

Research Networks Focused on Critical Problems of Education Policy and Practice

Assistance Listing Number (ALN): 84.305N

U.S. DEPARTMENT OF EDUCATION

A Product of the National Center for Education Research

Letter of Intent Due:	November 14, 2023	https://iesreview.ed.gov/LOI/LOISubmit
Application Package Available:	October 26, 2023	https://www.grants.gov/
Application Deadline:	11:59:59 p.m. Eastern Time on January 11, 2024	https://www.grants.gov/
Possible Start Date:	September 1, 2024	
<p>See the companion IES Application Submission Guide (https://ies.ed.gov/funding/submission_guide.asp) for guidance on preparing and submitting applications through Grants.gov.</p>		

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Part I: Overview

A. Purpose of the Education Research Networks Grants Program

Through its National Center for Education Research (NCER), the Institute of Education Sciences (IES) supports a program of research to build knowledge and understanding of education practice and policy. IES was established by the Education Sciences Reform Act of 2002 (ESRA – P.L. 107-279), in part to improve academic achievement and attainment and access to educational opportunities for all learners (ESRA, § 111.b.1.B), with a particular focus on low-performing learners (ESRA, § 115.a.1) and those lacking access to high-quality educational opportunities (ESRA, § 115.a.2.A and 115.a.2.B). In carrying out this mission, we are committed to ensuring that our work is objective, secular, neutral, and nonideological; free of partisan political influence; and free of racial, cultural, gender, or regional bias (ESRA, § 111.b.2.B).

In this request for applications (RFA), NCER invites applications for Research Teams to join two of our existing research networks, the Career and Technical Education (CTE) Network and the Digital Learning Platforms (DLPs) Network, both established under the Research Networks Focused on Critical Problems of Education Policy and Practice program (Education Research Networks; ALN 84.305N). This program focuses resources on education issues that are a high priority for the nation and creates structures for researchers who are working on these issues to share ideas, build new knowledge, and strengthen their research and dissemination capacity. Networks are comprised of multiple teams who have their own individual projects that share a focus on a particular education issue and a Network Lead. The goals of a Network are to advance the field's understanding of a problem or issue beyond what an individual research project or team can do on its own and to assist policymakers and practitioners in using this information to strengthen education policies and programs and improve learners' education outcomes. Networks support IES's mission to fund rigorous research that helps solve significant education problems that are relevant to the teaching and learning needs of the diverse population of the United States. NCER's ability to support high quality research depends on our ability to train and support talented researchers, statisticians, and evaluators that reflect this diversity. IES encourages principal investigators and personnel from all demographic backgrounds (<https://ies.ed.gov/aboutus/diversity.asp>) to apply. IES also encourages applications from minority-serving institutions.

For FY2024, IES invites applications for:

- Up to 5 **Research Teams** to join the [Extending the Reach of the CTE Research Network](#).
- Up to 8 **Research Teams** to join the [DLPs to Enable Efficient Education Research Network](#), SEERNet, which currently includes a Network Lead, five Platform Teams, and Research Teams funded through the FY2023 competition. Applicants can learn more about SEERNet here: <https://seernet.org/>.

IES will consider only applications that are responsive and compliant to the requirements described in this Request for Applications (RFA) and submitted on time electronically via Grants.gov (<http://www.grants.gov>).

For this competition, all awards will be made as cooperative agreements to facilitate IES's involvement in the planning and implementation of network activities. As part of the cooperative agreements with IES, each team will commit to collaborative participation with the network. See [Part IV.B.2.e Network Commitments](#) for the specific agreements for members of the network.

To encourage rigorous education research that is transparent, actionable, and focused on meaningful outcomes, all applicants are expected to incorporate the IES Standards for Excellence in Education Research (SEER; <https://ies.ed.gov/seer/>) into their proposed research, as applicable. SEER recommends that researchers:

1. Pre-register studies
2. Make findings, methods, and data open
3. Address inequities in learners' opportunities, access to resources, and outcomes

4. Identify interventions' components
5. Document treatment implementation and contrast
6. Analyze interventions' costs
7. Use high-quality outcome measures
8. Facilitate generalization of study findings
9. Support scaling of promising interventions

NCER expects researchers receiving funding through this program to disseminate evidence in a way that is useful to and accessible by learners, educators, parents, policymakers, researchers, and the public (ESRA, § 112.2). To support accessibility to all stakeholders, IES grantees must comply with the IES Policy Regarding Public Access to Research (<https://ies.ed.gov/funding/researchaccess.asp>) and adhere to other open science practices and SEER principles (<https://ies.ed.gov/seer/>) where applicable.

B. Getting Started

1. Technical Assistance for Applicants

IES provides technical assistance to applicants that addresses the appropriateness of project ideas for this competition and methodological and other substantive issues concerning research in education settings. IES program officers can work with applicants through a variety of formats at any time up until the time of Grants.gov submission.

If you submit a letter of intent (LOI) on the IES Peer Review website (<https://iesreview.ed.gov/LOI/LOISubmit>), a program officer will contact you regarding your proposed project. IES also offers webinars (<https://ies.ed.gov/funding/webinars/index.asp>) and virtual office hours (<https://ies.ed.gov/funding/technicalassistance.asp>) for general guidance on grant writing and submitting your application and choosing the appropriate competition. Contact NCER program officers (<https://ies.ed.gov/ncer/staff/stafflist.asp>) at any point in the application planning and preparation process prior to submission to discuss your research idea and whether it is a good fit for this or any other IES research grant program. The program officers for this competition are:

CTE Network
Dr. Corinne Alfeld
Email: Corinne.Alfeld@ed.gov
Telephone: (202) 987-0835

DLP Network
Dr. Erin Higgins
Email: Erin.Higgins@ed.gov
Telephone: (202) 987-1531

2. Eligible Applicants

Eligible applicants differ by network. See [Part II](#) for network-specific eligibility requirements.

Broadening Participation in the Education Sciences¹: IES is committed to broadening institutional participation in its research grant programs. IES encourages applications from minority-serving institutions (MSIs) 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.

¹ Section 114 of the Education Science Reform Act of 2002 charges IES with undertaking “initiatives and programs to increase the participation of researchers and institutions that have been historically underutilized in Federal education research activities of the Institute, including historically Black colleges or universities or other institutions of higher education with large numbers of minority students.”

3. Building Your Project Team

The Principal Investigator (PI) 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, and is the primary point of contact with IES. The PI is designated by the institution submitting the application. Other personnel having authority and responsibility for the research and use of grant funds should be designated as co-Principal Investigators (co-PIs). Even if two or more people will share the authority and responsibility for leading and directing the proposed research intellectually and logistically as co-PIs, only one of them may be identified as the PI for the purposes of making a grant award.

IES strives to ensure that the researchers we fund are drawn from the entire pool of talented individuals who bring different backgrounds, perspectives, interests, and experiences to address complex education problems (<https://ies.ed.gov/aboutus/diversity.asp>).

4. Eligible Study Populations

Eligible study populations differ by Network. See [Part II](#) for network-specific eligibility requirements.

If you are proposing research that is focused solely on the needs of learners with or at risk for disabilities from birth through postsecondary education, you must apply to the separate grant programs run by the National Center for Special Education Research (NCSEER; <https://ies.ed.gov/ncser>). The only exception is for research focused on learners with or at risk for disabilities in adult education settings which you may submit to this competition.

5. RFA Organization and the IES Application Submission Guide

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

1. *This RFA* provides information on how to prepare an application that is compliant and responsive to the requirements. [Part I](#) sets out the requirements for a grant application. [Part II](#) describes the requirements and recommendations for this competition. [Part III](#) provides information about general formatting and other narrative content for the application, including required appendices. [Part IV](#) provides general information on competition regulations and the review process. [Part V](#) provides a **checklist that you can use to ensure you have included all required application elements to advance to scientific peer review**. [Part VI](#) provides the topic codes that you must enter in Item 4b of the SF 424 Application for Federal Assistance form.
2. *The IES Application Submission Guide* (https://ies.ed.gov/funding/submission_guide.asp) provides important information about submission procedures and IES-specific guidance and recommendations to help you ensure your application is complete and received without errors on time through Grants.gov.

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

6. 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/submission_guide.asp)
- Received and validated by Grants.gov no later than 11:59:59 p.m. Eastern Time on January 11, 2024.

(b) Compliance

- Includes the **required project narrative** (see [Part II](#))
- Adheres to all formatting requirements (see [Part III](#))
- Adheres to all page limit maximums for the project narratives (see [Part II](#)) and appendices (see [Part III](#)). IES will remove any pages above the maximum before forwarding an application for peer review
- Includes all **required appendices** (see [Part III](#))
 - [Appendix A: Dissemination History and Plan](#)
 - [Appendix B: Response to Reviewers](#) (required for DLP Research Team resubmissions only)
 - [Appendix E: Letters of Agreement](#)
 - [Appendix F: Data Sharing and Management Plan](#)

(c) Responsiveness

- Meets **requirements** for the network topic and role (see [Parts II](#) and [Part III](#))

C. Award Limits

Applications to the Education Research Network Grants program must conform to the following limits on award duration and cost by network topic and role. Budgets should align with proposed project activities. Applicants should provide a detailed budget justification that explains how the requested costs are allowable, allocable, and reasonable (see 2 CFR 200, Subpart E; <https://www.ecfr.gov/current/title-2/subtitle-A/chapter-II/part-200/subpart-E>) and reflect the proposed scope of work.

Network Topic & Role	Maximum Number of Awards	Grant Duration	Maximum Grant Award
CTE Network Research Teams	5	4 years	\$3,200,000 per team
DLP Research Teams	8	2 years	\$1,000,000 per team

D. Changes in the FY2024 Request for Applications

Everyone involved in preparing and submitting an application, whether new or revised, should carefully read all relevant parts of this RFA. Major changes to the Research Networks Focused on Critical Problems of Education Policy and Practice (ALN 84.305N) competition in FY 2024 are listed below and described fully in relevant sections of the RFA.

New competition for CTE Research Teams - in FY2023, the CTE Network was established by awarding a [CTE Network Lead](#) through this program. For this FY2024 competition, IES is inviting applications for CTE Research Teams to join the network. The Network Lead and IES will coordinate the work of the Research Teams.

Increased Emphasis on Open Science Principles – throughout the RFA, we highlight IES requirements that support the goals of open science and the various opportunities afforded to IES grantees to share their research findings broadly and to encourage transparency in education research.

- **Requirement for Grantees to Use Persistent Identifiers (PIDs)** – in August 2022, the Office of Science and Technology Policy (OSTP) issued a Memorandum on Ensuring Free, Immediate, and

Equitable Access to Federally Funded Research (<https://www.whitehouse.gov/wp-content/uploads/2022/08/08-2022-OSTP-Public-Access-Memo.pdf>). This updated open access policy will go into effect by December 31, 2025. In anticipation of these changes and consistent with National Security Presidential Memorandum 33 (NSPM-33; see <https://www.whitehouse.gov/wp-content/uploads/2022/01/010422-NSPM-33-Implementation-Guidance.pdf>) that establishes policies for federal funding agencies that protect national security while supporting open science, we are requiring that all key personnel for funded projects obtain a PID such as ORCID iD (Open Researcher and Contributor Identification; <https://orcid.org/>) prior to award.

- **Recommendations to Incorporate Additional Open Science Practices** – where appropriate, we have added information throughout the RFA to encourage other open science practices, including pre-registration of projects, planning and budgeting to support curation of data and analysis codes to facilitate ease of data sharing, and budgeting for publication of findings in open access journals.
- **Updated guidance for the Data Sharing Requirement component of the IES Policy Regarding Public Access to Research** – as an applicant to this competition, you are required to include a plan in [Appendix F](#) that describes how you will manage project data and ultimately share a final research data set as required by the IES Public Access Policy.

Increased maximum award amount for DLP Network Research Team applicants – applicants may now request up to \$1,000,000 over 2 years for DLP Research Team awards.

Updated recommendations and additional information provided about platforms for the DLP Network Research Team topic – more information was added to clarify the purpose of the Research Team role within the DLP Network (also known as SEERNet). More detailed recommendations were added around power analyses and a recommendation was added to include validity and reliability information about any measures you plan to collect. Tables are now included that summarize key features of the platforms that can be used for research.

Removed restriction of number of Research Team awards per DLP platform. IES intends to make 8 DLP Research Team awards in response to the FY24 competition. The restriction of 2 awards per DLP platform has been removed.

Part II: Competition Requirements and Recommendations

A. Career and Technical Education (CTE) Research Teams

1. Overview and Goals of the CTE Network

(a) Background and Need

Career and Technical Education (CTE) generally comprises instruction in academic, technical, and employability skills; builds knowledge; and provides experiences required to enter and succeed in a variety of careers. Around the country, CTE has become widely recognized as a key component to a strategy for supporting career and college readiness, and research has demonstrated that various aspects of CTE provide learners with opportunities that increase their chances of success. However, there is no systematic documentation or research about how districts are supporting the career development of secondary school learners. Furthermore, due to resource inequities across school districts, it is likely that such opportunities are unevenly distributed. High school is the last time that the majority of young people in the U.S. have access to publicly funded, compulsory education and is thus a prime timeframe to equip them with the experiences, knowledge, skills, and tools they need to select a possible career and understand the necessary steps to pursue it. Information is needed to better understand the accessibility and impact of career development approaches and tools used in the secondary (middle and high) school grades. Findings from this network will help educators make more informed decisions about what to offer and how to ensure equity of access to these resources across diverse secondary school learners.

(b) CTE Network

The Institute of Education Sciences (IES) established a new CTE Network in FY2023, titled [Extending the Reach of the Career and Technical Education Research Network](#). The new CTE Network will build on the [momentum](#) of the [first CTE Network](#) by serving as a hub for CTE research, research training, leadership, and dissemination of research findings. The CTE Network includes a [Network Lead](#), funded under a FY2023 competition, and Research Teams to be funded under the current competition.

The Network Lead team is conducting an evidence review of work-based learning (WBL) in secondary education settings across the U.S., and the Research Teams will conduct complementary research to explore and describe how learners' career development is facilitated in secondary education settings across the U.S. As part of their coordination of the Network, the Lead will facilitate the Research Teams' collaborations around their research plans and results. Together, the Network members will begin to document the national landscape of secondary school career development opportunities and what works best for whom.

IES invites applications for Research Teams to join the new CTE Network. IES intends to fund up to five research teams to examine the availability, quality, and impact of career development opportunities that support secondary school learners on education outcomes.

2. Overview of the CTE Network Research Teams

With the goal of understanding the equity of available opportunities and outcomes, each CTE Research Team funded under this FY2024 305N competition will compile information and generate evidence about career development opportunities that support secondary school learners (middle and high school) in *a large school district*. This is an initial investment to understand how career development opportunities work in these settings. IES does not intend to fund more than one project in a given setting.

The career development opportunities may include but need not be limited to:

- CTE coursework and programs of study
- work-based learning

- career technical competency assessments (such as CTE end-of-course exams, certifications, microcredentials)
- career advising
- tracking tools (such as digital credential wallets, digital transcripts, dashboards).

Each research team will conduct a two-part project: The first part (Year 1) will be devoted to the exploratory study of career development opportunities and to the development of an impact evaluation plan around at least one career development opportunity. The two studies need not be conducted in the same setting. The second part (Years 2 through 4) of the project will be devoted to conducting the impact evaluation.

- I. Part I: Exploratory (Year 1): Research Teams will determine which and how many career development opportunities are available and used in the selected setting, the characteristics of the setting and of the learners who have access to and use them, and which opportunities are associated with better learner outcomes (see [Learner Outcomes](#) section).

Prepare for the Impact Study: Also, in Year 1 of the grant, each Research Team will prepare a detailed research plan for an impact evaluation of one career development opportunity using a design consistent with WWC standards, with or without reservations (<http://ies.ed.gov/ncee/wwc/>). The impact research plan will first be presented to the Network Lead and IES to determine its fit with the other proposed projects and to ensure regional diversity across projects. It will then be submitted to IES for review and approval.

- II. Part II: Impact (Years 2-4): Each research team will conduct a [causal impact study](#) to determine whether the most prevalent or promising career development opportunity in a particular setting (determined in collaboration with the rest of the Network) is beneficial to learners' career-related outcomes and to examine heterogeneity in learner outcomes. The impact study will also include information about implementation and cost.

With assistance from the CTE Network Lead, the teams will begin to systematically document the national landscape of career development opportunities offered and used at the secondary school level in the U.S. and build evidence of the impact of career development opportunities on learner outcomes.

3. CTE Research Team Applicant Requirements

(a) Overview

Each CTE Research Team will conduct independent research activities and will also coordinate with the other teams in the CTE Network. To be responsive to the CTE Network Research Team role and forwarded for peer review, the proposed project **must** meet the requirements listed below.

(b) Eligible Applicants

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

(c) Populations

Research and data collection **must** focus on learners enrolled in secondary (middle and/or high school) education but can include these learners' postsecondary and employment outcomes. You may include students with or at risk for disabilities, but applications that focus only on students with or at risk of

disabilities will not be considered.² Contact the program officer if you have questions about eligible populations.

(d) Learner Outcomes

Applicants **must** propose to measure education outcomes hypothesized to be affected by learner engagement with the career development opportunities of interest (see list in the [Overview of the CTE Network Research Teams](#) section). Depending on the grade level of the middle and/or high school learner cohort(s) on which the applicant chooses to focus, these outcomes can include measures of:

- Learning and achievement in career and technical education (CTE) and other relevant courses, such as grades, test scores, or course credits; high school graduation; technical certifications;
- Postsecondary enrollment; course credits; completion of for-credit and non-credit programs that lead to occupational credentials and certificates; associate degrees; bachelor's degrees;
- Employment; wages.

Contact the program officer if you have questions about eligible outcome measures.

(e) Education Settings

Proposed research **must** be relevant to education in the United States and **must** address factors under the control of U.S. education systems. Research Teams should propose to conduct the research in a large or midsize city or large or midsize suburb (according to NCES definitions: <https://nces.ed.gov/surveys/annualreports/topical-studies/locale/definitions>) with career development opportunities available to their secondary students. Applicants should explain why they selected the setting and describe the number and demographic characteristics of learners served. Employment settings where work-based learning (WBL) takes place, including youth apprenticeship, are eligible as the research setting if the WBL is explicitly part of a secondary CTE program.

You **must** include a letter of agreement from the district that will be the education setting for the exploratory project. The letter of agreement should outline the district's expected roles and responsibilities.

(f) CTE Network Research Teams Project Narrative Requirements

You **must** include a Project Narrative with four sections: (i) Significance, (ii) Research Plan, (iii) Personnel, and (iv) Resources. If any of these four sections are missing, or lack the required content described below, your application will not move forward to peer review. Please see the [Project Narrative Recommendations](#) section for additional information about what to include in the Project Narrative.

The project narrative **must** adhere to the formatting guidelines (see [Part III.B](#)) and be **no more than 22 pages**. If the narrative exceeds this page limit, IES will remove any pages after the 22nd page of the narrative.

(1) Significance

The purpose of this section is to describe the career development opportunities you propose to study.

You **must** describe the following:

- At least one career development opportunity that you propose to examine in the exploratory study. You are not required to identify the career development opportunity that you will focus on for the impact study until the first year of the grant, if awarded.

² For such studies, see research opportunities funded by the National Center for Special Education Research.

(2) Research Plan

The purpose of this section is to describe the proposed population, setting, research design, methods, and data analysis plans for the exploratory study in year 1. During year 1, IES will provide funded Research Teams additional guidance and a list of the requirements and recommendations for developing the impact study research plan, to be vetted by the Network Lead and submitted to IES for review and approval by the end of year 1. Each of these activities is described below.

You **must** describe the following:

- The selected setting and the population characteristics of the setting for your exploratory study.
- The research design, methods, and data analysis plans for your exploratory study.
- How you will develop a research plan for a causal impact study of a selected career development opportunity (in the same setting or a different setting) during the first year of the project.

(3) Personnel

The purpose of this section is to describe the members of your project team, their training and experience (including experience working with the proposed study population), and the amount of time they will commit to the proposed research and dissemination activities.

You **must** describe your project team.

(4) Resources

The purpose of this section is to describe the institutions involved in the research and their capacity and access to resources needed to execute a project of this size and complexity and to appropriately disseminate findings.

You **must** describe your resources to conduct the project.

(g) Data Sharing and Management Plan

You **must** include a Data Sharing and Management Plan (DSMP) in [Appendix F](#) for your Exploratory study in compliance with the IES Policy Regarding Public Access to Research (<https://ies.ed.gov/funding/researchaccess.asp>). If your application does not include a DSMP in [Appendix F](#), IES will declare your application noncompliant, and it will not move forward to peer review. Funded research teams will also be required to submit a DSMP for their proposed Impact study research plan in Year 1.

(h) Award Limits

Awards made under the CTE Network Research Teams topic must conform to the following limits on duration and cost and should reflect the actual time and amount of funding necessary to conduct the proposed scope of work, rather than the maximums allowable by IES.

The maximum cost for the CTE Network Research Team award is \$3,200,000 (total cost = direct costs + indirect costs) over four (4) years.

Note that applicants do NOT need to budget for time and travel for participation in Network activities (such as meetings); thus, all funds should be used to carry out the project.

(i) Maximum Number of Awards

IES intends to make no more than 5 CTE Network Research Team awards.

4. CTE Network Research Team Recommendations

(a) Overview

These recommendations are intended to improve the quality of your application, and the peer reviewers are asked to consider them in their evaluation of your application.

Recommendations are provided for both the Exploratory and Impact studies that are required as part of the proposed project. In general, keep in mind that:

- Successful exploration projects will generate hypotheses about how best to improve learner, educator, and system outcomes and should inform future testing of potentially beneficial career development opportunities.
- Successful impact studies will generate evidence about benefits to learners and the affordability and feasibility of career development opportunities to support their future deployment at scale.

(b) Project Narrative Recommendations

(1) Significance

Provide a literature review on current knowledge about career development opportunities for middle and high school learners.

Describe the range of existing types of opportunities (and, if known at the time of application, describe which types are offered in the selected setting), and the theory of change for how career development opportunities can improve learner outcomes.

Describe the district in which the exploratory research will take place and the reason for selection. Explain how the selected education setting is ideal for the exploratory research on secondary (middle and high school) education career development opportunities. IES recommends selecting a district in a large or midsize city or large or midsize suburb, by [NCES locale criteria](#). Include the required Letter of Agreement from the district in [Appendix E](#).

Describe how the proposed project will contribute to our understanding of and ability to equitably address the career development needs of all learners.

Identify aspects of the education setting and characteristics of learners or educators that may change the nature of the relationship between the factors of interest and learner outcomes.

Describe how the results of your proposed project will inform future research and increase understanding of career development needs among learners and educators.

Explicitly state your research questions for both the exploratory study and the impact study. Although you may not yet have selected the particular career development opportunity that you will evaluate in your causal impact study, you should pose research questions that are generally applicable to studying impact, implementation, and cost of a career development opportunity.

If relevant, describe whether and how local postsecondary programs or employers use evidence of career-related (vs. traditional academic) accomplishments in screening applicants.

(2) Research Plan

Your application should include a detailed plan for the Year 1 research activities, which includes an exploratory study and a plan for the conduct of an impact evaluation of a career development opportunity. For both the exploratory and the impact studies, a variety of approaches are appropriate, including (1)

primary data collection and analyses, (2) secondary data analyses, or (3) some combination of these two approaches.

- Demonstrate that the population, setting, research design, methods, and data analysis plans for the exploratory study align with the research questions posed in the Significance section and that the project will be able to answer those questions with sufficient rigor.
- Demonstrate that the impact study research plan (to be developed by the end of the first year of the project, vetted by the Network Lead, and approved by IES) will be well-designed, using appropriate and rigorous methods and measures to answer research questions about the causal impact, implementation, and cost of the career development opportunity that will be the focus of the impact study.

Include a 4-year timeline for activities to be undertaken in Parts I and II of the project in [Appendix C: Supplemental Charts, Tables, and Figures](#).

Population and Setting for the Exploratory Study

Describe the population of learners in your selected setting. Although IES expects your exploratory project to provide comprehensive information about this particular setting's secondary learner population, explain how the information will contribute to a larger body of knowledge on what works for similar secondary school learners in the U.S. IES does not expect individual projects to be generalizable to the U.S. population as a whole. Your target population may represent a narrow segment of the larger U.S. population.

Provide simple descriptive statistics about the learners in the selected setting (such as number of learners and percentages by gender, socioeconomic status, race/ethnic subgroups), if such data are available at the time of application.

Describe the setting in which the exploratory research will take place, including the size and characteristics of the setting and/or the surrounding community, and discuss how this will allow you to draw conclusions about similar education settings.

Research Design and Methods for both studies

Describe your exploratory research design with enough detail to demonstrate how it will address your research questions.

- Describe the methods you will use and how they will inform your research questions and/or specific aims. Use a mixed methods approach whenever possible.
- Describe the data sources, measures, and procedures for data collection. Use a mixed methods approach whenever possible.
- Follow the recommendations below regarding power analyses, high quality measures, and data analysis plans.

Describe how you will develop a research plan for conducting your causal impact study. Describe how, during year 1, you will select a career development opportunity that is hypothesized to support learner outcomes as the focus for your impact study. You are not required to have selected a specific career development opportunity at the time of this application. (Note: Each team's research plan for the impact study will first be submitted to the Network Lead and IES for initial review to ensure its fit with the other teams' proposals, and geographic diversity across projects, and then submitted to IES for review and approval by the end of the first year of the grant).

- For this application, you should explain the criteria you would use to select a career development opportunity for an impact evaluation. You should identify the process you will use to work with school and district partner(s) to design an impact evaluation and how you will work with the Network Lead and IES to ensure that your proposed study will fit with those of the other Research Teams and be carried out in a different setting from other funded Research Teams.

- For this application, IES does not expect the level of detail that would be expected for an Impact study under its Education Research Grants program (ALN 84.305A). Rather, IES and its reviewers want to understand your approach to conducting an impact evaluation and feel confident that you have thought through the major design and measurement challenges. In the Personnel and Resources sections of the proposal, reviewers will also look for your experience and capacity to conduct an impact evaluation.

The following recommendations apply to the impact study portion of the research plan included in this application:

- Describe your plan to collect any prior evidence (or lack of evidence) of impact of the selected career development opportunity, as context for your study.
- Explain what type of research design you would likely recommend for an impact study and why. Causal impact can be tested using either an experimental or quasi-experimental design that is eligible to meet the [IES What Works Clearinghouse \(WWC\) design standards](#). IES expects applicants to use the strongest research design available to address your proposed impact questions for the career development opportunity you are testing.
- Explain what outcomes you would examine, and how these outcomes are appropriate for secondary education career development.
- Describe potential data sources and procedures for data collection, both quantitative and qualitative.
- Describe the procedure you will use to calculate either the power for detecting the minimum effect or the minimum detectable effect size.
- Describe strategies to increase the likelihood that participants will join the project and remain in the study.
- Describe the major implementation and participation questions you would want to address during the impact evaluation, and why these questions are important.
- Describe how you will collect information about how the selected career development opportunity is being implemented in the selected setting and what it costs.

Power Analyses for the Exploratory Study

For all quantitative inferential analyses, demonstrate that your proposed population will provide enough power to address your research questions. Include the following:

- The statistical formula you used.
- The parameters with known values, such as number of clusters or number of participants within clusters.
- The parameters whose values are estimated and how those estimates were made, such as those for intraclass correlations or covariates.
- Other aspects of the design and how they may affect power, such as the use of repeated observations or stratified sampling or blocking.
- Predicted attrition and how it was addressed in the power analysis.

High-quality Measures

Clearly define the constructs of interest in the proposed studies. For all proposed measures, describe the importance, reliability, validity, sensitivity to change, appropriateness for the proposed setting and population (including learner characteristics and outcomes as well as educator and education system characteristics), and practical importance to educators, parents, and other decision makers. For additional resources, see <https://ies.ed.gov/seer/outcomes.asp>.

When state assessment scores or measures of successful progression through education systems such as attendance, progression, or degree completion are available, accessible, and appropriate for both the construct(s) and learners being assessed, you should include them.

Avoid relying on outcome measures that are over-aligned to the career development opportunity being studied (for more information on over-alignment, consult the What Works Clearinghouse Standards Handbook, <https://ies.ed.gov/ncee/wwc/Handbooks>).

Data Analysis Plans

Describe your data analysis procedures for all quantitative and qualitative analyses necessary to address your exploratory research questions and any analyses of groups of learners.

- For mixed methods studies, data analysis plans should provide detailed information on the analytical and interpretive processes for the qualitative data and reflect the integration of qualitative and quantitative data.
- As appropriate, proposed analyses should examine learners from diverse backgrounds and experiences. Describe any analyses that will be conducted to examine variations by demographic factors such as gender, race/ethnicity, and socioeconomic status.
- Describe how you will assess the generalizability of your findings by contrasting the population's characteristics with the characteristics of secondary learners in other education settings across the U.S. For additional resources see <https://ies.ed.gov/seer/generalization.asp>.
- Describe and justify the statistical models to be used.
- Discuss how exclusion from testing and missing data will be handled in your analyses.
- If you intend to link multiple datasets, provide sufficient detail for reviewers to judge the feasibility of the linking plan.
- Describe how you will identify and examine any variables that might influence the relationship between the learner education outcomes and the educators and education settings you propose to study.
- Explain how you will measure outcomes and report results in ways that policymakers and practitioners can readily understand.

(3) Personnel

Demonstrate that the project team possess the appropriate skills and qualifications to carry out both the proposed exploratory and impact research projects, that the principal investigator and other key personnel possess the appropriate training and experience for their roles and responsibilities, and that they will commit sufficient time to competently implement the proposed research.

In its research grant programs, IES is strongly committed to broadening participation, including personnel from underrepresented communities and diverse institutions.

Describe how the background and experience of the project team supports the conduct of the proposed study with the population of learners that your project addresses.

Both exploratory and impact projects demand a wide variety of expertise to ensure they are of high quality. Identify the key personnel who will be responsible for each of the specified activities in the proposed research plan and the amount of time they will devote to the project. IES strongly recommends that an impact evaluation expert (or experts) be identified to develop the Impact Evaluation Plan in Year 1 and to lead this work in Years 2-4.

For the planned impact study (to be developed in the first year of the project), demonstrate that you have the expertise to analyze the data appropriately depending on the method you select for testing causal impact.

- Describe your plan for how key personnel will maintain their objectivity and promote transparency in conducting the proposed research and dissemination activities. Program, practice, and/or policy developers may serve as Principal Investigators or other key personnel as long as the necessary safeguards are in place and their involvement does not jeopardize the objectivity of the evaluation.
 - Safeguards may include masking to condition, having separate teams of personnel for implementing the intervention versus conducting the evaluation activities, and/or pre-registering the analytic plan.
 - At a minimum, you should demonstrate that key personnel who are responsible for the random assignment, supervision of outcome data and coding, and data analysis are not involved in the development or distribution of the program, practice, or policy and do not have a financial interest in it.

Describe the management structure and procedures that will be used to keep the project on track and ensure the study is of high quality.

Include a Letter of Agreement in [Appendix E](#) from an individual representing each proposed partner district, institution or organization, as well as from any project consultants or advisors, if applicable.

(4) Resources

Demonstrate that you have sufficient research infrastructure and institutional capacity to carry out the proposed research and that the commitments of each partner show support for the implementation and success of the project.

Describe the proposed partners that will collaborate to carry out the proposed work. In addition to the required letter of agreement from the district that will be the setting for the exploratory project, include Letters of Agreement in [Appendix E](#) from any proposed subawardees and partners, such as school district(s), research institution(s), institution(s) of higher education (IHE) or postsecondary education system(s), educational support or technical assistance organization(s), education assessment or advisement vendor(s), employer(s), or association(s) of employers or industry representatives.

Describe the resources you will use to conduct the proposed project at both the primary applicant institution and any subaward institutions, including the following:

- Your institution's, organization's, or agency's capacity to manage a grant of this size.
- Your immediate access to resources available at the primary institution and any subaward institutions.
- Your plan for acquiring any resources that are not currently accessible, will require significant expenditures, and are necessary for the successful completion of the project.
- Your access to specific offices and organizations that will support your plan to disseminate results as described in the required Dissemination Plan in [Appendix A: Dissemination History and Plan](#).
- Your access to specific offices or organizations that will support dataset documentation and execution of the required Data Sharing and Management Plan (DSMP) in [Appendix F: Data Sharing and Management Plan](#).
- Access to the settings and data sets necessary for the proposed research.
 - Include letters of agreement, data licenses, or existing memoranda of understanding in [Appendix E: Letters of Agreement](#) documenting this access.
 - Convincing letters convey that the organizations understand what their participation in the study will involve, such as annual surveys, assessments, and/or classroom observations. Include information about incentives for participation, if applicable.

B. Digital Learning Platforms (DLPs) Network Research Teams

1. Overview and Goals of the DLPs Network

In FY2021, NCER funded a network to increase the number of digital learning platforms (DLPs) that support research and to provide the infrastructure needed to enable education technology industry leaders and developers, education researchers, and education practitioners to work together to conduct relevant, rigorous, equity-focused research. **The intent of this network is to leverage existing, widely used DLPs for rigorous education research and replication.** The network – SEERNet (<https://seernet.org/>) – is led by Digital Promise and includes five Platform Teams: Terracotta (a plug-in for Canvas developed at Indiana University), Kinetic (OpenStax/Rice University), UpGrade/MATHia (Carnegie Learning), Arizona State University (ASU) Learning@Scale (ASU/ASU Online), and ASSISTments (Worcester Polytechnic Institute/The ASSISTments Foundation). During the two years of the SEERNet network, the Platform Teams built tools to support research and established processes to work with external researchers. In FY2023, IES invited applications for Research Teams to join the network. In FY2024, we are continuing to invite applications for Research Teams to join the network to conduct research using DLPs within SEERNet. **Applicants will propose studies that can be done within the limited time and budget constraints set forth in this competition. IES acknowledges that these resource and platform constraints will necessarily limit the types of research that can be accomplished within this program.**

The following table provides a short description of each platform. A longer table that highlights key features of each platform is included below, under research plan recommendations.

Platform	Description
Arizona State University (ASU) Learning@Scale	ASU L@S provides a platform to connect, access, and examine undergraduate learner data and courses within the scope of ASU online and digital classrooms (ASU Online) in ways that honor institutional and individual privacy. The platform is designed to promote innovation in research, analytical methods, and collaboration to enhance universal lifelong learning. The L@S data warehouse will allow researchers to conduct several types of exploratory analysis and future designs may allow experimental interventions.
E-TRIALS/ASSISTments	E-TRIALS is the research platform for ASSISTments, a DLP that provides access to open educational resources (OER) math curriculum problems across K-12 which can be assigned by teachers who use ASSISTments. There are 6,000 problems which have more than one support to help learners as they solve the problems. Researchers could use data from ASSISTments to explore which features of these supports correlated with learning or can design studies that contrast specific features of interventions they are interested in exploring.
Kinetic/OpenStax	Kinetic is the research platform for OpenStax, a DLP that provides peer-reviewed, openly licensed textbooks, which are available in free digital formats, primarily in use in postsecondary education settings. Kinetic enables research on a wide spectrum of postsecondary learner outcomes related to behavior, performance, and psychosocial constructs. Researchers could design studies using pre- and post-intervention assessments, collection of self-report or external data from learners, and/or longitudinal analyses over multiple time scales using records in OpenStax products. The alpha version allows researchers to administer any measure that can be delivered via Qualtrics, while the beta version allows linking of these

	researcher-administered measures to existing learner outcomes in OpenStax materials.
MATHia/UpGrade	MATHia is a DLP that implements adaptive math learning software for middle and high schools across the country. UpGrade is an open-source A/B testing platform that facilitates randomized experiments within educational software and can now be used within MATHia. Researchers can design and deploy educational experiments in UpGrade’s user interface, then monitor learning outcomes and participant enrollment through a web-based dashboard. Experiments take place as part of learners’ normal math instruction and take the form of alternative instructional approaches (which can include changes to content, images, videos, manipulatives, etc.). MATHia is mastery based, so existing mastery “workspaces” (aka math topics) can act as assessments as well as instruction.
Terracotta	Terracotta is an open-source research platform that facilitates randomized experiments on learning activities within Canvas. Canvas is a Learning Management System (LMS) that supports online, hybrid, and in-person classrooms at the K-12 and postsecondary levels. An “activity” in Canvas can be remarkably broad, and for example, could include instructions to do things outside the LMS, could involve video playback, or could be a vehicle for implementing interventions. Terracotta allows researchers to evaluate the content, context, timing, and mode of learning activities. The learning activities manipulated in Terracotta have the potential to be designed and implemented differentially at the class-level. Terracotta accommodates multiple choice, short answer, and file upload question types.

Education research is often a slow and costly process. Also difficult is replicating research in a timely and cost-effective way to ensure that findings are meaningful for the wide range of contexts and populations that make up our nation’s education system. Conducting research through widely used DLPs may accelerate the research enterprise and make it easier to conduct replications to identify what works for whom under what conditions. As DLPs’ role in the provision of education grows, more research is needed to determine how to improve their effectiveness.

The Research Teams are key to the success of this network. One important role they play is to provide the perspective of researchers for the platform teams, giving feedback and testing out their processes and tools to ensure they are working as intended for facilitating efficient and productive collaboration between the platform team and external researchers. The other important role they play is to serve as an example for the field, showcasing the types of research that can be accomplished through a DLP and the affordances and value that conducting research through DLPs provides.

Each platform within SEERNet has characteristics that make it well suited for certain types of research. For instance, some are set up to support exploratory research, A/B studies, or efficacy/replication studies of instructional approaches. Others have large, existing datasets that can support a variety of secondary data analysis projects. Each platform also has its own process for working with researchers and for recruiting a sample of learners for studies that involve primary data collection. A guide with this information and more can be found here: <https://seernet.org/about-us/research-guide/>. Within these constraints, applicants are encouraged to use this funding to support projects that may be considered novel and/or may lack of existing pilot data.

2. Overview of the DLPs Network Research Teams

The focus of the current competition is on establishing Research Teams that will make use of one of the funded SEERNet platforms for their proposed research. This competition is not limited in terms of research project types or research designs, and it is open to applicants who propose primary data collection and analysis, secondary data analysis, or a mix of both, as long as the proposed research is feasible within the DLP that will be used to conduct the research. Research questions may be exploratory, design-based, or causal.

All applicants must include a letter from the Platform Team for the DLP that will be used to conduct the proposed research that comments on the feasibility of the proposed research as well as the full text of the request submitted to the Platform Team in order to obtain the feasibility letter. [Part II.B.3.g](#) of this RFA includes more information on how to obtain the letter.

Additionally, all applicants **must** build a six-month planning period into the start of the grant to allow for time to work out any additional platform feasibility challenges, unanticipated challenges, and to establish a Memorandum of Understanding (MOU) with the Platform Team. For all DLP Network Research Teams grants that IES awards, IES will impose a special condition that states that future grant funding beyond the first six months is contingent on the Research Team demonstrating that their project is able to be implemented in partnership with the proposed DLP.

3. DLP Network Research Team Requirements

(a) Overview

Each Research Team will conduct independent research activities, working with the Platform Team whose DLP will be used to implement the research, and will also coordinate with the other teams in the SEERNet network. To be responsive to the DLP Network Research Team role and forwarded for peer review, the proposed project **must** meet the requirements listed below in addition to the General Requirements listed in [Part I](#).

(b) Eligible Applicants

Organizations that have the ability and capacity to conduct rigorous research and development are eligible to apply. Eligible applicants include, but are not limited to, institutions of higher education and non-profit, for-profit, public, or private agencies. Applicants from the same institution as the Platform Team they intend to work with are eligible to apply to conduct research on that platform, and applicants associated with a SEERNet Platform Team are eligible to apply to work with another Platform Team within SEERNet.

(c) Academic Outcomes

Research projects **must** include measures of academic outcomes of learners. IES supports research on a diverse set of academic outcomes that reflect learning and achievement in academic content areas and learners' successful progression through education systems. **The academic outcomes that are the focus of the project must be obtainable within the SEERNet DLP that will be used to implement the proposed research.** Additional data sources may be used in conjunction with the data obtained from the SEERNet DLP.

One or more of the following academic outcomes **must** be measured as part of the proposed research:

- For **kindergarten through Grade 12**, learning, achievement, and higher order thinking in academic content areas, including literacy³, STEM, social studies⁴; English language proficiency; career and

³ By *literacy*, IES refers to language-based skills to include reading, writing, listening, and speaking regardless of modality (such as online or in person).

⁴ *Social studies* outcomes are defined as a learner's understanding of government structures and processes and how to be an engaged and knowledgeable citizen through skills and knowledge in civics, citizenship, geography, history, and economics.

technical education (CTE) attainment⁵; and progression through education systems as indicated by course and grade completion, retention, high school graduation, and dropout

- For **postsecondary**, learning, achievement, and higher order thinking in postsecondary courses; and access to, persistence in, progress through, and completion of postsecondary education, which includes developmental education courses and bridge programs as well as programs that lead to occupational certificates, associate or bachelor's degrees
- For **adult education**,⁶ achievement in literacy, English language proficiency, and numeracy, as well as access to, persistence in, progress through, and completion of adult education courses and programs

(d) Additional Outcomes – Recommended when Appropriate

In addition to a required academic outcome, IES encourages applicants to propose inclusion of additional outcomes relevant to their research focus when appropriate. All applications that include such outcomes **must also include** a required academic outcome. Below is a non-exhaustive list of the additional outcomes applicants may propose.

- Digital Literacy⁷
- Social and Behavioral Competencies⁸
- Educator Outcomes⁹
- Labor market success

(e) Education Settings

Proposed research and development must be relevant to education in the United States and must address factors under the control of U.S. education systems. Proposed research **must** be implemented within one and only one of the five SEERNet DLPs: Terracotta, Kinetic, UpGrade/MATHia, ASU Learning@Scale, and ASSISTments. Applicants may not submit multiple applications proposing to conduct the same or similar research using different DLPs. 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.

(f) Research Team Project Narrative Requirements

Each Research Team project narrative **must** adhere to the formatting guidelines (see [Part III.B](#)) and be **no more than 22 pages**. If the narrative exceeds this page limit, IES will remove any pages after the 22nd page of the narrative. The project narrative for a Research Team application **must** include four sections: Significance, Research Plan, Personnel, and Resources.

⁵ *CTE attainment* is defined as an indicator of mastery of CTE content or skills such as CTE course grades or credits earned, technical skills, assessment scores, industry certification, or employment outcomes in a field related to the CTE training.

⁶ *Adult education* refers to the system that serves learners at least 16-years old and outside the K-12 system who are preparing for, transitioning into, or currently enrolled in adult education, as defined in Title II of the 2015 Workforce Innovation and Opportunities Act (WIAO), such as Adult Basic Education, adult English language programs, and preparation programs for high school equivalency exams.

⁷ For the purposes of this competition, we are adopting the American Library Association definition of the term *digital literacy*: "the ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills."

⁸ *Social and behavioral competencies* refer to the social skills, attitudes/emotions, and behaviors that are important to learners' success in school and beyond.

⁹ *Educator outcomes* refers to measures of educator knowledge, skills, beliefs, behaviors, and/or practices.

(1) Significance

The purpose of this section is to provide an overview of the research you are proposing to conduct through one of the five DLPs in the SEERNet Network.

You **must**:

- describe the research questions that will be addressed through the proposed work.
- identify which SEERNet Network DLP will be used to implement the proposed research.

(2) Research Plan

The purpose of this section is to describe your research design, methods, and analysis plan and demonstrate how these will address the research questions. IES encourages the use of methods that combine both quantitative and qualitative analysis as relevant and appropriate.

You **must** describe the

- feasibility of conducting the proposed research on the identified DLP
- plans to address remaining feasibility challenges and unanticipated challenges in consultation with the Platform Team during an initial six-month planning period and/or to establish the MOU with the Platform Team
- characteristics of your sample
- research design and methods
- data analysis plan

(3) Personnel

The purpose of this section is to demonstrate that your team possesses the appropriate experience for the proposed work and will commit enough time to the project.

You **must** describe your project team.

(4) Resources

The purpose of this section is to demonstrate organizational capacity and access to resources needed to execute a project of this size and complexity.

You **must** describe your resources to conduct the project.

(g) Feasibility letter from the platform developer

Applicants **must include the full text of their request for a feasibility letter as well as the feasibility letter obtained from the SEERNet Platform Team** whose DLP is to be used for the proposed research in [Appendix E](#). The feasibility letter **must not** be a letter of endorsement or an assessment of the quality of the proposed research. It is intended to be an objective commentary on the feasibility of implementing the study or studies on the designated DLP. If the letter includes language endorsing the project, the application will be deemed nonresponsive and will not be sent forward for review.

If the Platform Team notes potential feasibility challenges in the letter, the applicant should provide an explanation in the project narrative as to how those challenges have been addressed through amendments to the research plan (relative to the one outlined in their original request for a feasibility letter) and/or could be addressed with the Platform Team during the six-month planning period at the start of the grant. To provide adequate time to obtain the letter ahead of the submission deadline, applicants are strongly recommended to submit the following information to the Platform Team's contact email (listed below) and to the SEERNet email address (seernet@digitalpromise.org) by November 30, 2023:

- 1-2 sentence overview of the project and its purpose
- List of the research questions to be addressed by the proposed study or studies
- Sample size and characteristics required for the proposed study or studies
- Research design
- Brief description of any measures, content, and/or instructional approaches that need to be implemented for the study(ies)

Contact information for each Platform Team:

- OpenStax/Kinetic: kinetic@openstax.org
- Terracotta: info@terracotta.education
- ASSISTments: etrial.305N@assistments.org
- MATHia/UpGrade: upgradeplatform@carnegielearning.com
- ASU Learning@Scale: learningatscale@asu.edu

If the written request for the feasibility letter and/or the feasibility letter from the platform team are not included in the application, the application will be deemed nonresponsive and will not be sent forward for peer review.

(h) Data Sharing and Management Plan (DSMP)¹⁰

All DLP Network Research Teams applications **must** include a Data Sharing and Management Plan (DSMP) placed in Appendix F. Your DSMP describes your plans for making the final research data from the proposed project accessible to others. See [Part III.C.6](#) for details about what should be included in your DSMP.

(i) Award Limits

Awards made under the DLP Network Research Teams role **must** conform to the following limits on duration and cost and should reflect the actual time and amount of funding necessary to conduct the proposed scope of work, rather than the maximums allowable by IES.

The maximum cost for a DLP Network Research Team award is \$1,000,000 (total cost = direct costs + indirect costs) over two (2) years.

(j) Maximum Number of Awards

IES intends to make **no more than ten awards to research teams to join the network. This includes awards made under the completed FY2023 competition and those yet to be made to the FY2024 competition.** However, should funding be available, IES may consider making additional awards to high-quality applications that remain unfunded after ten awards have been made.

4. DLP Network Research Team Recommendations

(a) Overview

These recommendations are intended to improve the quality of your application, and peer reviewers are asked to consider these recommendations in their evaluation of your application.

¹⁰ Resources that may be of interest to researchers in developing a data management plan can be found on the IES website (<https://ies.ed.gov/funding/researchaccess.asp>).

(b) Project Narrative Recommendations

(1) Significance

Address a significant challenge in education and provide a compelling theoretical and empirical rationale for the project.

Describe your research questions and their relevance to DLPs. DLPs are a unique learning context, so there are likely many open questions about how an established theory should be instantiated or how an evidence-based program or practice should be implemented within a DLP. Describe how the results will inform future design decisions for DLPs, both generally and specifically for the DLP that will be used for the proposed research.

Describe the population of learners and educators intended to benefit from this research, highlighting how the research will address diverse communities of learners and for those who have historically been underserved by the education system.

Describe the extent to which your research will explore how the quality of the DLP learning experience varies in relation to differences in learners' strengths, experiences, and characteristics, with sensitivity to variation in educators' characteristics and education settings.

If you propose research designed to test the causal impact of a program or practice implemented within the selected DLP or an A/B test of a feature of the DLP and/or the content delivered through the DLP:

- Describe the value of the program, practice, or DLP feature(s) being tested. Why would it be an improvement over what already exists? For example, is it more user-friendly, more likely to produce significantly better learning outcomes, more likely to be ready to be used at scale when evidence of impact is available, and/or less expensive to implement than what exists in current practice or in currently available DLPs?
- Clearly describe your initial theory of change, illustrating how and why the desired change in learner outcomes is expected to happen as the result of the program, practice, or DLP feature you are testing.
 - Include the theoretical justifications and empirical evidence to support your theory of change.
 - Specify the core components of the program, practice, or DLP feature(s) being tested as well as conditions that must be in place that will lead to the desired change in education outcomes.
 - Include a visual representation of your theory of change in [Appendix C: Supplemental Charts, Tables, and Figures](#).

If the DLP you intend to use expects you to recruit your own participants, describe partnerships with education agencies to support recruitment. Review the SEERNet research guide for more information about recruitment: <https://seernet.org/about-us/research-guide/>.

In [Appendix A](#), discuss how you will make the results of your proposed research available to a wide range of audiences in a manner that reflects the purpose of the research.

(2) Research Plan

Demonstrate that the sample, setting, research design, methods, and data analysis plans align with the research questions posed in the Significance section and that the project will be able to answer those questions with sufficient rigor. Proposed research will necessarily be limited by the time and budget constraints set forth in this competition.

Specify your research questions and describe how they are motivated by the information provided in your significance section.

Review the SEERNet research guide carefully to ensure that all proposed research activities and their corresponding budget are appropriate for the DLP you have identified for your proposed research: <https://seernet.org/about-us/research-guide/>. For instance, for some DLPs, content creation falls to the Research Teams, in which case proposing development work and the costs associated with it would be appropriate. However, research that requires revisions to content, such as instructional materials and assessments, developed and delivered by or through the DLP would not be suitable for this competition. The table beginning on the next page is taken directly from the SEERNet research guide and highlights the key considerations for each platform.

	ASU Learning @Scale	E-TRIALS/ASSISTments	Kinetic/OpenStax	UpGrade/MATHia	Terracotta
User Population	Post-secondary online ASU learners	K-12 math learners using OER math curriculum	Post-secondary learners using OpenStax textbooks	Grades 6-12 math learners using Mathia, teachers using MATHia	Grades 6-16 learners using Canvas
Research Questions	ASU L@S affords a wide range of questions regarding learning in credit-bearing courses that utilize long-term and short-term learner performance data and various learner demographics.	Effectiveness of supports for math learning	Learner characteristics and their influence on behavior, performance, and psychosocial constructs. 3 key guiding questions: who is the learner? (individual differences), what are they learning? (contextual information), how are they learning? (context - learning strategies)	Improvements to learning experiences based on alternative presentations of material. Also motivational and related improvements due to design, messaging, etc.	Learners' behavior during learning activities, and the effects of learning activities on learners' performance (or any outcome score in Canvas, or manually added by the teacher).

	ASU Learning @Scale	E-TRIALS/ASSISTments	Kinetic/OpenStax	UpGrade/MATHia	Terracotta
Pre-Registration/ Vetting	ASU Provost's Office	Pre-register on OSF.io	Pre-register on OSF.io recommended	Verify feasibility of intervention with Carnegie Learning and interested district, complete pre-registration form	No formal vetting process. Teachers are in control.
IRB requirements	ASU IRB, researchers use own IRB	Normal educational practice covered by existing ASSISTments IRB, external researchers get an IRB to receive data.	Researchers submit to Rice IRB	Researchers use own IRB	Researchers use own IRB protocol
Recruitment	Recruitment depends on existing data or implementing interventions/ surveys.	No recruitment necessary – all users eligible. The timing of the study will depend on when the teachers assign the problems as determined by the curriculum order/time of year	Learners opt-in, incentivized, institutional partnerships	Carnegie Learning will assist researchers in recruiting school(s)/ district(s) using Mathia's customer base and will assist with data-sharing agreements with these districts.	Teachers (at institutions using Terracotta) recruit learners to participate. If the researcher is not a teacher, the researcher recruits teachers to participate.
Randomization	Affords randomization at individual or group	Learner-level random assignment	Learner-level random assignment	Individual or group random assignment	Learner-level random

	ASU Learning @Scale	E-TRIALS/ASSISTments	Kinetic/OpenStax	UpGrade/MATHia	Terracotta
	level depending on research question.			(class, teacher, school, district)	assignment AND learner/ assignment-level randomization (within-subject crossovers)
Intervention	Affords randomization at individual or group level depending on research question.	Set of learner supports for one or more problems	Open-ended based on capabilities of Qualtrics	Alternate unit of instruction/ activity in Mathia. Messaging, hints, presentation, and design features.	Assignments and activities
Prior achievement/ demographic data	Data warehouse will contain demographic, achievement, course activity data	Class/group membership, school/class-level contextual data, prior ASSISTments achievement	Learner characteristics collected by Kinetic across studies	Class/group membership, prior Mathia achievement	Existing data within Canvas course site (gradebook, activity, assignments), and any learner-level data added by the Teacher
Outcome Measures	Course activity, grades, persistence/graduation	Performance on Similar-but-Not-the-Same (SNS) problems	Researcher-administered measures in Qualtrics In future versions, connections to institutional data (course grades, etc.)	Mathia process measures, performance, and survey measures	Canvas gradebook, activity, assignments, data added by teacher
Analysis	Data warehouse	Data export, posted to OSF.io	Secure data enclave allows researchers to run analysis with full	Data export	Data export, possible analysis tools

Education Research Network Grants / Awards Beginning FY2024

	ASU Learning @Scale	E-TRIALS/ASSISTments	Kinetic/OpenStax	UpGrade/MATHia	Terracotta
			dataset without access to PII		

Summarize the issues raised in the feasibility letter included in [Appendix E](#) and provide a clear plan for addressing them in collaboration with the identified SEERNet Platform Team during the 6-month planning period of the project.

Provide a timeline for each step in your project including sample recruitment, data collection, data analysis, and dissemination. Ensure that the timeline includes the six-month planning period at the start of the project. Timeline tables or figures should be placed in either the project narrative or [Appendix C: Supplemental Charts, Tables, and Figures](#) but discussion of the timeline should be included only in the project narrative.

Discuss how your research conceptualizes education equity, and how the research design, sample, measurement, analysis, and reporting align to that conceptualization.

Sample and Setting

Discuss the procedure you will use to recruit a sample that represents your target population (including subgroups, if applicable). Note that each platform has different processes for how researchers recruit participants for their studies. For more information, see <https://seernet.org/about-us/research-guide/>.

Describe and justify exclusion and inclusion criteria and discuss how they will affect your ability to generalize to the target population.

Describe the population of learners that your sample represents. Explain how your work with this sample will contribute to a larger body of knowledge on what works, for whom, and under what conditions, and how learners from diverse backgrounds and experiences, including those in your proposed study, will be represented in this larger knowledge base. IES does not expect individual projects to be generalizable to the U.S. population as a whole; instead, your target population may represent a very narrow segment of the larger U.S. population.

Describe strategies to reduce attrition, if applicable.

Power Analyses

- For all quantitative inferential analyses, demonstrate that your proposed sample will provide enough power to address your research questions. Include the following:
 - The statistical formula you used.
 - The parameters with known values, such as number of clusters or number of participants within clusters.
 - The parameters whose values are estimated and how those estimates were made such as those for intraclass correlations or covariates.
 - Other aspects of the design and how they may affect power such as the use of repeated observations or stratified sampling or blocking.
 - Predicted attrition and how it was addressed in the power analysis

Research Design and Methods

Describe your research design with enough detail to demonstrate how it will address your research questions.

A wide variety of research designs are appropriate, including correlational, descriptive cross-sectional, longitudinal, and experimental designs.

Describe the methods you will use and how they will inform your research questions and/or specific aims. Use a mixed methods approach whenever possible.

If you propose an experimental design to test the causal impact of a program, practice, or DLP feature, describe the following:

- The unit of randomization, your rationale for randomizing at that level, and the procedures for implementing and maintaining random assignment to condition.
- How you will document baseline equivalence between treatment and comparison groups at the start of the study and the level of bias occurring from overall and differential attrition rates.

High-quality Measures

Clearly define the constructs of interest in the proposed study. Describe the importance, reliability, and validity of all measures you plan to use, including learner outcomes, educator outcomes, and educator and education system characteristics. For additional resources, see <https://ies.ed.gov/seer/outcomes.asp>.

For primary data collection projects:

- Describe procedures for data collection.
- If applicable, describe processes for transforming or recoding raw data into another format or structure.
- If applicable, describe any qualitative data collection and coding protocols including the procedures for monitoring and maintaining inter-rater reliability and the mechanism for quantifying the data if needed.

For secondary data analysis projects:

- Describe the types of data that will be requested from the DLP.
- Describe the process for transforming the data to create any of the key variables, if applicable.

Data Analysis Plan

Describe the types of analyses you intend to perform, such as descriptive, correlational, predictive and/or causal analyses. NCER does not favor any one type of analysis but expects that the proposed analyses will be high quality and will be tailored to address the research questions.

Describe how you will determine whether the findings from your sample represent the larger population by contrasting your sample's characteristics with the characteristics of the target population.

Describe your plans for adjusting for any mismatch between your sample and the target population. IES does not expect individual projects to be generalizable to the U.S. population as a whole; instead, your target population may represent a segment of the U.S. population.

Describe and justify the statistical models to be used, including, if relevant, how they address the multilevel nature of education data and how well they control for selection bias. Discuss analyses to explore alternative hypotheses.

Discuss how you will address missing data. Describe sensitivity tests to assess the influence of key procedural or analytic decisions on the results. Provide separate descriptions for all analyses of factors that mediate or moderate the relationships of interest and provide information about the statistical power for each analysis.

Describe analyses that allow valid estimates to be calculated for different groups within the sample to improve our understanding of the extent to which there are varying outcomes for different groups, especially those groups that have been historically underserved.

Provide enough detail for reviewers to be able to judge the feasibility of any plans to link multiple datasets.

(3) Personnel

Demonstrate that the project team possess the appropriate skills and qualifications to carry out the proposed research project, that the principal investigator and other key personnel possess the appropriate training and

experience for their roles and responsibilities, and that will they commit sufficient time to competently implement the proposed research.

In its research grant programs, IES is strongly committed to broadening participation, including personnel from underrepresented communities and diverse institutions.

Describe how the background and experience of the project team supports the conduct of the proposed study with the population of learners that your project addresses.

If applicable, describe partnerships with education agencies to carry out the proposed work.

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

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

(4) Resources

Demonstrate that you have sufficient research infrastructure and institutional capacity to carry out the proposed research and that the commitments of each partner show support for the implementation and success of the project.

Describe your organization's capacity to manage a grant of this size.

Describe your access to resources available at the primary and any subaward organizations. Applicants may not include a subaward to the Platform Team whose DLP they are proposing to use to implement their study.

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

In addition to the required letter from a SEERNet Platform Team and the text of the initial request for the letter, include letters of agreement, data licenses, or existing memoranda of understanding in [Appendix E: Letters of Agreement](#), if applicable to your project.

Part III: Preparing Your Application

A. Overview

The application contents—individual forms and their PDF attachments—represent the body of an application to IES. Read the IES Application Submission Guide (https://ies.ed.gov/funding/submission_guide.asp) to learn how to prepare a complete application that is submitted on time through Grants.gov (<https://www.grants.gov/>).

B. General Formatting

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

1. Page and Margin Specifications

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

2. Page Numbering

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

3. Spacing

Text must be single spaced.

4. Type Size (Font Size)

Type must conform to the following three requirements:

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

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

As a practical matter, if you use a 12-point Times New Roman font without compressing, kerning, condensing, or other alterations, and use footnotes sparingly, if at all, the application will typically meet these requirements. Readability should guide your selection of an appropriate font and your use of footnotes.

5. Citations

Use the parenthetical author-date style for citations rather than numeric citations that correspond to the reference list.

6. Graphs, Diagrams, and Tables

Use black and white in graphs, diagrams, tables, and charts. If color is used, check that the material reproduces well if printed or photocopied in black and white.

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

C. Required and Optional Appendices

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

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

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

Both CTE and DLP Research Team applicants **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**. IES suggests 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

The dissemination history is intended to demonstrate that the research you and your project team have conducted in the past has been disseminated in a way that is consistent with the IES mission to promote scientifically valid research findings that can provide the basis for improving academic instruction and lifelong learning. PIs who have never led an IES grant should focus on dissemination history of related, past federal or non-federal research projects in which they and their project team have participated or other relevant research dissemination activities. Reviewers will use this information to determine whether the project personnel have dissemination experience that will support the proposed dissemination plan.

The dissemination history should include the following:

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

(b) Dissemination Plan

Describe your plan to disseminate the findings from the proposed project. Dissemination plans should be tailored to the audiences that will benefit from the findings and reflect the unique purposes of the project.

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

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

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

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

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

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

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 DLP Research Team 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 may be included in Appendix B; all other material will be removed prior to review of the application.

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

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 may include figures, charts, or tables with supplementary information like a timeline for your research project, a diagram of the management structure of your project, or examples of measures used to collect data for your project such as individual test items, tests, surveys, and observation and interview protocols.

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

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

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

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

5. Appendix E: Letters of Agreement (Required)

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

Letters of agreement should include enough information to make it clear that the author of the letter understands the nature of the time commitment and timing of participation, as well as the required space and personnel resources that the organization is prepared to contribute to the research project and the ways that organization personnel will be expected to coordinate with the research team (e.g., quarterly meetings with administrative staff, access to learners or teachers) if the application is funded. A common reason for projects to fail is loss of participants. Letters of agreement regarding the provision of data should make it clear that the author of the letter will provide the data described in the application for use in the proposed research and in time to meet the proposed schedule.

For CTE Network Research Team Applicants Only

Applicants **must** include a letter of agreement from the district that will be the setting for the exploratory project. The letter of agreement should outline the district's expected roles and responsibilities.

For DLP Network Research Team Applicants Only

Applicants **must include the full text of their request for a feasibility letter as well as the feasibility letter obtained from the SEERNet Platform Team** whose DLP is to be used for the proposed research in Appendix E. The feasibility letter **must not** be a letter of endorsement or an assessment of the quality of the proposed research. It is intended to be an objective commentary on the feasibility of implementing the study or studies on the designated DLP. If the letter includes language endorsing the project, the application will be deemed nonresponsive and will not be sent forward for review.

If the Platform Team notes potential feasibility challenges in the letter, the applicant should provide an explanation in the project narrative as to how those challenges could be addressed with the Platform Team during the six-month planning period at the start of the grant. To provide adequate time to obtain the letter ahead of the submission deadline, applicants are strongly recommended to submit the following information to the Platform Team's contact email (listed below) and to the SEERNet email address (seernet@digitalpromise.org) by November 30, 2023.

- 1-2 sentence overview of the project and its purpose
- List of the research questions to be addressed by the proposed study or studies
- Sample size and characteristics required for the proposed study or studies
- Research design
- Brief description of any measures, content, and/or instructional approaches that need to be implemented for the study

Contact information for each Platform Team:

- OpenStax/Kinetic: kinetic@openstax.org
- Terracotta: info@terracotta.education
- ASSISTments: etrial.305N@assistments.org
- MATHia/UpGrade: upgradeplatform@carnegielearning.com
- ASU Learning@Scale: learningatscale@asu.edu

If the written request for the feasibility letter and/or the feasibility letter from the platform team are not included in the application, the application will be deemed nonresponsive and will not be sent forward for peer review.

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

6. Appendix F: Data Sharing and Management Plan (Required)

Both CTE and DLP Network Research Teams applicants **must** include Appendix F. CTE Research Teams only need to include a DSMP for their exploratory study; the DSMP for the impact study will be due with the impact study research plan during Year 1 of the project.

Appendix F must meet the general formatting guidelines and be **no more than five pages**. If Appendix F exceeds this page limit, IES will remove any pages after the fifth page of the appendix before it is forwarded for scientific peer review.

See the Implementation Guide for Public Access to Research Data (https://ies.ed.gov/funding/datasharing_implementation.asp) and our FAQs (https://ies.ed.gov/funding/datasharing_faq.asp) for additional guidance on developing a DSMP.

When the principal investigator (PI) and authorized organization representative (AOR) sign the cover page of the grant application, they will be assuring compliance with the IES Policy Regarding Public Access to Research (<https://ies.ed.gov/funding/researchaccess.asp>) as well as other policies and regulations governing research awards. This entails uploading full text of accepted or published manuscripts to ERIC that are based on IES-funded data, as well as the sharing of data.

Once the DSMP is approved by IES, the PI and the institution are required to carry it out and to report progress and problems through the regular reporting channels. Compliance with IES data sharing requirements is expected even if the final dataset may not be completed and prepared for data sharing until after the grant has been completed. In cases where the PI/grantee is non-compliant with the requirements of

the data sharing policy or DSMP, subsequent awards to individuals or institutions may be affected. By addressing the items identified below, your DSMP describes how you will meet the requirements of the IES policy for data sharing and adopt best practices for adherence to open science principles.

The DSMP should describe the following:

- The pre-registration repository where you will pre-register your study within the first year of the project, following the Standards for Excellence in Education Research (SEER; <https://ies.ed.gov/seer/preregistration.asp>).
- The data repository where you plan to share your data, and an indication of the selected repository's adherence with the National Science and Technology Council document entitled "Desirable Characteristics of Data Repositories for Federally Funded Research" (<https://repository.si.edu/handle/10088/113528>).
- The type of data to be shared.
- The approach you will take to curating, cleaning, and preparing data for sharing, taking into consideration guidance from IES's Sharing Study Data: A Guide for Education Researchers (<https://ies.ed.gov/ncee/pubs/2022004/>).
- The format of the final dataset.
- Dataset documentation to be provided, including any decisions made about the data that would be important in replicating the results.
- Intentions to share analysis code to support reproducibility, including format and location.
- Procedures for managing and for maintaining the confidentiality of Personally Identifiable Information.
- Roles and responsibilities of project or institutional staff in the management and retention of research data, including a discussion of any changes to the roles and responsibilities that will occur should the project director/principal investigator and/or co-project directors/co-principal investigators leave the project or their institution.
- Expected schedule for data sharing, including how long the data will remain accessible (no later than publication of findings in a peer-reviewed publication and available for at least 10 years) and acknowledgement that the timeframe of data accessibility will be reviewed at the annual progress reviews and revised as necessary.
- Whether or not users will need to sign a data use agreement and, if so, what conditions they must meet.
- Any circumstances that prevent all or some of the data from being shared. This includes data that may fall under multiple statutes and, hence, must meet the confidentiality requirements for each applicable statute including data covered by Common Rule for Protection of Human Subjects, the Family Educational Rights and Privacy Act (FERPA), and the Health Insurance Portability and Accountability Act (HIPAA). Approaches to disseminating the availability and location of data to support discoverability for reuse purposes.
- The costs associated with implementation of the DSMP can be covered by the grant and should be included in the budget and explained in the budget narrative.

IES program officers will be responsible for reviewing the completeness of the proposed DSMP. If your application is being considered for funding based on the scores received during the scientific review process but your DSMP is determined incomplete, you will be required to provide additional detail regarding your DSMP.

This is the only material that may 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 project narrative (see [Part II: Competition Requirements and Recommendations](#)) and required and optional appendices (see above), you will also prepare a project summary/structured abstract, a bibliography and references cited, an exempt or non-exempt research on human subjects narrative, and biosketches for key personnel and consultants to include as file attachments in your application. See the IES Application Submission Guide (https://ies.ed.gov/funding/submission_guide.asp) 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/Structured Abstract

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

(a) Title and Network Role

- **Title:** Distinct, descriptive title of the project.
- **Network Role:** Identify the network role to which you are applying (see [Parts II](#) and [III](#)). This information should match the code entered for Item 4b: Agency Routing Number on the SF 424 Application for Federal Assistance form (see the IES Application Submission Guide (https://ies.ed.gov/funding/submission_guide.asp) and [Part VI: Required Codes for Item 4b of the SF 424 Cover Sheet](#) for more information).

(b) Project Summary

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

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

(c) Structured Abstract

The purpose of the structured abstract is to provide key details about the project activities. This section is most likely to be used by other researchers but should be written in a way that is accessible to anyone who wants more information about the project.

- **CTE Network Research Teams–** For the Exploratory study, CTE Research Teams should describe the following:
 - **Setting:** A brief description of the location where the project activities will take place and other important characteristics of the locale, such as whether it is urban or suburban.
 - **Population:** A brief description of the composition of the population in the selected setting, including number or percent of learners by grade level, race/ethnicity, FRL, or disability status as appropriate.

- Factors: A brief description of which career development opportunities will be studied.
- Research Design and Methods: A brief description of the major features of the exploratory project design and methodology.
- Key Measures
- Data Analytic Strategy
- Related IES Projects: A list of the IES-issued award number and/or corresponding online abstract link (URLs) to completed or ongoing IES-funded projects that are related to the proposed project

CTE Research Team applicants do not need to provide the above information about the Impact study at this time because it will be designed during Year 1 of the grant.

- **DLP Research Teams**– For each major study, DLP Research Teams should describe the following:
 - Setting: A brief description of the location (identified at the state level) where the project activities will take place and other important characteristics of the locale, such as whether it is rural or urban.
 - Sample/Population: A brief description of the sample who will participate in the proposed project activities, including number of participants; the composition of the sample including age or grade level, race/ethnicity, or disability status as appropriate; and the population the sample is intended to represent.
 - Program/Practice/Factors: a brief description of what will be developed or tested, or a brief description of the factors that will be examined in relation to learner outcomes (for studies that propose exploratory work)
 - Research Design and Methods: A brief description of the major features of the design and methodology.
 - Control Condition (if applicable)
 - Key Measures
 - Data Analytic Strategy
 - Cost Analysis (if applicable, include a brief description of the cost and/or cost effectiveness analyses planned)
 - Related IES Projects: A list of the IES-issued award number and/or corresponding online abstract link (URLs) to completed or ongoing IES-funded projects that are related to the proposed project

See our online search engine of funded research grants (<https://ies.ed.gov/funding/grantsearch/>) for examples of the content to be included in your project summary/structured abstract and to search for award numbers and URLs for related IES Projects.

2. Bibliography and References Cited

You **must** submit the bibliography and references cited as a separate PDF attachment in the application package. There is **no recommended page length** for the bibliography and references cited. You should include complete citations, including the names of all authors (in the same sequence in which they appear in the publication), titles of relevant elements such as the article/journal and chapter/book, page numbers, and year of publication for literature cited in the project narrative. As a reminder, you should use the author-date style for citations in the project narrative (see [Part III B.5 Citations](#) for more information).

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/hrsnarrative1.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.

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.

4. Biographical Sketches for Key Personnel

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

Biographical sketches are submitted as separate PDF attachments in the application package. IES strongly encourages applicants to use SciENCv (<https://www.ncbi.nlm.nih.gov/sciencv/>) where you will find an IES biosketch form. IES will accept the SciENCv format for your biographical sketch even though it does not adhere exactly to our general formatting requirements. You may also develop your own 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.

The biographical sketch for the principal investigator, each co-principal investigator, other key personnel, and consultants (if included) should show how members of the project team possess training and expertise commensurate with their specified duties on the proposed project, for example, by describing relevant publications, grants, and research experience, including experience working with the study population as applicable.

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.

Include a persistent identifier (PID) such as an ORCID iD (Open Researcher and Contributor; <https://orcid.org/>) in the biosketches for all key personnel. If you or any key member of your project team does not yet have a PID, IES encourages you to establish one as soon as possible, given the requirement that **all key personnel are required to have a PID in place before an award will be made.**

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

The size of the award depends on the network topic and role as well as the scope of the project. Please attend to the duration and budget maximums set for each network role in [Part II: Competition Requirements and Recommendations](#). For the CTE Network, IES intends to award no more than five Research Teams. For the DLP Network, IES intends to award no more than ten awards to Research Teams. This includes awards made under the completed FY2023 competition and those yet to be made under the FY2024 competition.

3. Special Considerations for Budget Expenses

(a) Indirect Cost Rate

Applicants are expected to apply their institution's federally negotiated indirect cost rate when developing a budget for the proposed research project.

If your institution does not have an indirect cost rate and you receive a grant from IES, the Indirect Cost Group (ICG) in the U.S. Department of Education's Office of the Chief Financial Officer (<https://www2.ed.gov/about/offices/list/ocfo/fipao/faq.html>) can help with obtaining an indirect cost rate once the grant is awarded. Please note that the ICG is not available for assistance during the application preparation process.

Most institutions that do not have a current negotiated rate may use a de minimis rate of 10 percent of modified total direct costs (see 2 CFR §200.414: <https://www.ecfr.gov/current/title-2/subtitle-A/chapter-II/part-200/subpart-E/subject-group-ECFRd93f2a98b1f6455/section-200.414> for more information). This de minimis rate may be used indefinitely, and no documentation is required to justify its use.

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

(b) Meetings and Conferences

If you are requesting funds to cover expenses for hosting meetings or conferences, please note that there are statutory and regulatory requirements in determining whether costs are reasonable and necessary. Please refer to the Office of Management and Budget's (OMB's) Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (Uniform Guidance), 2 CFR, §200.432 Conferences (<https://www.ecfr.gov/current/title-2/subtitle-A/chapter-II/part-200/subpart-E/subject-group-ECFRd1f39f9b3d4e72/section-200.432>).

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.

(c) CTE Network Research Team Required Budget Amounts

CTE Network Research Teams applicants do not need to set aside funds for Network participation (such as time and travel); the CTE Network Lead will cover these costs.

Continuation Funding for Part II: Because the planning and design of the impact study relies on the findings from the exploratory study conducted during Part I in the grant's first year, continuation funding for the second through fourth years of the project will depend on the following:

- The recommendation of scientific peer reviewers that the grantee's proposed impact study research plan be accepted by IES, and
- The timeliness and effectiveness with which all existing requirements of the negotiated cooperative agreement have been or are being met by the project.

(d) DLP Network Research Teams Budget Considerations

DLP Network Research Teams applicants should separate their year 1 budget into two 6-month phases within the SF-424 and the narrative budget justification so that the costs for the 6-month planning period are clear and separate from project costs following the planning phase. See [Special Conditions](#) for more information about expectations for the 6-month planning phase.

Applicants may not include a subaward to the Platform Team whose DLP they are proposing to use to implement their study.

4. Program Authority

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

5. Applicable Regulations

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

B. Additional Requirements

1. Pre-Award

(a) Clarification and Budget Questions

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

(b) Demonstrating Access to Data and Education Settings

The research you propose to conduct may require that you have a partnership or that you have (or will have) access to education settings such as classrooms, schools, districts, colleges/universities; secondary datasets; or studies currently under way.

For CTE Network Research Teams, a letter of agreement from the district that will be the education setting for the exploratory project **must** be included in [Appendix E](#) and an updated letter submitted to IES prior to award.

For DLP Network Research Teams, this applies if you are working with a platform that expects researchers to do their own recruitment (see the SEERNet research guide for more information: <https://seernet.org/about-us/research-guide/>). In such cases, you will need to provide evidence that you have access to these resources prior to receiving funding. Whenever possible, include letters of agreement in [Appendix E](#) from those who have responsibility for or access to the data or settings you wish to incorporate when you submit your application. Even in circumstances where you have included such letters with your application, **IES will require additional supporting evidence prior to the release of funds**. If you cannot provide such documentation, IES may not award the grant or may withhold funds.

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

(1) Conducting research in or with education settings

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

For DLP Network Research Teams proposing to conduct research on a platform that does not require researchers to do their own recruitment, the feasibility letter from the Platform Team is sufficient documentation of access to the education settings necessary to carry out the work. As noted below in [Part IV.B.2.c](#), IES will impose a special condition on all DLP Network Research Team grants that states that future grant funding beyond the first 6 months of the project is contingent on the Research Team demonstrating to IES that their project can be feasibly implemented in partnership with the proposed DLP.

(2) Using secondary datasets

If your application is being considered for funding based on scientific merit scores from the scientific peer review panel and your research relies on access to secondary datasets (such as federally collected datasets, state or district administrative data, or data collected by you or other researchers), you will need to provide documentation that you have access to the necessary datasets to receive the grant. This means that if you do not have permission to use the proposed datasets at the time of application, you must provide documentation to IES from the entity controlling the dataset(s) before the grant will be awarded (for CTE Research Teams, this applies to the exploratory study in part 1; documentation for datasets to be used for the impact study in part 2 must be provided before the continuation funding is awarded for year 2). This documentation must indicate that you have permission to use the data for the proposed research for the time period discussed in the application. If you obtained permission to use a proposed dataset prior to submitting your application, IES will ask you to provide updated documentation indicating that you still have permission to use the dataset to conduct the proposed research during the project period.

For DLP Network Research Teams proposing secondary data analysis projects, the feasibility letter from the Platform Team is sufficient documentation of access to the SEERNet Platform Team dataset necessary to

carry out the work. As noted below in [Part IV.B.2.c](#), IES will impose a special condition on all DLP Network Research Team grants that states that future grant funding beyond the first 6 months of the project is contingent on the Research Team demonstrating to IES that their project can be feasibly implemented in partnership with the proposed DLP.

(3) Building on existing studies

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

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

(c) Assessment of Past Performance

IES considers the applicant's performance and use of funds under a previous federal award as part of the criteria for making a funding decision. IES also determines the principal investigator's (PI's) compliance with the IES Policy Regarding Public Access to Research if they were the PI on previous IES grants awarded in 2012 or later (<https://ies.ed.gov/funding/researchaccess.asp>).

(d) Persistent Identifiers (PIDs) for Key Personnel

All key personnel are required to have a persistent identifier (PID), such as ORCID iD (Open Researcher and Contributor Identification; <https://orcid.org/>) **in place before an award will be made.**

2. Post-Award

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

(1) Access to research results: Grantee submissions to ERIC

IES requires all grantees to submit the electronic version of peer-reviewed scholarly publications to ERIC (<https://eric.ed.gov/>), a publicly accessible and searchable electronic database of education research that makes available full-text documents to the public for free. This public access requirement (<https://ies.ed.gov/funding/researchaccess.asp>) applies to peer-reviewed, original scholarly publications that have been supported (in whole or in part) with direct funding from IES. The public access requirement 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 (PI) responsible** for ensuring that authors of publications stemming from the grant comply with this requirement.

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

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

(2) Access to final research data

Applicants must describe a plan for making final research data available should the project be funded. You must include a [Data Sharing and Management Plan \(DSMP\) in Appendix F](#). The scientific peer review process will not include the DSMP in the scoring of the scientific merit of the application. Instead, IES program officers will be responsible for reviewing the completeness of the proposed DSMP. The costs of the DSMP can be covered by the grant and should be included in the budget and explained in the budget narrative.

(b) Pre-Register Exploratory and Impact Studies

Research team grantees must register their exploratory and impact studies on a suitable pre-registration platform within the first year of receiving a new award. There are several options for pre-registration including but not limited to the Registry of Efficacy and Effectiveness Studies (REES; <https://sreereg.icpsr.umich.edu/sreereg/>), the Open Science Framework (OSF; <https://osf.io/>), ClinicalTrials.gov (<https://clinicaltrials.gov/>), AEA Registry (<https://www.socialscienceregistry.org/>), EGAP (<https://egap.org/content/registration>), Uri Simonsohn's *AsPredicted* (<https://aspredicted.org/>), and trial registries in the WHO Registry Network (<https://www.who.int/ictrp/network/en/>).

(c) Special Conditions on Grants

IES may impose special conditions on a grant pertinent to the proper implementation of key aspects of the proposed research design or if the grantee is not financially stable, has a history of unsatisfactory performance, has an unsatisfactory financial or other management system, has not fulfilled the conditions of a prior grant, or is otherwise not responsible.

For all CTE Network Research Team grants, IES will impose a special condition that states that future grant funding beyond the first year of the project is contingent on IES approval of the impact study research plan for years 2-4.

For all DLP Network Research Teams grants, IES will impose a special condition that states that continuing grant funding beyond the first 6 months is contingent on the Research Team demonstrating that their project can be feasibly implemented in partnership with the proposed DLP. DLP Network Research Teams will need to establish a MOU with the Platform Team they have proposed to work with during the 6-month planning phase.

(d) Attendance at the Annual IES Principal Investigators Meeting

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

(e) Network Commitments

Below are the commitments that each team will need to agree to as part of its cooperative agreement, which is completed prior to award.

The CTE Network Research Teams must agree to the following:

- Research Teams, including the PI and Co-PIs, will attend and participate in the one annual in-person meeting to be coordinated by the Network Lead. Research Team members are expected to travel to these meetings, but the cost will be covered by the Network Lead.
- Research Teams, including the PI and Co-PIs, will also participate in three annual virtual meetings coordinated by the Network Lead.

- Research Team members will, when requested, participate in advisory board meetings and present research to and solicit feedback from the advisors.
- Research Teams will submit their initial causal impact study research plan to the Network Lead and IES for review and feedback prior to submitting it to IES for approval.
- Research Teams will participate in developing topics for workgroups and will participate in at least one active working group at all times during the grant period. The set of active working groups may change over the grant period. Teams can satisfy this expectation by providing at least one representative to each of the two active working groups.
- Research Teams will generate ideas for supplemental research projects that are aligned with the focus of the Network and will collaborate in submitting proposals for such projects.
- Research Teams will participate in and provide content for the network-wide dissemination and data management plans. This work includes contributing content to the Network website and responding to requests from the Lead Team for research findings that will be made available through dissemination products coordinated by the Lead Team.
- Research team members may be asked to make presentations of their research at the summer training institutes.
- Research Teams will provide onsite and cross-site training and mentoring opportunities to early career researchers on their own teams and on other teams throughout the network.
- Research Teams are expected to be responsive to requests for assistance from early career researchers on teams other than their own.

The DLP Network Research Teams must agree to the following:

- Co-create and implement a network-wide dissemination plan
- Ensure representation at virtual and in-person network meetings
- Work with the Platform Team whose DLP is being used for the Research Team's proposed research to address any remaining feasibility issues, establish an MOU, and negotiate co-authorship agreements, if pertinent, with the Platform Teams
- Collaborate with the Platform Teams and the Network Lead, as well as the other Research Teams who will be funded around network-level initiatives
- Adopt shared measures and coding conventions as relevant

C. Overview of Application and Scientific Peer Review Process

1. Submitting Your Letter of Intent

Letters of intent (LOIs) are submitted online at the IES Peer Review Information Management Online (PRIMO) system (<https://iesreview.ed.gov/LOI/LOISubmit>). **Select the Letter of Intent form for the competition under which you plan to submit your application.** The online submission form contains fields for each of the seven content areas listed below. Use these fields to provide the requested information. The project description should be single-spaced and is recommended to be no more than one page (about 3,500 characters).

The LOI is non-binding and optional but strongly recommended. If you submit an LOI, a program officer will contact you regarding your proposed research. IES staff also use the information in the LOI to identify the expertise needed for the scientific peer review panels and to secure a sufficient number of reviewers to handle the anticipated number of applications.

(a) Elements for the Letter of Intent:

- Descriptive title
- Topic and network role for your application (CTE or DLP Research Team)
- Brief description of the proposed project
- 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 topic and network role)
- Estimated total budget request (attend to the Budget maximums for each topic and network role)

2. Resubmissions and Multiple Submissions

If you intend to revise and resubmit an application that was submitted to a previous IES competition but that was not funded, you **must** indicate on the SF 424 Application for Federal Assistance Form in the application package (see the IES Application Submission Guide (https://ies.ed.gov/funding/submission_guide.asp) that the FY 2024 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 2024 Request for Applications.

If you submitted a somewhat similar application in the past and did not receive an award but are submitting the current application as a new application, you should indicate on the application form (Item 8) that your FY 2024 application is a new application. In [Appendix B](#), you should provide a rationale explaining why your FY 2024 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 FY 2024 IES grant programs and to multiple topics within the Education Research Networks Grants program. In addition, within a particular grant program or topic, you may submit multiple applications. However, you may submit a given application only once for the FY 2024 grant competitions, meaning you may not submit the same application or similar applications to multiple grant programs, multiple topics, or multiple times within the same topic. If you submit the same or similar applications, IES will determine whether and which applications will be accepted for review and/or will be eligible for funding.

3. Application Processing

Applications must be submitted electronically and received no later than 11:59:59 p.m. Eastern Time on January 11, 2024 using the Grants.gov Workspace (<https://www.grants.gov/applicants/workspace-overview.html>). You must follow the application procedures and submission requirements described in the IES Application Submission Guide (https://ies.ed.gov/funding/submission_guide.asp) and on Grants.gov (<https://www.grants.gov/web/grants/applicants.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 PRIMO system (<https://iesreview.ed.gov/>). PRIMO allows applicants to track the progress of their application via the Applicant Notification System (ANS).

Approximately one to two weeks after the application deadline, invitation emails are sent to applicants who have never applied to IES before to create their individual PRIMO ANS accounts. Both the PI and the AOR will

receive invitation emails. Approximately four to six weeks after the application deadline, all applicants (new and existing ANS users) will begin to receive a series of emails about the status of their application. See the IES Application Submission Guide (https://ies.ed.gov/funding/submission_guide.asp) 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.

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 they believe 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 help solve education problems by generating reliable information about education programs, practices, policies, and assessments that support learning and improve academic achievement and education access for all learners. IES expects reviewers to assess the scientific rigor and practical significance of the research proposed to judge the likelihood that it will make a meaningful contribution to the larger IES mission. Information about each of these criteria is described in [Part II: Competition Requirements and Recommendations](#). The review criteria for each network role in this RFA are listed separately below.

(a) CTE Research Teams

(1) Significance

Does the applicant address the recommendations described in the Significance section for the CTE Research Team role?

(2) Research Plan

Does the applicant address the recommendations described in the Research Plan section for the CTE Research Team role?

(3) Personnel

Does the applicant address the recommendations described in the Personnel section for the CTE Research Team role? Do the principal investigator and other key personnel possess appropriate experience, and will they commit sufficient time to competently implement the proposed activities?

(4) Resources

Does the applicant address the recommendations described in the Resources section for the CTE Research Team role? Does the applicant have the facilities, equipment, supplies, and other resources required to support the proposed activities? Do the commitments of each partner (if applicable) show support for the implementation and success of the grant?

(5) Dissemination

Does the application address the recommendations described in [Appendix A: Dissemination History and Plan](#)? Does the applicant present a dissemination plan that is tailored to audiences that will benefit from the findings and reflect the purpose of the project? Does the applicant describe a dissemination history that demonstrates past success in sharing results of education research widely and appropriately?

(b) DLP Network Research Teams

(1) Significance

Does the applicant address the recommendations described in the Significance section for the DLP Research Team role?

(2) Research Plan

Does the applicant address the recommendations described in the Research Plan section for the DLP Research Team role?

(3) Personnel

Does the applicant address the recommendations described in the Personnel section for the DLP Research Team role? Do the principal investigator and other key personnel possess appropriate experience, and will they commit sufficient time to competently implement the proposed work?

(4) Resources

Does the applicant address the recommendations described in the Resources section for the DLP Research Team role? 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?

(5) Dissemination

Does the application address the recommendations described in [Appendix A: Dissemination History and Plan](#)? Does the applicant present a dissemination plan that is tailored to audiences that will benefit from the findings and reflect the purpose of the project? 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 described in this request for applications
- Ability to carry out the proposed research 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.

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

Compliance
Have you included a Project Narrative?
Do the project narrative and other narrative content adhere to all formatting requirements?
Do the project narrative and other narrative content adhere to all page maximums as described in the RFA? IES will remove any pages above the maximum before forwarding an application for scientific peer review.
For the CTE Network Research Team applicants, have you included Appendix A: Dissemination History and Plan , a letter from the district that will be the setting for the exploratory project in Appendix E: Letters of Agreement , and Appendix F: Data Management Plan ?
For DLP Network Research Teams applicants, have you included Appendix A: Dissemination History and Plan , your request for a feasibility letter and the feasibility letter from a SEERNet Platform Team in Appendix E: Letters of Agreement , and Appendix F: Data Management Plan ?
If you are resubmitting an application, have you included Appendix B: Response to Reviewers ?
Responsiveness
Have you met all the Requirements for an application?
Have you indicated a single network topic and role for your application (i.e., CTE Research Team or DLP Research Team)?
Do you meet the applicant eligibility requirements for the network to which you are applying?
Does your proposed research include at least one measure of education outcomes, and does it address the setting requirements specific to the network topic and role for your application? For CTE Research Teams, does your proposed research also include at least one measure of career outcomes?
Does your Project Narrative include the required sections and the associated requirements for the selected network role? Did you describe the elements required for each section as listed below?

(Table continues on the following page)

Required Project Narrative Elements			
CTE Network Research Teams			
Significance	Research Plan	Personnel	Resources
<p>You must describe</p> <ul style="list-style-type: none"> At least one career development opportunity that you propose to examine for the exploratory study. 	<p>You must describe</p> <ul style="list-style-type: none"> The selected setting and the population characteristics of the setting for your project. The research design, methods, and data analysis plans for the exploratory study. How you will develop a research plan for the causal impact study of a selected career development opportunity during the first year of the project. 	<p>You must describe your project team.</p>	<p>You must describe your resources to conduct the project.</p>

DLP Network Research Team			
Significance	Research Plan	Personnel	Resources
<p>You must</p> <ul style="list-style-type: none"> describe the research questions that will be addressed through the proposed work. identify which SEERNet Network DLP will be used to implement the proposed research. 	<p>You must describe the</p> <ul style="list-style-type: none"> feasibility of conducting the proposed research on the identified DLP plans to address remaining feasibility challenges and unanticipated challenges in consultation with the Platform Team during an initial six-month planning period and/or to establish the MOU with the Platform Team characteristics of your sample research design and methods data analysis plan 	<p>You must describe your project team.</p>	<p>You must describe your resources to conduct the project.</p>

Part VI: Required Codes for Item 4b of the SF 424 Cover Sheet

Applications to the **Research Networks Focused on Critical Problems of Policy and Practice (ALN 84.305N) program** are submitted under a single topic and a single network role. You must enter the appropriate topic and network role code in Item 4b of the SF 424 Application for Federal Assistance form (see the IES Application Submission Guide, https://ies.ed.gov/funding/submission_guide.asp, for more information about this form). For example, an application under the DLP Network topic and the Research Team role should have the code “NCER-DLP” entered in the field for Item 4b.

Topic	Code
CTE Network Research Team	NCER-CTE
DLP Network Research Team	NCER-DLP