applicable, note which SEER principles (https://ies.ed.gov/seer.asp) are aligned with the focus of the training.

Describe the type of participants you will recruit, noting their field of work and existing skills and expertise.

- Justify why this is an important group to train.
- Discuss the importance of these methods for the work of the expected participants.
- Note the number of participants to trained and whether there will be one or several cohorts.

Identify any existing sources from which potential participants could currently obtain the training you propose. If such sources do exist, then justify why a new training program is necessary.

Provide a conceptual framework that ties together the training needs of the participants to be recruited, the training to be provided, the specific skills and knowledge that participants will acquire, and how the skills and knowledge will improve participants' ability to carry out their work.

Methods Training grants should seek to increase skills of education practitioners and/or researchers to an extent that benefits the field. *It is not expected that participants will become experts in the material taught*. Specify in the application the anticipated level of proficiency the participants will attain by the

end of the training. Provide a rationale for that level of proficiency being both needed in the field and attainable through the proposed training.

(b) Research Training Plan

(1) Recruitment Plan, Eligibility Requirements, and Selection Criteria

Discuss how the recruitment plan addresses the type of participants you intend to recruit, as described in the Significance section.

- In most cases, the focus of Methods Training Programs is on participants who have received their master's degree or doctorate prior to beginning the training and are working in the field of education research. Training focused on state and local education personnel may include people with a bachelor's or master's degree.
- Eligibility is limited to citizens or permanent residents of the United States.

Discuss strategies—consistent with constitutional and statutory limitations—for recruiting individuals from groups that are underrepresented in the field of education research (racial/ethnic minorities, first

Examples of Training Activities

- Preliminary introduction of participants to the method and to fellow researchers
- Lectures or webinars on the methodology
- Readings of and discussion on the method and its application
- Small group or individual applications using the method
- Application of the method to participants' own research
- Ongoing opportunities to consult with experts
- Presentation and review of participant work

in their families to graduate college, veterans, and individuals with disabilities, etc.). Note any plans to train researchers at MSIs.

Discuss your strategies for recruiting researchers from state and local education agencies, education-related organizations and businesses, as relevant. Describe how you will announce the training opportunity (training cannot be restricted to members/employees of a specific organization).

Describe the eligibility criteria for participants and the application process.

Describe the selection criteria, how they will be applied to the applicants, and who will make the decisions regarding admission to the training. Discuss how you will make the selection process fair and avoid any appearances of conflict of interest.

Provide a timeline (either in the Research Training Plan section or <u>Appendix F</u>) delineating when the expected recruitment and training of the participants will take place. Methods Training projects can start between July 1, 2021, and September 1, 2021.

(2) Training Activities

Detail the format of the training and identify the number of participants to be included.

Discuss how the proposed format provides the training in a cost-effective way.

Describe how the structure and delivery of the training are organized to reflect adult learning theories (such as participants engaging in activities that are relevant and timely, linked to their work, and applicable to the problems of their fields).

Describe the use of mentors in the training program—how they will be selected and paired with trainees.

Note how the training will build networks among the participants and, if so, how joint learning and collaboration will be encouraged both during and after the training.

Describe the specific training activities for the method you are teaching.

Describe the specific content to be taught within each activity and how it will develop the expected knowledge, skills, and abilities in the participants.

Identify who will lead each activity and how long it will last.

Indicate whether participants will bring a specific research issue to work on during the training or will work on developing a plan to further their understanding of the methodological program.

IES encourages applicants to include training on how to discuss the methods with education policymakers and practitioners.

(3) Tracking Program Success

Discuss how you will identify the strengths and weaknesses of participants upon their entry to the program and how you will tailor the training accordingly.

Describe the measures you will use to determine that the training program is developing researchers who can use the methods taught.

Describe how you will estimate the cost of training per participant, including recruitment costs.

(c) Personnel

Describe the PI's qualifications and experience for managing a research training grant.

Briefly describe the following for each key personnel:

- Qualifications and how these contribute to the focus of the training program
- Roles and responsibilities within the training program
- Percent of time and calendar months per year to be devoted to the training program
- Previous experience providing training for current education researchers

Discuss how the combined expertise of the key personnel reflects the methodological focus, format, and activities of the training program.

(d) Resources

Describe your institutional capacity and experience to manage a grant of this kind.

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/or are necessary for the successful completion of the project (for example, equipment, test materials, curriculum or training materials).

Include Letters of Agreement in Appendix E from all institutions that will take part in the training.

Describe your access to any data sets that you will require for training purposes. Include letters of agreement, data licenses, or existing Memoranda of Understanding (MOU) in Appendix E to document that you will be able to access the data for your proposed use.

Note any ongoing or recently completed methods research projects led by key personnel on your application related to the training to be provided (these are to be detailed in your <u>Appendix C</u>).

Describe the success of any previous Methods Training Grants you or the other key personnel have had from IES (see also <u>Appendix C</u>) and describe any lessons learned incorporated into your application.

Describe the resources you have to implement your dissemination plan as described in <u>Appendix A</u>, providing opportunities for non-participants to have access to the training.

5. Additional Budget Parameters and Application Requirements

The following requirements for the Methods Training applications will not be used in determining responsiveness to the RFA, but applications recommended for funding will be required to adjust their plans and budgets, if necessary, to meet them before receiving grant funds.

The budget must include potential costs of accommodations for trainees with disabilities; for example, a sign language interpreter and/or assistive listening devices. These costs should be reasonable given the duration and format of the training and should be budgeted for each training.

Under the Methods Training program, you will have to certify that your training participants and your support of them meet the following requirements. Grant funds expended in ways that do not meet these requirements will be disallowed, and your institution will have to return such expended funds).

(a) Participant Characteristics

Training participants must be citizens or permanent residents of the United States.

Training participants should primarily be people who have received their master's degree or doctorate prior to beginning the training and are working in the field of education research. Training focused on state and local education personnel may include people with a bachelor's or master's degree.

Participants' work must be relevant to education in the United States.

(b) Participant Support Costs

Methods Training participants and their institutions cannot receive financial recompense for attending a training program.

Participants are expected to cover their own travel costs with the following exceptions.

- Reasonable travel costs for state and local education agency personnel attending the training can be covered by the grant.
- A small number of training participants can have their travel costs covered by the grant if they have been accepted to the training but lack travel funding.

Lodging and per diem can be covered by the grant but must not exceed federal government reimbursement rates for place and time of year (see https://www.gsa.gov/portal/category/21287).

In general, training grant funds may not be used to pay for food. However, under limited circumstances grant funds may be used to cover the costs of working lunches for attendees of training activities. If you are proposing to use grant funds for working lunches, you should include a clear description of the work to be accomplished during the meal as well as the per person cost. IES will determine whether these working lunch costs are allowable if the grant is awarded. Other meals or snacks should not be included in the grant budget.

Part III: Preparing Your Application

A. Overview

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

B. General Formatting

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

1. Page and Margin Specifications

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

2. Page Numbering

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

3. Spacing

Text must be single spaced.

4. Type Size (Font Size)

Type must conform to the following three requirements:

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

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

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

5. Graphs, Diagrams, and Tables

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

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

C. Required and Optional Appendices

The required training program narrative - Significance, Research Training Plan, Personnel, and Resources - that is described for each training program (see Part II: Training Program Descriptions and Requirements) 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 training program narrative and all required and optional 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 the optional appendices. See the IES Application Submission Guide (https://ies.ed.gov/funding/pdf/submissionguide.pdf) for more information about preparing and submitting your application using the required application package for this competition through

1. Appendix A: Dissemination History and Plan (Required for Methods Training Program Only)

You **must** include Appendix A after the project narrative. Appendix A includes two sections: Dissemination History and Dissemination Plan. Appendix A **must** meet the general formatting guidelines and be **no more than three pages**, including one page for the Dissemination History and two pages for the Dissemination Plan. If Appendix A exceeds this three-page limit, IES will remove any pages after the 3rd page of the appendix before it is forwarded for scientific peer review.

(a) Dissemination History

Grants.gov (https://www.grants.gov/).

The dissemination history is intended to demonstrate that the trainings you have conducted in the past have been disseminated to a broader audience than those attending your trainings (online or in person). Applicants who have never had an IES grant should focus on the dissemination history of related, past methods training projects. Reviewers will use this information to determine whether the project personnel have the experience necessary to carry out the proposed dissemination plan.

The dissemination history should include the following:

- A brief description of the methods trainings you have provided in the past, the training
 materials developed, the different audiences the trainings were directed toward, and how
 trainings and the materials were disseminated to persons unable to attend any training sessions
 given. Examples of such dissemination include the posting of recordings of training sessions
 and/or training materials provided to specific audiences, posted on websites for specific
 audiences, or made publicly available.
- Other unique dissemination products or notable training presentations

(b) Dissemination Plan

The dissemination plan is intended to demonstrate that the training you are proposing to conduct will be disseminated in a way to reach other members of your intended audience that are unable to attend the training sessions provided under this grant. Your dissemination plan should include the following:

- Identify the audiences that you expect will most likely benefit from your training such as institutional researchers, state or local education agency staff, junior or senior academic researchers.
- Discuss the different ways in which you intend to reach members of these audiences who will not be able to attend the training sessions you intend to hold. Describe how the materials, presentations, and products you expect to develop will be made more widely available.
- Discuss how the public will access your resources, whether the resources will be static or updated, and if updated, how frequently.

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

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

If your application is a resubmission, you **must** include Appendix B. If your application is one that you consider to be new but that is similar to a previous application, you should include Appendix B. Appendix B **must** meet the general formatting guidelines and be **no more than three pages**. If Appendix B exceeds this page limit, IES will remove any pages after the third page of the appendix before it is forwarded for scientific peer review. Note that an application that was previously submitted to a different topic within this competition or to another IES grant competition is still considered a resubmission.

Use Appendix B to describe 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 is the only information that should be included in Appendix B; all other material will be removed prior to review of the application.

If you currently have an IES-funded Pathways to the Education Sciences Training Program grant and are submitting an application to renew your training program, then Appendix B is not required.

3. Appendix C: Summary of Research and Training Projects (Required)

Appendix C **must** meet the general formatting guidelines and be **no more than 15 pages**. If Appendix C exceeds this page limit, IES will remove any pages after the 15th page of the appendix before it is forwarded for scientific peer review. In Appendix C, you must provide the information requested according to the training topic area.

Each training program has specific guidelines for the information to be included Appendix C. See below for the guidelines for each program. These are the only materials that should be included in Appendix C; all other materials will be removed prior to review of the application.

(a) Pathways Training Program

A summary table of ongoing research projects of the core faculty, including PI, project title, funder, and start/end dates. In the table, include the following for each project:

- PI and other key personnel
- Brief description of the research project, including topic addressed and methods used
- Brief explanation of where the project would fit within the IES research programs
- Funding source
- Duration
- Possible apprenticeship opportunities for the fellows on the project, including the fellows' specific roles and the specific competencies fellows could gain through working on the project
- Outcomes and products

A summary table of additional apprenticeship opportunities (if applicable) that includes the following:

- The partner institution and key staff involved in the apprenticeship opportunity.
- Brief description of each research apprenticeship, including the topic addressed, methods used, and proposed oversight by the Pathways program.
- Brief explanation of how the apprenticeship aligns with the IES research programs and goals, i.e., the IES Education Research Grants program (84.305A) or the Statistical and Research Methodology in Education grants program (84.305D), or the Partnerships and Collaborations Focused on Problems of Practice and Policy grant program (84.305H). The Requests for Applications for these grant programs are available at http://ies.ed.gov/funding.
- Duration
- Fellows' specific roles and the specific competencies fellows could potentially gain through participating in the apprenticeship
- The outcomes and products

If the PI or any key personnel on this application have had or currently have an IES-funded Pathways Training Program grant, a summary table of each training program that contains the following information:

- Title and award number of the grant
- Core faculty who are also key personnel on the current application
- Number of fellows admitted to the program
- Percent of fellows who successfully completed the program
- Percent of fellows who enrolled in graduate school post-fellowship, including MA and PhD programs.
- Publications by fellows, if applicable

(b) Postdoctoral Training Program

A summary table of the ongoing education research projects for which the core trainers (defined as the training grant PI, Co-PIs, and other mentors) serve as PI or Co-PI. These are the grants upon which fellows may work. In the table, include the following for each project:

- Name of the core trainer and the trainer's role on the research project (as PI or Co-PI)
- Brief description (we recommend no more than three sentences) of the research project, including topic(s) addressed and methods used

- Brief explanation of where the project would fit within the IES research programs and project
 types as described in the IES Education Research Grants program (84.305A) or Research Grants
 Focused on Systematic Replications in Special Education (84.305R) (NOTE: The Request for
 Applications for these grant programs are available at https://ies.ed.gov/funding.)
- Content area alignment (note whether the project falls into Adults with Low Skills, Career and Technical Education, Education Leadership, English Learners, or Other)
- Funding source
- Duration of the project
- Possible roles postdoctoral fellows could have on the project
- Specific competencies fellows could potentially gain through working on the project
- Outcomes and products of the project

If the PI or any core trainer on this application have had or currently have an IES-funded Postdoctoral Training Program grant, a summary table of the training program(s) that contains the following information:

- Title of the training program grant
- Researcher mentors who are also core trainers on the current application
- Number of fellows admitted to the program
- Percent of fellows who successfully completed the program
- Research projects that postdoctoral fellows completed or are currently conducting
- Research methods used or learned by fellows
- Publications by fellows (both peer reviewed and other types)
- Titles of research grants received by fellows
- Current positions of former postdoctoral fellows

(c) Methods Training Program

A summary table of the ongoing (and recently completed) research projects of the PI and/or Co-PIs that are related to the training to be provided. In the table, include the following for each project:

- Principal investigator and other key personnel involved in the project
- Brief description of the research project
- Funding source
- Duration of the project
- Outcomes and products of the project

If the PI or any key personnel on this application have had or currently have an IES-funded Methods Training Program grant, a summary table of the training program(s) that contains the following information:

- Title of the training program grant
- Number of participants admitted to the training program
- Research methods learned by participants
- Participant rating of the training program
- Results from follow-up with participants on their use of the material taught

4. Appendix D: Examples of Letters of Agreement for Fellows (Required for Pathways and Postdoctoral Training Programs)

Appendix D **must** meet the general formatting guidelines and be **no more than two pages**. If Appendix D exceeds this page limit, IES will remove any pages after the second page of the appendix before it is forwarded for scientific peer review. Include an example of the Letter of Agreement that the PI and each fellow will sign prior to the fellow's acceptance of the position. This letter should outline the conditions of the fellowship and contain the expectation that fellows will respond to IES research training surveys.

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

5. Appendix E: Letters of Agreement (Required for Pathways and Methods Training Programs, Optional for Postdoctoral Programs)

There is **no recommended page length** for Appendix E. Include in Appendix E the Letters of Agreement from any institutional partners who will take part in the training program. 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 training program that will be required if the application is funded. Applicants for the Methods Training topic may also include data licenses and Memorandums of Understanding (MOUs) in Appendix E.

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

(a) Pathways Training Program

IES requires including letters from the following:

- From any involved departments showing their agreement to be part of the training program
- From outside partners providing research or policy/practice apprenticeship opportunities for fellows

(b) Postdoctoral Training Program

IES recommends including letters from the following:

- From the personnel providing training if your program includes trainers from multiple departments, institutions, or organizations
- From any other involved departments showing their agreement to be part of the training program if relevant
- From outside partners providing research opportunities for fellows if relevant

(c) Methods Training

IES requires including letters from the following:

• From all key training personnel.

- From all institutions that will take part in the training.
- From those who hold access to necessary data to include letters of agreement, data licenses, or the existing Memorandum of Understanding in documenting access to any data sets to be used in the training

6. Appendix F: Examples of Training and Assessment Materials (Optional)

Appendix F **must** meet the general formatting guidelines and be **no more than 10 pages**. If Appendix F exceeds this page limit, IES will remove any pages after the 10th page of the appendix before it is forwarded for scientific peer review. Include in Appendix F examples of training materials and tables/charts that support the training program narrative (for example, a project timeline, syllabi, course descriptions, mentoring activities, seminars).

These materials may include self-assessments used to identify fellows' or participants' strengths, weaknesses, or interests; program or fellow/participant evaluation forms; training materials; and other such materials.

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

D. Other Narrative Content

In addition to the training program narrative (see <u>Part II: Training Program Descriptions and Requirements</u>) and required and optional Appendices (see above), you will also prepare a project summary/abstract and a bibliography and references cited to include as file attachments in your application. See the IES Application Submission Guide

(https://ies.ed.gov/funding/pdf/submissionguide.pdf) for more information about preparing and submitting your application using the required application package for this competition on Grants.gov (https://www.grants.gov/).

1. Project Summary/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**: Distinct, descriptive title for the training program.
- **Topic:** Identify the RFA (Research Training Programs in the Education Sciences) and the program to which you are applying (Pathways Training Program, Postdoctoral Training Program, or Methods Training Program).
- Description of the training:
 - o A brief description of the proposed training and its purpose
 - o The expected number of individuals to be recruited and length of their training
 - For the postdoctoral training program, a description of research currently conducted by the proposed core trainers, opportunities for fellows to be involved in education research projects, and opportunities for fellows to collaborate with practitioners and policymakers

Please see online summary/abstracts (https://ies.ed.gov/funding/grantsearch) of previous and current training grants for examples of the content to be included in your 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* (https://www2.ed.gov/policy/fund/guid/humansub/overview.html) for a brief overview of principles, regulations, and policies which affect research involving human subjects in research activities supported by the Department of Education.

Note that the Revised Common Rule is now in effect with changes that will affect Institutional Review Board (IRB) review of your proposed research protocol if your training program is conducting research as part of the training (see "Note" below). Take care to address how changes to exemption and continuing review procedures and the use of a single IRB will be addressed should your application be recommended for funding.

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

NOTE: For most training programs, you are likely to be exempt because you are not conducting research activities as part of the training. Often, the training program fellows or participants are working on research grants that have their own IRB approval process. However, in some cases, training programs conduct research as part of the training. In such cases, the training program will need to go through the IRB process.

4. Biographical Sketches for Key Personnel

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

Biographical sketches are submitted as separate PDF attachments in the application package. IES strongly encourages applicants to use SciENcv (http://www.ncbi.nlm.nih.gov/sciencv/) where you will find an IES biosketch form. You may also develop your own biosketch format. If you use SciENcv, the information on current and pending support will be entered into the IES biosketch template. If you use your own format, you will need to provide this information in a separate table.

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

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

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

Part IV: Competition Regulations and Review Criteria

A. Funding Mechanisms and Restrictions

1. Mechanism of Support

IES intends to award cooperative agreements pursuant to this Request for Applications. Through the terms of the cooperative agreements, grantees will work with IES to plan and implement their activities.

2. Funding Available

Although IES intends to support the programs 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, regardless of program.

The size of the award depends on the program and scope of the training program. Please attend to the duration and budget maximums set for each training program in Part II: Training Program
Requirements. IES will not make an award exceeding the relevant maximum grant duration and/or award amount as set out below.

IES intends to make no more than five Pathways Training awards for FY 2021. However, should funding be available, IES may consider making additional awards to high-quality applications that remain unfunded after five awards have been made. There is no limit on the number of Postdoctoral Training or Methods Training awards.

3. Special Considerations for Budget Expenses

(a) Indirect Cost Rate

U.S. Department of Education policy (34 CFR 75.562 (c)(2)) limits indirect cost reimbursement on a training grant to the recipient's actual indirect costs, as determined by its negotiated indirect cost rate agreement, or 8 percent of a modified total direct cost base, whichever amount is less. For the purposes of this competition, a modified total direct cost base is defined as total direct costs less stipends, tuition and related fees (including fellows' benefits), and capital expenditures of \$5,000 or more. 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 sub-awardees, not located in the territorial U.S. cannot charge indirect costs.

(b) Meetings and Conferences

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

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

4. Program Authority

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

5. Applicable Regulations

Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (Uniform Guidance) codified at CFR Part 200. The Education Department General Administrative Regulations (EDGAR) in 34 CFR parts 77, 81, 82, 84, 85, 86 (part 86 applies only to institutions of higher education), 97, 98, and 99 and 2 CFR 3485. 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, 75.210, 75.211, 75.217, 75.219, 75.220, 75.221, 75.222, and 75.230.

B. Additional Award Requirements

1. Pre-Award

(a) Clarification and Budget Questions

Applications that are being considered for funding following scientific peer review may be required to provide further information on their proposed research training activities (see Part II) before a grant award is made. For example, you may need to update letters of agreement from any participating departments/schools or partners reaffirming commitment to participating in the training program and proposed cost-sharing (if applicable). You may be asked for additional detail regarding your recruitment plan or for your Pathways Training apprenticeships. In addition, you may be required to provide greater detail regarding your proposed training. If significant revisions to the project arise from these information requests, they will have to be addressed under the original overall budget.

(b) Assessment of Past Performance

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

2. Post Award

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

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

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

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

(b) Special Conditions on Grants

IES may impose special conditions on a grant 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. Training grant recipients who have not successfully recruited the number of fellows/participants for whom they requested funding will have their continuation funding adjusted. Postdoctoral training grants must provide training opportunities in one of the required content areas and methodological focuses for the entire grant award period. IES may impose special conditions or withhold continuation funding for a postdoctoral training program that does not have active research projects that fellows may work on and that align with the required content area and methodological focus of the program.

(c) Attendance at the Annual IES Principal Investigators Meeting

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

C. Overview of Application and Scientific Peer Review Process

1. Submitting a Letter of Intent

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

Elements of a Letter of Intent:

- Descriptive title
- Research Training Program that you will address
- Brief description of the proposed training program
- Name, institutional affiliation, address, telephone number, and email address of the principal investigator and any co-principal investigators
- Name and institutional affiliation of any key collaborators and contractors
- Duration of the proposed project (attend to the Duration maximums for each Training Program)
- Estimated total budget request (attend to the Budget maximums for each Training Program)

2. Resubmissions and Multiple Submissions

If you intend to revise and resubmit an application that was submitted to one of IES's previous competitions but that was not funded, you must indicate on the SF-424 Application for Federal Assistance Form in the Application Package (see IES Application Submission Guide, https://ies.ed.gov/funding/pdf/submissionguide.pdf) that the FY 2021 application is a resubmission (Item 8) and include the application number of the previous application (an 11-character alphanumeric identifier beginning "R305" 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 Appendix B: Response to Reviewers. Revised and resubmitted applications will be reviewed according to this FY 2021 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 the FY 2021 application is a new application. In Appendix B, you should provide a rationale explaining why the FY 2021 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 2021 Training Grant programs and to multiple topics within the Education Research Training Grants program, so long as you meet the requirements below.

- An institution may submit multiple applications to the Postdoctoral Training Program only if
 they are substantively different from one another and do not include key personnel that are
 also on another application to the Postdoctoral Training Program.
- An institution may submit multiple applications to the Methods Training Program if they are substantively different from one another.

If you submit more than one application to the same program under the Research Training grants program or 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 20, 2020 through the internet using the software provided on the Grants.gov website https://www.grants.gov/. You must follow the application procedures and submission requirements described in the IES Application Submission Guide (https://ies.ed.gov/funding/pdf/submissionguide.pdf) and on Grants.gov https://www.grants.gov/web/grants/applicants/apply-for-grants.html.

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 (https://iesreview.ed.gov/). 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 IES Application Submission Guide (https://ies.ed.gov/funding/pdf/submissionguide.pdf) for additional information about ANS and PRIMO.

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

4. 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 (https://ies.ed.gov/director/sro/application_review.asp) by a panel of experts who have substantive and methodological expertise appropriate to the program of research and Request for Applications.

Each compliant and responsive application is assigned to one of the IES review panels (https://ies.ed.gov/director/sro/peer_review/reviewers.asp). Applications are assigned to panel according to the match between the overall expertise of reviewers on each panel and the content and methodological approach proposed in each application.

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 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 students. The specific purpose of IES-supported training programs is to support this contribution by furthering the training of education researchers and policymakers. In doing so, IES aims to increase the quality, accessibility, use, and relevance of education research. IES expects reviewers for all applications to assess the following aspects of an application in order to judge the likelihood that the proposed training program will have a substantial impact on that purpose. Information pertinent to each of these criteria is described in Part II: Training Program Requirements.

(a) Significance

Does the applicant provide a compelling rationale for the significance of the training program as defined in the Significance section for the program under which the applicant is submitting the application? Does the applicant address the recommendations described in the Significance section for the training program under which the applicant is submitting the application?

(b) Research Training Plan

Does the applicant address the recommendations for the training plans described in the Research Training Plan section for the program under which the applicant is submitting the application?

(c) Personnel

Does the description of the personnel make it apparent that the principal investigator and other key personnel possess appropriate training and experience and will commit sufficient time to competently implement the proposed training?

(d) Resources

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

(e) Dissemination (Methods Training Programs Only)

Does the application address pertinent recommendations described in Appendix A: Dissemination History and Plan? Does the applicant present a dissemination plan that is tailored to the purpose of the project type and designed to reach a wide range of audiences? Does the applicant describe a

dissemination history that demonstrates past success in sharing results of education research widely and appropriately?

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 training described in this request for applications
- Ability to carry out the proposed research training within the maximum award and duration requirements
- Availability of funds

Part V: Compliance and Responsiveness Checklist

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

	Compliance				
	Have you included a project narrative?				
	Do the project narrative and other narrative content adhere to all formatting requirements (Part IV.B)?				
	Do the project narrative and other narrative content adhere to all page maximums as described in the RFA? IES will remove any pages above the maximum before forwarding an application for scientific peer review.				
	 For Pathways Training Program applications, have you included the following Required Appendices? If you are resubmitting an application, Appendix B: Response to Reviewers Appendix C: Summary of Research and Training Projects Appendix D: Example Letter of Agreement for Fellows Appendix E: Letters of Agreement from Training Partners 				
	 For Postdoctoral Training Program applications, have you included the following required Appendices? If you are resubmitting an application, Appendix B: Response to Reviewers Appendix C: Summary of Research and Training Projects Appendix D: Example Letter of Agreement for Fellows 				
	 For Methods Training Program applications, have you included the following Required Appendices? Appendix A: Dissemination History and Plan If you are resubmitting an application, Appendix B: Response to Reviewers Appendix C: Summary of Research and Training Projects Appendix E: Letters of Agreement from Training Partners 				
		Responsiveness			
	Have you identified a single Training Program for your application? Do you meet the Eligible Applicants for your chosen topic? Does your Training Program Narrative include the required sections? Did you describe the elements required for each section?				
		ng Program Narrative Elements			
	Pathways Training Program	Postdoctoral Training Program	Methods Training Program		
Significance	Education research focus and its relation to improving the US education system	Content area and methodological focus of your training program selected from the list in Part II	Specific methodologies that will be the focus of your training program Intended participants		
Research Training Plan	 Program that will train a minimum of 40 fellows over 5 years Recruitment plan Research training activities Financial support Plan for tracking fellows' progress Plan for determining success of the training program 	 Recruitment plan Research training activities At least one research project that will be active for the first 2 years of the program and that aligns with the proposed content area and methodological focus The financial support to be provided to individual fellows and to the overall training program Plan for tracking fellows' progress and determining the success of the training program 	 Recruitment plan The training content, format, and activities Plan for tracking participants' progress and determining the success of the training program 		

Personnel	 All key personnel on the project team including the PI, any Co-PIs, and the other core faculty If the applying institution is not a MSI, key personnel must include a co-PI and core faculty members from the partner MSI. 	 All core trainers on the project team (the PI, any Co-PIs, and the other mentors) and their new or ongoing education research projects Any other individuals who may provide additional substantive support but are not key personnel 	 All key personnel on the project team, including the PI, any Co-PIs, and other trainers. Applications must name the experts in specific methodologies who will provide the training.
Resources	Institutional resources of both the primary applicant institution and any subaward institutions	Institutional resources of both the primary applicant institution and any subaward institutions	Institutional resources of both the primary applicant institution and any subaward institutions

Part VI: Program Codes

Applications to the **Education Research Training Grant program (CFDA 84.305B)** are submitted under a single topic. You must enter the appropriate topic and project type code in Item 4b of the SF 424 Application for Federal Assistance form (see the IES Application Submission Guide, https://ies.ed.gov/funding/pdf/submissionguide.pdf, for more information about this form). For example, an application to the Education Research Training Grants program (CFDA 84.305B) under the Postdoctoral Research Training Program in the Education Sciences topic should have the code "NCER-Postdoc" entered in the field for Item 4b.

Topics	Codes
Pathways to the Education Sciences	NCER-Pathways
Postdoctoral Research Training Program in the Education Sciences	NCER-Postdoc
Methods training for Education Researchers	NCER-Methods