REQUEST FOR APPLICATIONS

RESEARCH NETWORKS FOCUSED ON CRITICAL PROBLEMS OF EDUCATION POLICY AND PRACTICE
CFDA Number: 84.305N

Milestone	Date	Website
Letter of Intent Due	June 4, 2015	https://iesreview.ed.gov/
Application Package Available	May 21, 2015	http://www.grants.gov/
Application Due	**By 4:30:00pm Washington DC time on August 6, 2015**	**http://www.grants.gov/**
Applicants Notified	By December 15, 2015	https://iesreview.ed.gov/
Possible Start Dates	January 1, 2016 to June 1, 2016	

Table of Contents

PART I: OVERVIEW AND GENERAL REQUIREMENTS

A. INTRODUCTION

In this announcement, the Institute of Education Sciences (Institute) requests applications to form Research Networks Focused on Critical Problems of Education Policy and Practice. The purpose of the Networks is to focus resources and attention on education problems or issues that are high priority for the nation, and to create both a structure and process for researchers who are working on these issues to share ideas, build new knowledge, and strengthen their research and dissemination capacity. The ultimate objective of the Networks is to advance the field's understanding of a problem or issue beyond what an individual research project or team is able to do on its own, and to assist policymakers and practitioners in using this information to strengthen education policies and programs and improve student education outcomes. For FY 2016, the Institute invites Networks proposals on two topics: (1) Supporting Early Learning from Preschool Through Early Elementary School Grades (Early Learning Network); and (2) Scalable Strategies to Support College Completion (College Completion Network).

Each network will consist of several Research Teams that are working on a topic. Each Research Team will carry out a major research project of its own, and will participate in collaborative activities with other Research Teams in the same network. More specifically, each network will address the following:

- In the Early Learning Network, up to four Research Teams will conduct in-depth research in a setting of their choosing (e.g., a state, city, or school district) to gather and analyze data to identify malleable factors associated with children's school readiness and achievement as they move from preschool to elementary school. They will also work with an Assessment Team to develop a new or improve a current classroom observation tool for use by local preschool programs and elementary schools interested in assessing and improving the quality of instruction and services. The ultimate goal of the Early Learning Network is to provide reliable information and useful products that policymakers and practitioners can use to assess their efforts to build effective early learning systems and programs and to make improvements to those systems.

- In the College Completion Network, up to four Research Teams will conduct evaluations of interventions that they identify as having promise for increasing the number of college students who earn degrees in open- and broad-access institutions, such as community colleges and four-year colleges and universities that accept 75 percent or more of their applicants. The ultimate goal of the College Completion Network is to provide reliable evidence on the impacts and costs of strategies that policymakers and college leaders may consider adopting or expanding in their states and institutions.

The Research Teams in each network will meet to discuss research plans and progress and identify ways that they can strengthen their collective work by collaborating on data collection tools, common measures, research synthesis, and other activities. The Institute will set aside additional funding that each network can use toward supplementary studies and joint dissemination activities that are useful to policymakers, practitioners, and other researchers.

For each Network, the Institute will award a grant for a Network Lead to facilitate meetings and coordinate other network activities. The Network Lead will provide the administrative and logistic support for the network, and will coordinate with the Institute to gain approval for supplementary activities undertaken by the network. The Network Lead will host a website that describes the work of the network and makes the publications and products generated by the network available to the general public. Finally, the Network Lead will organize briefings for policymakers, practitioners, researchers, and others who have a stake in the research. The role of Network Lead is limited to those who apply for and receive a Research Team or Assessment Team award.

For the FY 2016 competition, the Institute will consider only applications that are responsive and compliant to the requirements described in this Request for Applications (RFA) and submitted electronically via Grants.gov (http://www.grants.gov) on time. Separate funding announcements are

available on the Institute's web site that pertain to the other research and research training grant programs funded through the Institute's National Center for Education Research (http://ncer.ed.gov) and to the discretionary grant competitions funded through the Institute's National Center for Special Education Research (http://ncser.ed.gov). An overview of the Institute's research grant programs is available at http://ies.ed.gov/funding/overview.asp.

This RFA is organized in the following fashion. Part I sets out the general requirements for a grant application to the Institute. Part II describes general requirements for a network as well as requirements specific to the Early Learning and College Completion Networks. Part III provides general information on funding, award requirements and the review process. Part IV describes how to prepare an application. Part V describes how to submit an application electronically using Grants.gov. You will also find a Glossary of important terms located at the end of this RFA. The first use of each term within each Part of this RFA is hyperlinked to the Glossary.

1. Technical Assistance for Applicants

The Institute encourages you to contact the Program Officers for this competition as you develop your application. The Institute's Program Officers can provide guidance on substantive aspects of your application and answer any questions prior to submitting an application. Program Officer contact information for this competition is as follows:

- Supporting Early Learning from Preschool through Early Elementary School Grades: Dr. Caroline Ebanks (202-219-1410; Caroline.Ebanks@ed.gov).

- Scalable Strategies to Support College Completion: Dr. James Benson (202-219-2129; James.Benson@ed.gov).

The Institute asks potential applicants to submit a Letter of Intent 60 days prior to the application submission deadline. Letters of Intent are optional but strongly encouraged by the Institute. If you submit a Letter of Intent, a Program Officer will contact you regarding your proposed research. Institute staff members also use the information in the Letters of Intent to identify the expertise needed for the scientific peer-review panels and to secure a sufficient number of reviewers to handle the anticipated number of applications.

In addition, the Institute encourages you to sign up for the Institute's Funding Opportunities Webinars for advice on choosing the correct research competition, grant writing, or submitting your application. For more information regarding webinar topics, dates, and the registration process, see http://ies.ed.gov/funding/webinars/index.asp.

B. GENERAL REQUIREMENTS

1. Student Education Outcomes

All research supported under the Research Networks program must address the education outcomes of students and include measures of these outcomes. The Institute is most interested in student academic outcomes and student social and behavioral competencies that support success in school and afterwards.

The Institute supports research on a diverse set of student academic outcomes that fall under three categories. The first category includes **academic outcomes that reflect learning and achievement in the core academic content areas** (e.g., measures of understanding and achievement in reading, writing, math, and science). The second category includes academic outcomes that reflect **students' successful progression through the education system** (e.g., preparation of preschool children for entry into kindergarten and elementary school; postsecondary persistence, progress, and completion). The third category is **social and behavioral competencies**, which encompass a range of student

social skills, attitudes, and behaviors that may be important to students' academic and post-academic success.

2. Authentic Education Settings

Proposed research must be relevant to education in the United States and must address factors under the control of the U.S. education system (be it at the national, state, local, and/or school level). To help ensure such relevance, the Institute requires research to work within or use data obtained from formal programs taking place within authentic education settings. Authentic education settings include both in-school settings (including PreK Centers) and after-and out-of-school settings (e.g., after-school programs, distance learning programs, on-line programs) under the control of schools or state and local education agencies. Formal programs not under the control of schools or state and local education agencies are not considered as taking place in an authentic education setting and are not appropriate for study. For this Networks competition, authentic education settings include:

- **Authentic PreK Education Settings** are defined as center-based prekindergarten settings that include:
  - o Public prekindergarten programs.
  - o Child care centers.
  - o Head Start programs.

- **Authentic K-12 Education Settings** are defined as the following:
  - o Schools and alternative school settings (e.g., alternative schools or juvenile justice settings).
  - o School systems (e.g., local education agencies or state education agencies).
  - o Settings that deliver supplemental education services (as defined in Section 1116(e) of the Elementary and Secondary Education Act of 1965, as amended by the No Child Left Behind Act of 2001) (http://www2.ed.gov/policy/elsec/leg/esea02/index.html).

- **Authentic Postsecondary Education Settings** are defined as the following:
  - o 2-year and 4-year colleges and universities that have education programs leading to Associate's or Bachelor's degrees, and that are open- or broad-access (i.e., accept 75 percent or more of their applicants).

C. APPLICANT REQUIREMENTS

1. Eligible Applicants

Applicants that have the ability and capacity to conduct scientifically valid 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.

2. The Principal Investigator and Authorized Organization Representative

The Principal Investigator

The Principal Investigator (PI) is the individual who has the authority and responsibility for the proper conduct of the research, including the appropriate use of federal funds and the submission of required scientific progress reports.[1]

Your institution is responsible for identifying the PI on a grant application and may elect to designate more than one person to serve in this role. In so doing, your institution identifies these PIs as sharing the

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[1] The Institute uses the uniform format for reporting performance progress on Federally-funded research projects, the Research Performance Progress Report (RPPR http://www.nsf.gov/bfa/dias/policy/rppr/) for these reports.

authority and responsibility for leading and directing the research project intellectually and logistically. All PIs will be listed on any grant award notification. However, institutions applying for funding must designate a single point of contact for the project. The role of this person is primarily for communication purposes on the scientific and related budgetary aspects of the project and should be listed as the PI. All other PIs should be listed as Co-Principal Investigators.

The PI will attend one meeting each year (for up to 2 days) in Washington, DC with other Institute PIs and Institute staff. The project's budget should include this meeting. Should the PI not be able to attend the meeting, he/she can designate another person who is key personnel to attend.

The Authorized Organization Representative

The Authorized Organization Representative (AOR) for the applicant institution is the official who has the authority to legally commit the applicant to (1) accept federal funding and (2) execute the proposed project. When your application is submitted through Grants.gov, the AOR automatically signs the cover sheet of the application, and in doing so, assures compliance with U.S. Department of Education policy on public access to scientific publications and data as well as other policies and regulations governing research awards (see Part III.B Additional Award Requirements).

3. Common Applicant Questions

- *May I submit an application if I did not submit a Letter of Intent?* Yes, but the Institute strongly encourages you to submit a Letter of Intent. If you miss the deadline for submitting a Letter of Intent, contact the program officer listed in Part II. Please see Part III.C.1 Submitting a Letter of Intent for more information.

- *May I submit an application to form a network on a research topic other than ones identified in the RFA?* No. The Institute will only consider network proposals for two topics: (1) Supporting Early Learning from Preschool Through Early Elementary School Grades; and (2) Scalable Strategies to Support College Completion.

- *How many teams must be funded in order to form a network?* At least two Research Teams (or, in the Early Learning Network, at least one Research Team and an Assessment Team) are needed in order to form a network. If only one application receives funding, the Institute will not name a Network Lead and will not provide funding for supplementary activities. In this case, the grantee will conduct the proposed project independently.

- *How will network members be selected?* As is true for the Institute's other research and training grant competitions, applications for Research Teams or the Assessment Team that meet the compliance and responsiveness criteria in this RFA will be forwarded to peer review. The Institute intends to fund up to four Research Teams in each network, and up to one Assessment Team in the Early Learning Network. If a larger number of applications are deemed meritorious by peer review, the Institute will award grants in rank order. Because of the place-based nature of the Early Learning Network's research, the Institute will also consider the location in which the research is taking place so that no more than one Early Learning Research Team is working in the same (or essentially the same) geographic location.

- *How will the Network Lead be selected?* Applicants who are interested in the Network Lead role must submit two separate applications: one to be a Research Team or an Assessment Team and one to be a Network Lead. Applications that meet the compliance and responsiveness criteria will be forwarded to peer review. The Institute intends to make no more than one Network Lead award for the Early Learning Network and no more than one Network Lead award for the College Completion Network. The awards will go to the applicants who receive the highest average

Overall score from peer reviewers on their Network Lead application and who also receive funding to be a Research Team or Assessment Team.

- *What if no one applies to be Network Lead or if no Network Lead applications are deemed meritorious through peer review?* The Institute will consider other options, including hiring a contractor and/or designating Institute staff to coordinate meetings until a Network Lead is identified.

- *May I submit applications to perform more than one role in a network (e.g., Research Team, Assessment Team, and/or Network Lead)?* Yes. Research Team and Assessment Team applicants are strongly encouraged to apply for the Network Lead role. However, in the Early Learning Network, applicants must choose between the Research Team and Assessment Team roles; they cannot apply for both.

- *May I submit multiple applications for the same network role?* No. For example, a PI/project team may only submit one Research Team application, even if you have ideas for studies that are substantively different from one another.

- *May I submit the same application to more than one of the Institute's grant programs?* No. You may not, for example, submit a proposal to the Education Research Grants program (84.305A) that is essentially the same as a Research Team or Assessment Team application you submit to the Research Networks program (84.305N).

- *May I submit an application that involves a partnership with another research organization?* Yes. Two or more research organizations can work together to fulfill any of the network roles (e.g., Research Team, Assessment Team, and/or Network Lead). However, the application must designate one Principal Investigator as the primary point of contact for the project, and that Principal Investigator's institution as having primary responsibility for budgetary compliance and reporting.

- *May an institution serve as both the setting for the research and the grantee or sub-awardee?* It is permissible for a researcher interested in the College Completion Network to submit an application to study an intervention that is being developed by or implemented in his or her own institution. It is up to the applicant, however, to demonstrate that he or she is situated within the institution in a way that preserves his/her ability to conduct unbiased scientific research. For example, the researcher should not be responsible for designing or delivering the intervention that is being evaluated.

- *May I apply if I work at a for-profit developer or distributor of an intervention or assessment?* Yes. You may apply if you or your collaborators develop, distribute, or otherwise market products or services (for-profit or not-for-profit) that can be used as interventions, components of interventions, or assessments in the proposed research activities. However, the involvement of the developer or distributor must not jeopardize the objectivity of the research. In cases where the developer or distributor is part of the proposed Research Team, you should discuss in the project narrative how you will ensure the objectivity of the research.

- *May I apply if I intend to copyright products (e.g., a curriculum) developed using grant funds?* Yes. Products derived from Institute-funded grants may be copyrighted and used by the grantee for proprietary purposes, but the U.S. Department of Education reserves a royalty-free, non-exclusive, and irrevocable right to reproduce, publish, or otherwise use such products for Federal purposes and to authorize others to do so [2 C.F.R. § 200.315(b) (2014) (http://www.ecfr.gov/cgi-bin/text-idx?SID=114a76aaaec6398e1309d731056ee2df&node=pt2.1.200&rgn=div5#se2.1.200_1315)].

- *May I apply to do research on non-U.S. topics or using non-U.S. data?* No. Researchers applying to the Networks competition must propose research on U.S. topics and use U.S. data.

- *May I apply if I am not located in the United States or if I want to collaborate with researchers located outside of the United States?* Yes, you may submit an application if your institution is not located in the territorial United States. However, your proposed work must be relevant to education in the United States. Also, institutions not located in the territorial United States (both primary grantees and sub-awardees) cannot charge indirect costs.

D. READING THE REQUEST FOR APPLICATIONS

The Institute encourages both **Principal Investigators and Authorized Organization Representatives** to read this Request for Applications to learn how to prepare an application that meets three types of criteria:

1. Criteria that are required for an application to be sent forward for peer review (Requirements)

2. Criteria that make for a strong (competitive) application and are used by the peer reviewers (Recommendations for a Strong Application)

3. Criteria that are required for a highly-rated application to receive funding (Pre-Award Requirements)

1. Requirements

The Institute will examine all applications and determine whether they meet the following criteria. Applications that do not meet these criteria will not be sent forward for peer review.

- **RESPONSIVENESS**
    - Meets general-, topic-, and role-specific **requirements** (see Part II).
    - Meets the **Award requirements**. Please note the maximum grant awards for the Early Learning Network are different than for the College Completion Network.

Network Topic	Network Role	Maximum Number of Awards	Maximum Grant Duration	Maximum Grant Award
Supporting Early Learning from Preschool through Early Elementary School Grades	Research Team	4	5 years	$4,500,000 ($4,000,000 for Primary Research and $500,000 for Assessment work)
	Assessment Team	1	5 Years	$2,000,000
	Network Lead	1	5 Years	$2,000,000

Network Topic	Network Role	Maximum Number of Awards	Maximum Grant Duration	Maximum Grant Award
Scalable Strategies to Support College Completion	Research Team	4	5 years	$4,000,000
	Network Lead	1	5 Years	$1,000,000

- **COMPLIANCE** (see Part IV)

    o Follows **formatting and font size requirements** (see Part IV.C).

    o Follows **page limits** (see Part IV.D).

    o Includes only **allowable content** (see Part IV.D).

    o Includes all **required content** (see Part IV.D).

- **SUBMISSION** (see Parts IV and V)

    o Submitted electronically via Grants.gov no later than **4:30:00 pm**, Washington, DC time, on August 6, 2015.

    o Completed using the **correct application package** downloaded from Grants.gov (see Part IV.B).

    o Includes **PDF files** that are **named and formatted appropriately** and that are **attached to the proper forms** in the application package (see Part IV.D and Part V).

2. Recommendations for a Strong Application

Applications that meet the required criteria discussed above will be forwarded to peer review for an evaluation of their scientific and technical merit (see Part III.C.4). Under each topic (see Part II), the Institute provides recommendations to improve the quality of your application. The peer reviewers are asked to consider these recommendations in their evaluation of your application. The Institute strongly encourages you to incorporate the recommendations into your Project Narrative and relevant appendices.

3. Pre-Award Requirements

Applications that are being considered for funding following peer review may be required to provide further information on their proposed research activities (see Part III.B) before a grant award is made. For example, you may be required to provide updated letters of agreement showing access to the authentic education settings where your work is to take place or to the secondary data sets you have proposed to analyze. You may be asked for additional detail regarding your capacity to disseminate research findings. In addition, you may be required to provide greater detail regarding your proposed work. Significant revisions to the project that arise from these information requests will have to be addressed within the original budget. The Institute strongly encourages applicants to carefully review all Requirements and Recommendations for a Strong Application to ensure that their applications propose high-quality work.

PART II: NETWORK REQUIREMENTS

A. GENERAL REQUIREMENTS FOR ALL NETWORK APPLICATIONS

1. Research Requirements

For FY 2016, the Institute intends to form networks on two topics: (1) Supporting Early Learning from Preschool Through Early Elementary School Grades (Early Learning Network); and (2) Scalable Strategies to Support College Completion (College Completion Network). Each network will comprise up to four Research Teams and a Network Lead; in addition, the Early Learning Network will include up to one Assessment Team. The Institute expects information-sharing across teams and collaboration on research and dissemination activities. Ultimately, the goal of the networks is to advance the field's understanding of a problem or issue beyond what individual researchers may be able to do on their own, and to produce a body of research tools and evidence that will lead to improvements in education policies and programs and in student outcomes.

To become part of a network, applicants must propose a research project that meets the requirements of the topic under which it is submitted. Applicants must describe the significance of the project they have proposed, provide a detailed description of the research methods they will use, describe the qualifications of the Principal Investigator (PI) and other key personnel conducting the work, and provide information on resources available to support the research project. The requirements for each topic area are described under Part II.B, Requirements for Network Topics and Roles.

2. Objectives and Requirements for Network Members

The networks are based on the idea that significant advances in knowledge are more likely to occur when researchers across institutions and disciplines are working together to address a significant problem or issue. Building on the unique interests and strengths of network members, the Institute intends to create a structure and process that will facilitate the sharing of research plans, data collection instruments, and other information and ideas. Network members are expected to provide constructive feedback on each other's projects and to look for opportunities to work together on adopting common measures that will support the goal of research synthesis toward the end of the grants. Network members are also expected to develop supplementary activities that will strengthen their collective work. Finally, network members are expected to plan and produce joint publications, policy briefings, and other activities to disseminate their findings. Over time, the Institute hopes that Network members will build relationships that lead to new collaborations and new lines of inquiry.

At a minimum, researchers who are funded under a network are required to attend network meetings and to communicate regularly with other network members. The Institute expects that networks will hold at least two in-person meetings during the first grant year, and at least one in-person meeting each year in subsequent grant years. Other meetings may take place in person or via conference calls. At least one network meeting each year will be held in Washington, D.C. to allow participation by Institute staff, and may be coordinated with the annual PI meeting for all Institute grantees (typically in the fall of each year). Applicants should include the costs for traveling to and from these meetings in their project budgets, and should allocate at least three days per meeting to cover travel time and attendance.

3. Objectives and Requirements for the Network Lead

The role of Network Lead carries four minimum requirements. First, the Network Lead is responsible for planning and facilitating network meetings, including at least two in-person meetings during the first year of the network, and at least one annual meeting thereafter. Second, the Network Lead is to serve as point person with the Institute for negotiating supplementary activities. Third, the Network Lead is expected to develop and host a website that explains the network's goals and projects, and that makes the Network's products and publications available to the public. Fourth, the Network Lead is expected to

organize briefings or presentations for federal and state policymakers to discuss research goals and findings and to elicit feedback that will help improve the quality and policy relevance of the network's research. The Early Learning Network Lead has additional requirements to participate in meetings with Preschool Development Grant recipients and provide research guidance and tools for early childhood practitioners (see Part II.B.3).

The Network Lead will play a critical role in making sure the network functions smoothly and reaches its full potential. The Network Lead Principal Investigator (PI) should bring a record of scholarship in the topic area, and should show a strong commitment to building new knowledge on the topic from different disciplinary and methodological perspectives. The PI should have strong facilitation skills and experience working in teams. The PI should be committed to developing young scholars and provide meaningful opportunities for them to participate in network activities. Finally, the PI may need to serve as spokesperson for the group and should feel comfortable interacting with researcher, policymaker, and practitioner audiences.

The Network Lead will be selected from the Research Teams or Assessment Team that comprise each network. Applicants who wish to be considered for Network Lead must submit an application in which they describe their plans and qualifications. The Institute is open to different ideas on how to structure the Network Lead role. For example, applicants may propose one person as Network Lead PI or two persons as co-leaders, and may use other staff for support. Applicants should identify the names and responsibilities of the people involved, and make clear how the Network Lead functions will be organized and managed. If a co-leadership model is proposed, applicants must designate a PI on the application and list other personnel as co-PIs.

4. Supplementary Activities

To support collaboration and foster new ideas, the Institute will allocate funds for supplementary activities for each network. These funds are intended for research and dissemination activities that are carried out by two or more network members and that go beyond the scope of individual project grants. For example, network members may decide they want to develop some common measures, create a data collection tool that will be used by all of the network members, or conduct exploratory research on an issue that emerges during the course of their projects. Near the end of their grants, network members may seek additional funding to produce a synthesis of their research and to conduct joint dissemination activities. These examples are illustrative, and networks are encouraged to propose other ideas after they begin working together.

The Institute will set aside $1,000,000 for supplementary activities for each network. The Institute will begin accepting proposals for supplementary activities from each network during the second year the networks are in operation and will review proposals on a rolling basis until the supplementary funds for each network are used or the beginning of the fifth year of the grant, whichever comes first. Networks may propose to use the funds for a single supplementary activity or several, smaller supplementary activities. Applicants should *not* budget for supplementary activities in their applications; rather, after the Network is formed, Research Teams will work with the Network Lead to generate ideas and set priorities. The Network Lead will be responsible for submitting requests for funding of supplementary activities to the Institute.

5. General Narrative Requirements

Applications for network members under both the Supporting Early Learning from Preschool through Early Elementary School Grades Network and the Scalable Strategies to Support College Completion Network grants programs **must** include four sections:

(i) Significance

(ii) Research plan

(iii) Personnel

(iv) Resources

Applications for Network Lead for the Early Learning and College Completion Networks must include two sections:

(i) Plans

(ii) Qualifications

Requirements and recommendations for these sections of the project narrative are topic and role specific and are described in Part II.B.

B. REQUIREMENTS FOR NETWORK TOPICS AND ROLES

1. Supporting Early Learning from Preschool Through Early Elementary School Grades: <u>Research Team Requirements</u>

Program Officer: Dr. Caroline Ebanks (202-219-1410; Caroline.Ebanks@ed.gov)

The Institute requests applications from researchers in order to form a network to identify malleable factors that support early learning from preschool through early elementary school grades. The Early Learning Network will comprise up to four Research Teams who will conduct in-depth, exploratory research in states, regions, cities, or school districts that are providing preschool opportunities for children from disadvantaged backgrounds. Each Research Team will conduct three complementary, prospective studies: (1) a descriptive study of systems-level policies and practices that support early learning; (2) a classroom observation study to identify teaching practices and other classroom-level malleable factors associated with children's school readiness and achievement in preschool and early elementary school; and (3) a longitudinal study to identify malleable factors associated with early learning and school achievement over time from preschool through the early elementary school grades (e.g., kindergarten through third grade). The Early Learning Network will also include up to one Assessment Team that will develop a new classroom observation tool or improve an existing tool that is expressly designed for practitioners to use for assessing quality of instruction and making program improvements. The Early Learning Network will meet regularly to discuss ways to coordinate and strengthen its collective work. The Early Learning Network's ultimate objective is to advance the field's understanding and implementation of policies and practices that support early learning and ongoing academic success.

a) Overview

Across the nation, there is strong interest in and support for expanding high quality early childhood programs to all children, especially those from economically disadvantaged backgrounds. Since 2012, the U.S. Department of Education and the Department of Health and Human Services have invested more than one billion dollars in Race to the Top Early Learning Challenge (RTT-ELC) Fund grants to states to improve access to and enrollment in high quality preschool programs, promote early learning and development outcomes for children, address the needs of the early childhood workforce, and measure outcomes and progress. In December 2014, the U.S. Department of Education, in collaboration with the U.S. Department of Health and Human Services, awarded Preschool Development grants to 18 states to develop or expand high-quality preschool programs.[2] Over 30 states and numerous local education agencies have also invested in prekindergarten programs to support children's school readiness skills (e.g., the Georgia PreK Program, the Oklahoma Universal Preschool Program, the Los Angeles Universal Preschool initiative, and the Tennessee Voluntary Prek Program).

In the midst of this expansion, the research community has made significant advances in the evaluation of early childhood programs and the identification of crucial features of effective programs (Diamond, Justice, Siegler, and Snyder, 2013; NICHD Early Child Care Research Network, 2005; Puma, Bell, Cook, Heid, Broene, Jenkins, Mashburn, and Downer, 2012). The Institute has made significant investments in early childhood research on strategies to increase the school readiness skills of prekindergarten children, and to build the knowledge, skills, and instructional practices of early childhood educators. For example, the Institute has supported the development and evaluation of curricular interventions targeting children's language and literacy, mathematics, science, and social-behavioral skills; the development of measures to assess domain-specific skills; professional development interventions to improve early childhood educators' instructional practices and the quality of teacher-child interactions; and evaluations of early childhood policy initiatives (Clements, Sarama, Wolfe, and Spitler, 2013; Diamond et al, 2013; Hamre, Pianta, Burchinal, Field, LoCasale-Crouch, Downer, Howes, LaParo, and Scott-Little, 2012; Lipsey,

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[2] For information on the Preschool Development Grants, see http://www2.ed.gov/programs/preschooldevelopmentgrants/index.html.

Hofer, Hong, Farran, and Bilbrey, 2013; Preschool Curriculum Evaluation Research Consortium, 2008; Weiland and Yoshikawa, 2013). These investments have focused on ensuring that young children acquire the school readiness skills that are needed for later school success.

Despite these advances, many children – especially those from low-income households or other disadvantaged backgrounds – experience academic and social difficulties as they begin elementary school. It may be that preschool programs are not of sufficient quality to produce sustained benefits, are not adequately aligned with early elementary school curricula and instruction to help children make a smooth transition, or do not give struggling children the extra help they need to make steady progress. Uneven implementation of effective teaching and learning practices in both the preschool setting and early elementary school grades may also be a factor. Whatever the reason, an academic achievement gap between children from different household income levels and educational backgrounds is often present at kindergarten entry and widens during the school years. Research findings from both descriptive, longitudinal studies and evaluation studies suggest that participating in early childhood education programs helps to narrow, but not close the school achievement gap (Magnuson, Ruhm, and Waldfogel, 2007; Weiland and Yoshikawa, 2013; Yoshikawa, Weiland, Brooks-Gunn, Burchinal, Espinosa, Gormley, Ludwig, Magnuson, Phillips, and Zaslow, 2013). Even with initial benefits from participation in preschool interventions, later school success is not always a reality for early learners, especially for children from disadvantaged backgrounds.

The Early Learning Network will conduct in-depth, exploratory studies in states, cities, or school districts that are providing preschool opportunities for children from disadvantaged backgrounds in order to investigate the implementation of early learning policies and programs, and to identify malleable factors associated with early learning and achievement from preschool through early elementary school grades (i.e., kindergarten through third grade). The research is intended to provide reliable information and useful tools and products that policymakers and practitioners can use to assess their efforts to build effective early learning systems and programs and to make improvements as needed. Each team will select at least one location (e.g., a city, state, or school district) in which it will conduct three complementary, prospective studies:

(i) *A descriptive study of systems-level policies and practices that support learning and school achievement.* This will include investigation into state and/or local policies and practices designed to support children as they move from preschool into the early elementary school grades, and between grades in elementary school. Researchers will document the goals and objectives of preschool and elementary school policies and programs, funding levels, assessment practices, curricular alignment, and other factors that support learning and school achievement in preschool and the early elementary grades. This study will provide important contextual information for the other studies and may suggest areas where current policies and practices may be improved.

(ii) *A classroom observation study to identify malleable factors that are associated with children's school readiness skills and school achievement*. This research will complement the systems-level study to examine whether and how *classroom* processes and practices (e.g., curricular content and approaches; teacher instructional practices; classroom climate; teacher, child, and peer interactions) support early learning and school achievement. Researchers will investigate aspects of the classroom environment that promote learning and instruction in preschool and the early elementary grades. The classroom experiences of children from disadvantaged backgrounds will be a primary focus.

(iii) *A longitudinal study to identify malleable factors associated with early learning and school achievement over time.* This research will examine how child, family, and classroom level variables, such as attendance or nonattendance in preschool, types and settings of preschools, school readiness skills, parental involvement, continuity in learning goals, expectations, instruction at each grade level, and other factors may influence children's learning trajectories as they move from preschool through the early elementary school grades. Researchers will pay particular attention to identifying malleable factors that are associated with

increased academic achievement and narrowing of achievement gaps among different groups of children, including preschool participants and non-participants (Lipsey et al., 2013; Yoshikawa et al, 2013), dual language learners (Lipsey et al., 2013; Weiland and Yoshikawa, 2013), and children from different racial and ethnic groups and socioeconomic backgrounds (Clements et al., 2013; Iruka, Gardner-Neblett, Matthews, and Winn, 2014; Sarama, Clements, Wolfe, and Spitler, 2012).

When choosing sites, the Institute encourages researchers to consider learning about the important policy choices states and localities may be making and capturing variations in program practices and operating conditions. Because of the place-based nature of the research, the Institute does not intend to fund more than one application that proposes to work in the same (or approximately the same) geographic location.

Members of the Early Learning Network are expected to collaborate with the other Research Teams, the Assessment Team, and the Network Lead to discuss research plans, share emerging findings, and give and receive constructive feedback. Among the network's specific goals are to:

(i)   Identify productive ways to coordinate research activities, which may include adopting some common data collection protocols and measures;

(ii) Propose supplementary activities that will be undertaken jointly by Early Learning Network members to strengthen their work;

(iii) Plan and conduct dissemination activities that are accessible and useful to policymakers, practitioners, and researchers focused on early childhood and elementary school education, including annual meetings with recipients of Preschool Development Grants, and briefings or meetings with other federal, state, and local officials; and

(iv) Develop and validate a classroom observation tool that can be easily adopted by preschools and elementary schools around the country to assess the quality of preschool and early elementary school classroom environments and identify areas for improvement. The Assessment Team is expected to lead this work, but the Research Teams are expected to support the Assessment Team in two ways: (1) to review and provide input into the classroom observation tool, and (2) to assist in validating the tool. (See Part II.B.2 for a discussion of the Assessment Team role.) Each Research Team should allocate $500,000 of their proposed budget for this work.

The Institute anticipates that the research performed by the Early Learning Network will lead to ideas for new interventions that may be developed and evaluated in other projects. For this competition, however, the Institute does *not* intend to support the development of new interventions or the evaluation of fully developed interventions. Applicants interested in pursuing funding for efficacy or effectiveness studies in FY 2016 should apply for funding under the Education Research Grants program (305A).

b) General Requirements

Applications to the Early Learning Network **must** meet the sample, outcomes, and setting requirements listed below in order to be responsive and sent forward for scientific peer review.

(1) Sample

- You **must** focus on children from prekindergarten (generally ages 3-5) through early elementary school grades (kindergarten through third grade).

- You **must** focus on typically developing children, including children who are at risk for lower school achievement because of socio-demographic factors.

- Your longitudinal sample **must** include preschool attenders and non-attenders who transition into early elementary school classrooms.

(2) Outcomes

- For preschool, you **must** include measures of children's school readiness skills (e.g., pre-reading, pre-writing, early mathematics, early science, social-behavioral competencies associated with academic achievement).

- For elementary school you **must** include measures of academic achievement and social behavioral competencies that are associated with academic achievement in early elementary school grades.

(3) Setting

- For the preschool component of each study, research **must** be conducted in center-based prekindergarten programs.

- For the early elementary school (K-3) component of each study, research **must** be conducted in public elementary schools and cover multiple grades. It is permissible to conduct some, but not all, of your research in private elementary schools.

c) Narrative Requirements

An application under the Supporting Early Learning from Preschool Through Early Elementary School Grades Network grant program **must meet the requirements set out under (1) Project Narrative and (2) Awards** in order to be responsive and sent forward for scientific peer review. The requirements are the minimum necessary for an application to be sent forward for peer review. In order to improve the quality of your application, the Institute offers recommendations following each set of Project Narrative requirements.

Applications **must** also include a Data Management Plan as described in **(3) Data Management Plan**.

(1) Project Narrative

The 30-page project narrative for an application under the Supporting Early Learning from Preschool Through Early Elementary School Grades Network grant program **must** include four sections:

  (i) Significance

  (ii) Research plan

  (iii) Personnel

  (iv) Resources

a. Significance

The purpose of the Significance section is to provide a rationale for your approach to addressing the objectives of the Early Learning Network. You should explain your understanding of the issues the Research Network is meant to address, propose an overall plan for your Research Team's approach to conducting the three studies, and describe how your program of research will inform policy and practice in preschools and early elementary school grades.

Requirements: In order to be responsive and sent forward for peer review, applications **must** include a Significance section in which you describe:

   (i) Your research objectives for the three studies (descriptive study of systems-level policies and practices, classroom observation study, and longitudinal study)

   (ii) The site(s) where you will conduct your research.

Recommendations for a Strong Application: In order to address the above requirements, the Institute recommends that you include the following in your Significance section to provide a compelling rationale for your work.

- Describe the state of the early learning field and what is currently known and what is not known about how to support early learning from preschool through the early elementary school grades.

- Describe your understanding of the goals of the network and what you would envision a successful network should accomplish.

- Discuss the major research questions you intend to answer and how they will address the objectives of the Early Learning Network.

- Explain your vision for the three studies and the malleable factors you will address. Provide theoretical and empirical support for the approach you are taking.

- Discuss the practical importance of the proposed work.

- Describe the research site(s) where you will conduct your studies, and your rationale for choosing the location(s). Include information on the major policy goals or objectives in the site and the sources of funding for preschool programs (e.g., Preschool Development Grants, Head Start, state or district funding, or other sources).

- Include information on the demographic characteristics of the research sites and explain how they are appropriate for meeting the sample requirement of a focus on typically developing children who are at risk for lower school achievement because of socio-demographic factors.

b. Research Plan

The purpose of this section is to describe the methodology you will use to answer your research questions and to collect and analyze data on the malleable factors you have identified. Your research **must** be prospective and include primary data collection for each of the three studies, though you may also use some secondary data sources.

Requirements: In order to be responsive and sent forward for peer review, applications **must** include a Research Plan section that explains the methodology you will use for each of the following:

   (i) Descriptive Study of Systems-Level Policies and Practices

   (ii) Classroom Observation Study

   (iii) Longitudinal Study

Recommendations for a Strong Application: In order to address the above requirements, the Institute recommends that you include the following in your Research Plan section to explain and strengthen the methodological rigor of your work.

- Organize your Research Plan into three subsections, one for each of the three studies.

- Explain the prospective nature of your research and how you see the three studies fitting together to answer your research questions and provide reliable, useful information for policymakers and practitioners.

Descriptive Study of Systems-Level Policies and Practices

Sample and Setting:

- Discuss the states, cities, school districts, or other geographic areas that will be included in your descriptive study.

- Discuss the key informants who will help you understand systems-level policies and practices. Make clear how these informants will be identified and selected.

- For all quantitative inferential analyses, demonstrate that the sample provides sufficient power to address your research aims.

Research Design and Data Analysis:

- List the questions your descriptive study of systems-level policies and practices will answer. Explain your approach to answering these questions (e.g., administrator interviews, staff interviews, document review of budgets or financial records, etc.).

- Explain the research protocols or instruments you will use to collect your data. Include examples in the Project Narrative or in Appendix B.

- Discuss your approach to managing and analyzing your descriptive data, including any software you plan to use.

Timeline:

- Discuss when your descriptive data on systems-level policies and practices will be collected.

- Timelines may be placed in either the Project Narrative or Appendix B but may only be discussed in the Project Narrative (Appendix B cannot include narrative).

Classroom Observation Study

Sample and Setting:

- Describe the preschool and early elementary school classrooms you will include in your classroom observation study.

  o Explain the procedures you will use to select your classroom sample. Provide justification for any exclusion and inclusion criteria.

  o Explain your plans to oversample among particular types of classrooms, if applicable (e.g., classrooms located in particular preschool centers or elementary schools).

  o For all quantitative inferential analyses, demonstrate that the sample provides sufficient power to address your research aims.

Research Design:

- Discuss the research questions or hypotheses that will guide your classroom observation study.

- Explain the malleable factors in preschool and elementary school classrooms that you believe will be associated with children's learning and school achievement.

Measures:

- Describe the measures and key variables you will be using in the study. For the outcome measures, discuss their validity and reliability for the intended purpose and population.

- Describe the data to be collected and the procedures for data collection.

  - Describe how the data will be collected and coded (including the procedures for monitoring and maintaining inter-rater reliability), and describe the mechanism for quantifying the data if one is needed.

  - If the data will be transformed to create any of the key variables, describe this process.

Data Analysis:

- Describe how you will analyze your classroom observation data. Explain how your approach will address your research questions or hypotheses.

- Discuss any plans to explore alternative hypotheses.

- For qualitative data, describe the intended approach to data analysis, including any software that will be used.

Timeline:

- Provide a timeline for each step in your classroom observation study, including such actions as sample recruitment and selection, data collection, data analysis, and reporting.

- Timelines may be placed in either the Project Narrative or Appendix B but may only be discussed in the Project Narrative (Appendix B cannot include narrative).

Longitudinal Study of Child Outcomes

Sample and Setting:

- Explain the sample you will use for your longitudinal study of child outcomes. For primary data collection include the following:

  - Describe the base population, the sample, and the sampling procedures (including justification for any exclusion and inclusion criteria).

  - Explain your plans to oversample among particular groups of children, if applicable (e.g., groups selected on the basis of preschools attended, demographic characteristics, or other factors).

  - For all quantitative inferential analyses, demonstrate that the sample provides sufficient power to address your research aims.

- Explain how many cohorts of children you expect to follow and for how long.

- Discuss how your sampling plan will address preschool attenders and non-attenders.

- Describe strategies to reduce attrition for your primary data collection.

Research Design:

- Discuss the research questions or hypotheses that will guide your longitudinal study.

- Explain the malleable factors that you believe will be associated with increased academic achievement and narrowing of achievement gaps among different groups of children, including preschool attenders and non-attenders.

- Describe how you will examine factors that are associated with continuity in learning and achievement over time.

- Discuss what types of data you will use to address your research questions or hypotheses (e.g., surveys, observations, administrative records, etc.).

- If you intend to link multiple data sets (e.g., child or family surveys with administrative records data), provide sufficient detail for reviewers to be able to judge the feasibility of the linking plan.

Measures:

- Describe the measures and key variables you will be using in the study. For the outcome measures, discuss their validity and reliability for the intended purpose and population.

- For primary data collection, include the following:

  o Describe the data to be collected and the procedures for data collection.

  o If the data will be transformed to create any of the key variables, describe this process.

  o If observational data or qualitative data are to be collected and analyzed statistically, describe how the data will be collected and coded (including the procedures for monitoring and maintaining inter-rater reliability), and describe the mechanism for quantifying the data if one is needed.

Data Analysis:

- Describe the statistical models to be used. Discuss why they are the best models for testing your hypotheses, how they address the multilevel nature of education data, and how well they control for selection bias.

- Discuss plans to explore alternative hypotheses.

- Discuss how you will address exclusion from testing and missing data. Propose to conduct sensitivity tests to assess the influence of key procedural or analytic decisions on the results.

- Provide separate descriptions for any mediator or moderator analyses.

- For qualitative data, describe the intended approach to data analysis, including any software that will be used.

Timeline:

- Provide a timeline for each step in your longitudinal analysis including such actions as sample selection and assignment, data collection, data analysis, and reporting.

- Timelines may be placed in either the Project Narrative or Appendix B but may only be discussed in the Project Narrative (Appendix B cannot include narrative).

Collaboration with the Assessment Team

Each Research Team will be expected to review and provide input on the Assessment Team's effort to develop or improve a classroom observation tool designed for practitioners. Each Research Team will also be expected to help the Assessment Team validate the tool.

- Describe your plan for assisting the Assessment Team with piloting, reliability testing, and validation of the classroom observation tool.

- Identify a person on your team who will be the principal point of contact for the Assessment Team, and be sure to describe this person's background in the Personnel section.

- You must set aside $500,000 in your budget to support the collaboration with the Assessment Team. Discuss the personnel time that will be available for this work.

c. Personnel

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

Requirements: In order to be responsive and sent forward for peer review, applications **must** include a Personnel section that:

   (i) Identifies and describes the qualifications of the members of the Research Team.

Recommendations for a Strong Application: In order to address the above requirements, the Institute recommends that you include the following in your Personnel section to demonstrate that your team possesses the appropriate training and experience and will commit sufficient time to implement the proposed research.

- Identify key personnel at the primary applicant institution, any subaward institutions, and any consultants.

- Identify and briefly describe the following for all key personnel (i.e., Principal Investigator, co-Principal Investigators, co-Investigators) on the project team: qualifications to carry out the proposed work; roles and responsibilities within the project; percent of time and calendar months per year (academic plus summer) to be devoted to the project; and past success at disseminating research findings in peer-reviewed scientific journals and to policymaker or practitioner audiences.

- Discuss your past experience working in a research network, if any, and what lessons you drew from that experience that would help the Early Learning Network succeed.

- Identify key state or local officials who will be involved in the study and what roles they will play (e.g., informing research questions, reviewing research protocols, providing access to preschool programs and elementary schools, discussing emerging findings, etc.). Include letters of support from key agencies or programs in Appendix D.

- Discuss what steps you would take to involve early career researchers in your activities. The Institute is committed to the development of early career researchers who are completing doctoral studies or are within five years of earning a Ph.D.

- Identify the management structure and procedures that will be used to keep your project on track and ensure the quality of its work. This is especially important for projects involving multiple institutions carrying out different tasks that must be coordinated and/or integrated.

- Provide an organization chart to illustrate how key personnel will relate to one another on the project (this chart can be placed in Appendix B).

d. Resources

The purpose of this section is to describe both how you have the institutional capacity to complete a project of this size and complexity and to disseminate the results.

Requirements: In order to be responsive and sent forward for peer review, applications **must** include a Resources section that describes the resources to:

(i) Conduct the project

(ii) Disseminate the results

Recommendations for a Strong Application: In order to address the above requirements, the Institute recommends that you include the following in your Resources section to demonstrate that your team has: a plan for acquiring or accessing the facilities, equipment, supplies, and other resources required to support the conduct and dissemination of the proposed project; and the commitments of each partner for the implementation and success of the project.

Resources to conduct the project:

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

• Describe your access to resources available at the primary institution and any subaward institutions.

• Describe your plan for acquiring any resources that are not currently accessible, will require significant expenditures, and are necessary for the successful completion of the project (e.g., equipment, test materials, curriculum or training materials).

• Describe your access to the preschool programs and elementary schools that will be the focus of your research. Include letters of agreement from preschool program and school district officials in Appendix D. Convincing letters will convey that the organizations understand what their participation in the study will involve (e.g., access to data, participation in classroom observations, etc.).

• Include information about financial incentives for study sites to participate in the research, if applicable.

• Describe your access to any data sets that you will require. Include letters of agreement, data licenses, or existing Memoranda of Understanding in Appendix D to document that you will be able to access the data for your proposed use.

Resources to disseminate the results:

• Describe your capacity to disseminate information about the findings from your research. For example, your university or research firm may have a communications office that can assist with disseminating the results of your project, or you may have members of your Research Team who have experience disseminating research to nontechnical audiences.

• Identify the audiences that you expect will be most likely to benefit from your research.

• Discuss the ways in which you intend to reach these audiences through the major publications, presentations, and products you expect from your project.

• Keep in mind that national dissemination activities, including meetings with Preschool Development Grant recipients and hosting of a network website, will be coordinated by the Network Lead. In your budget, you should allocate sufficient time to participate in Early Learning Network activities.

    o Allocate time for the PI and other key personnel to participate in at least two in-person network meetings in the first year and at least one in-person network meetings each year thereafter. For budgeting purposes, assume the meetings will take place in Washington, D.C.

    o Allocate funds for the PI and other key personnel to attend two meetings or conferences each year with early childhood practitioners and policymakers.

(2) Awards

All Early Learning Network Research Teams **must** conform to the following limits on duration and cost:

Duration Maximum:

- **The maximum duration of an Early Learning Network project is 5 years.** An application of this type proposing a project length of greater than 5 years will be deemed nonresponsive to the Request for Applications and will not be accepted for review.

Cost Maximum:

- **The maximum award for an Early Learning Network project is $4,500,000 (total cost = direct costs + indirect costs).** An application of this type proposing a budget higher than the maximum award will be deemed nonresponsive to the Request for Applications and will not be accepted for review.

In addition to these awards, the Institute will allocate up to $1,000,000 for the Network to conduct **supplementary activities**. Applicants should **not** include a budget for supplementary activities in their applications, as these funds are intended for use by the entire Network. The Network Lead will negotiate a budget for supplementary activities with the Institute after the Network is formed.

Maximum Number of Awards:

- The Institute intends to make up to **four awards** to Research Teams to form the Early Learning Network.

(3) Data Management Plan

Applications for the Research Team must include a Data Management Plan (DMP, no more than five pages in Appendix E) that describes your plans for making the final research data from the proposed projects accessible to others. Resources that may be of interest to researchers in developing a data management plan can be found at http://ies.ed.gov/funding/researchaccess.asp.

DMPs are expected to differ depending on the nature of the project and the data collected. By addressing the items identified below, your DMP describes how you will meet the requirements of the IES policy for data sharing. The DMP should include the following:

- Type of data to be shared.

- Procedures for managing and for maintaining the confidentiality of Personally Identifiable Information.

- Roles and responsibilities of project or institutional staff in the management and retention of research data, including a discussion of any changes to the roles and responsibilities that will occur should the Project Director/Principal Investigator and/or co-Project Directors/co-Principal Investigators leave the project or their institution.

- Expected schedule for data access, including how long the data will remain accessible (at least 10 years) and acknowledgement that the timeframe of data accessibility will be reviewed at the annual progress reviews and revised as necessary.

- Format of the final dataset.

- Dataset documentation to be provided.

- Method of data access (e.g., provided by the Project Director/Principal Investigator, through a data archive) and how those interested in using the data can locate and access them.

- Whether or not a data agreement that specifies conditions under which the data will be shared will be required.

- Any circumstances that prevent all or some of the data from being made accessible. This includes data that may fall under multiple statutes and, hence, must meet the confidentiality requirements for each applicable statute (e.g., data covered by Common Rule for Protection of Human Subjects, FERPA and HIPAA).

The costs of the DMP can be covered by the grant and should be included in the budget and explained in the budget narrative. The peer-review process will not include the DMP in the scoring of the scientific merit of the application. The Institute's Program Officers will be responsible for reviewing the completeness of the proposed DMP. If your application is being considered for funding based on the scores received during the peer-review process but your DMP is determined incomplete, you will have to complete your DMP before an award will be made.

2. Supporting Early Learning from Preschool Through Early Elementary School Grades: <u>Assessment Team Requirements</u>

Program Officer: Dr. Caroline Ebanks (202-219-1410; Caroline.Ebanks@ed.gov)

The Institute requests proposals for an Early Learning Network Assessment Team. Its primary purpose is to support the development and validation of a classroom observation tool that can be used by practitioners (e.g., program directors, district administrators, master teachers, coaches) to assess structural elements and process features of the classroom environment that are associated with child academic and social-behavioral outcomes during preschool and early elementary grades and that are predictive of later learning and school achievement. The Assessment Team will be responsible for the measurement development work and the selection of research site(s) and study sample(s) to pilot-test and validate the measure. The Assessment Team will also work with the Early Learning Network Research Teams to develop and validate the classroom observation tool, and with the Network Lead to implement a dissemination plan for the classroom observation tool. The tool should be accessible, affordable, and easy for practitioners to use.

a) Overview

Classroom quality is associated with teacher practices and child outcomes and is predictive of later learning and achievement. With current policy initiatives (e.g., Race to the Top Early Learning Challenge and state quality rating and improvement systems) and an expanded definition of classroom quality (e.g., structural elements and process features), research is needed to develop or improve assessment tools to capture global and domain-specific aspects of classroom quality that are associated with child outcomes in preschool and early elementary school. Some structural characteristics of the classroom, such as use of a targeted, focused curriculum and adult-child ratio, are associated with child outcomes (Burchinal, Roberts, Riggins, Zeisel, Neebe, and Bryant, 2000; Yoshikawa, Weiland, Brooks-Gunn, Burchinal, Espinosa, Gormley, Ludwig, Magnuson, Phillips, and Zaslow, 2013). Recent research has shown that process features of the classroom environment are also related to child outcomes. The quality of teacher instruction and teacher-child interactions, time spent in instructional activities, opportunities for children to learn, child engagement in cognitively stimulating activities and interactions, and classroom climate are associated with a range of academic and social behavioral outcomes for children (Cabell, Justice, McGinty, and Dec Oster, 2015; Fuhs, Farran, and Nesbitt, 2013; Mashburn, Pianta, Hamre, Downer, Barbarin, Bryant, Burchinal, Early, and Howes, 2008; Sabol, Hong, Pianta and Burchinal, 2013; Weiland, Ulvestad, Sachs, and Yoshikawa, 2013; Pelatti, Piasta, Justice, and O'Connell, 2014).

Existing measures of classroom quality have been used to assess structural elements of the classroom, classroom processes, or the quantity and quality of instruction in a particular subject matter area (e.g., literacy or math instruction). These measures include, but are not limited to, the Classroom Assessment Scoring System (CLASS); the Classroom Observation of Early Mathematics Environment and Teaching (COEMET); the Early Childhood Environment Rating Scale (ECERS); the Early Language and Literacy Classroom Observation (ELLCO); and the Teacher Behavior Rating Scale (TBRS). While each of these measures has its strengths, the field lacks a comprehensive, multidimensional assessment of structural elements, classroom processes, and the quality of instruction in different subject matter areas that are associated with child outcomes *across the transition from preschool to early elementary grades*. The Assessment Team will address this need, either by improving an existing tool or developing a new one that is predictive of school achievement. The tool should have the following features:

- It should measure a range of structural elements and process features that support children's learning and achievement in preschool and early elementary school classrooms.

- It should address global and domain-specific aspects of the classroom. For example, global features include overall quality of the classroom environment, including structural elements and process features; domain-specific features include the quality of interactions or practices in a specific area, such as math, social emotional development, or instruction.

- It should be accessible, affordable, and easy to use by practitioners.

The Institute will award up to one grant for the Assessment Team. The Assessment Team will be responsible for designing, developing, and validating the classroom observation tool. The Institute expects the Research Teams in the network to support the Assessment Team by reviewing and offering substantive input on the tool and assisting with piloting and validation. Applicants for the Assessment Team award must address measurement of classroom quality in preschool *and* early elementary grade settings (preschool through third grade). The project will result in the following:

(i) A fully-developed version of the proposed tool.

(ii) A detailed description of the tool and its intended use.

(iii) A detailed description of the iterative development processes used to develop the tool and scoring protocols, including field-testing procedures and processes for revision.

(iv) A user manual, training materials for potential end users, and a plan for disseminating the fully-developed tool to practitioners and researchers.

(v) A technical manual that describes the psychometric properties of the tool.

b) General Requirements

Applications to the Early Learning Network **must** meet the sample, outcomes, and setting requirements listed below in order to be responsive and sent forward for scientific peer review.

(1) Sample

- You **must** focus on children from prekindergarten (generally ages 3-5) through early elementary school grades (kindergarten through third grade).

- You **must** focus on typically developing children, including children who are at risk for lower school achievement because of socio-demographic factors.

(2) Outcomes

- For preschool, you **must** include measures of children's school readiness skills (i.e., pre-reading, pre-writing, early mathematics, early science, and social behavioral competencies associated with academic achievement).

- For elementary school you **must** include measures of academic achievement and social-behavioral competencies that are associated with academic achievement in early elementary school grades.

(3) Setting

- For the preschool component of each study, research **must** be conducted in center-based prekindergarten programs.

- For the early elementary school (K-3) component of each study, research **must** be conducted in public elementary schools and cover multiple grades. It is permissible to conduct some, but not all, your research in private elementary schools.

c) Narrative Requirements

Applications for the Assessment Team award **must meet the requirements set out under (1) Project Narrative and (2) Awards** in order to be responsive and sent forward for scientific peer review. The requirements are the minimum necessary for an application to be sent forward for peer

review. In order to improve the quality of your application, the Institute offers recommendations following each set of Project Narrative requirements.

(1) Project Narrative

The 25-page project narrative for the Assessment Team application **must** include four sections:

(i) Significance

(ii) Research plan

(iii) Personnel

(iv) Resources

a. Significance

The purpose of this section is to explain why it is important to develop a new classroom observation tool for use in preschool and early elementary grade classrooms.

Requirements: In order to be responsive and sent forward for peer review, applications for the Assessment Team **must** include a Significance section that provides the following:

(i) Description of the assessment (i.e., classroom observation tool) to be developed.

Recommendations for a Strong Application: In order to address the above requirement, the Institute recommends that you include the following in your Significance section to provide a compelling rationale for the proposed work.

- Describe your understanding of the goals of the Early Learning Network and the Assessment Team's role in the network.

- Describe the specific need for developing the assessment. Discuss how the results of this work will be important both to the field of education research and to education practice and education stakeholders (e.g., practitioners and policymakers).

- Identify any current assessments that are in use and their strengths and weaknesses. Your review does not have to be exhaustive, and may focus on some assessments in wide use.

- Contrast the new or improved assessment with current typical assessment practice and its identified shortcomings. A detailed description of the assessment will clearly show that it has the potential to provide a better measure of the intended construct(s) because: (1) it is sufficiently different from current assessments practice and does not suffer from the same shortcomings; (2) it has a strong theoretical or empirical basis; and (3) its implementation appears feasible for preschool program staff and school administrators, given their resource constraints (e.g., time, funds, personnel, schedules).

- Describe the assessment framework and the fit between validation activities and the assessment framework. The assessment framework includes the following:

  o Operational definition(s) of the construct(s) of measurement.

  o Theoretical model showing how construct(s) are related to each other and/or external variables.

  o Description of how the assessment provides evidence of the construct(s) identified in the rationale.

  o Description of the processes for reasoning from assessment items and scores to the intended inferences regarding the construct(s) of measurement.

o   Description of the intended use(s) and population(s) for which the assessment is meant to provide valid inferences.

- Describe your vision for making the assessment accessible, affordable, and easy to use by practitioners.

b. Research Plan

The purpose of this section is to describe the methodology you will use to develop the assessment.

Requirements: In order to be responsive and sent forward for peer review, applications for the Assessment Team **must** include a Research Plan section that provides a description of the:

(i)   Sample

(ii)   Setting

(iii)   Development process

(iv)   Data analysis procedures

Recommendations for a Strong Application: In order to address the above requirements, the Institute recommends that you include the following in your Research Plan section to strengthen the methodological rigor of the proposed measurement project.

- Describe the preschools and early elementary school classrooms you will include in your sample.

- Explain the procedures you will use to select the sample and provide justification for any exclusion and inclusion criteria.

- Describe the iterative procedures for developing, field testing, and selecting items to be used in the assessment and for obtaining representative responses to items.

- Describe the procedures for scoring the assessment, including justification for the scaling model that will be used to create scores. For example, if item response theory will be used to create scores, describe the model that will be applied.

- Describe the procedures for demonstrating adequate construct coverage and minimizing the influence of factors irrelevant to the construct.

- Describe the plans for determining the administrative procedures for conducting the assessment (e.g., in-person data collection versus videotape; selection of class time to observe; length of time observed). Describe the plans for examining the feasibility of use of the assessment for the intended purpose.

- Identify the theoretical and analytic steps that you will undertake to provide evidence that the assessment measures the intended construct for a given purpose and population. Provide the plans for establishing the fairness of the assessment for all relevant contexts (e.g., grade levels, student composition).

- Describe the procedures for determining the reliability of the assessment for the intended purpose and population.

- Identify the types of validity evidence that will be used and provide justification for the adequacy of the selected types of evidence to support use of the assessment (e.g., predictive, concurrent, convergent, discriminant).

- Describe the statistical models and analyses that will be used (e.g., structural equation modeling; type of IRT model).

Coordination and Collaboration with Research Teams in the Early Learning Network:

- Describe your plan for working with the Research Teams in the Early Learning Network to fully develop, validate, and disseminate the classroom observation tool.

Timeline:

- Provide a timeline for each step in your project including such actions as measurement development or revision (if applicable), sample selection and assignment, data collection, validation activities, data analysis, and dissemination.

- Timelines may be placed in either the Project Narrative or Appendix B but may only be discussed in the Project Narrative (Appendix B cannot include narrative).

c. Personnel

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

Requirements: In order to be responsive and sent forward for peer review, applications under the Assessment Team **must** include a Personnel section that:

    (i)   Identifies key personnel and describes their qualifications

Recommendations for a Strong Application: In order to address the above requirement, the Institute recommends that you include the following in your Personnel section to demonstrate that your team possesses the appropriate training and experience and will commit sufficient time to competently implement the proposed research.

- Demonstrate how your team has the expertise in content domain(s), assessment development and administration, psychometrics, and statistical analysis as appropriate to support your scope of work. Describe personnel at the primary applicant institution, any subaward institutions, and any consultants.

- Describe how your team has expertise working with teachers, schools, or other individuals in other education delivery settings in which the proposed assessment is intended to be used.

- Identify and briefly describe the following for all key personnel (i.e., Principal Investigator, co-Principal Investigators, co-Investigators) on the project team: qualifications to carry out the proposed work; roles and responsibilities within the project; percent of time and calendar months per year (academic plus summer) to be devoted to the project; and past success at disseminating research findings in peer-reviewed scientific journals and to policymaker and practitioner audiences.

- Describe your past experience working in a research network or collaboration, either as a member or a leader.

- Describe your past experience disseminating assessment tools.

d. Resources

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

Requirements: In order to be responsive and sent forward for peer review, applications for the Assessment Team **must** include a Resources section that describes the resources to:

    (i)   Conduct the project

    (ii)   Disseminate the results

Recommendations for a Strong Application: In order to address the above requirements, the Institute recommends that you include the following in your Resources section to demonstrate that your team has: a plan for acquiring or accessing the facilities, equipment, supplies, and other resources required to support the conduct and dissemination of the proposed measurement work; and the commitments of each partner for the implementation and success of the project.

Resources to conduct the project:

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

- Describe your access to resources available at the primary institution and any subaward institutions.

- Describe your plan for acquiring any resources that are not currently accessible, will require significant expenditures, and are necessary for the successful completion of the project (e.g., equipment, test materials, curriculum or training materials).

- Describe your access to the preschools and elementary schools in which the research will take place. Include letters of agreement in Appendix D documenting the participation and cooperation of the schools. Convincing letters will convey that the organizations understand what their participation in the study will involve (e.g., annual student and teacher surveys, student assessments, classroom observations).

  - o   Include information about teacher and school incentives, if applicable.

- Describe your access to any data sets that you will require. Include letters of agreement, data licenses, or existing Memoranda of Understanding in Appendix D to document that you will be able to access the data for your proposed use.

Resources to disseminate the results:

- Be cognizant of the focus of your project and how this affects the type and use of your findings. The Institute expects that the dissemination of the fully-developed assessment would clearly specify the validity evidence for the appropriate users.

- Describe your capacity to disseminate information about the findings from your research. For example, your university or research firm may have a communications office that can assist with disseminating the results of your project, or you may have members of your Assessment Team who have experience disseminating research to nontechnical audiences.

- Identify the audiences that you expect will be most likely to benefit from your research (e.g., other researchers, federal or state policymakers, state and local school system administrators, principals, teachers, counselors, parents, students, and others).

- Discuss the ways in which you intend to reach these audiences through the major publications, presentations, and products you expect from your project.

- Keep in mind that national dissemination activities, including meetings with Preschool Development Grant recipients and hosting of a network website, will be coordinated by the Network Lead. In your budget, you should allocate sufficient time to participate in Early Learning Network activities.

  o Allocate time for the PI and other key personnel to participate in at least two in-person network meetings in the first year and at least one in-person network meeting each year thereafter. For budgeting purposes, assume the meetings will take place in Washington, D.C.

  o Allocate funds for the PI and other key personnel to attend two meetings or conferences each year with early childhood practitioners and policymakers.

(2) Awards

An application for the Assessment Team **must** conform to the following limits on duration and cost:

Duration Maximum:

- **The maximum duration for the Assessment Team is 5 years.** An application of this type proposing a project length of greater than 5 years will be deemed nonresponsive to the Request for Applications and will not be accepted for review.

Cost Maximum:

- **The maximum award for the Assessment Team is $2,000,000 (total cost = direct costs + indirect costs).** An application of this type proposing a budget higher than the maximum award will be deemed nonresponsive to the Request for Applications and will not be accepted for review.

Maximum Number of Awards:

- The Institute will make up to **one** award for an Assessment Team.

3. Supporting Early Learning from Preschool Through Early Elementary School Grades: <u>Network Lead Requirements</u>

Program Officer: Dr. Caroline Ebanks (202-219-1410; Caroline.Ebanks@ed.gov)

a) Overview

The Institute requests applications from institutions interested in serving as Network Lead for the Early Learning Network. The Network Lead is responsible for making sure the network runs smoothly and accomplishes its goals and objectives. The Network Lead should possess subject-area expertise in early learning, and should be committed to helping the network produce a body of work that will be informative and useful to policymakers, practitioners, and other researchers. The ideal Network Lead will show respect for different perspectives, foster collaboration, and encourage innovation.

The Institute welcomes applicants' ideas on how best to structure and carry out the Network Lead role. The minimum responsibilities include the following:

(i) **Planning and Facilitating Network Meetings.** The Institute envisions network meetings as serving multiple purposes: building interpersonal and cross-team relationships; sharing ideas and information; encouraging constructive review and feedback; planning and launching joint studies; and coordinating dissemination. The Network Lead is responsible for planning and facilitating at least two in-person meetings during the first year the network is in operation, and at least one in-person meeting a year for the next four years. Additional in-person and teleconference meetings may be arranged as needed, and may be convened as the Network Lead deems appropriate. The Institute requests that at least one in-person meeting each year be held in Washington, D.C. to allow participation by Institute staff, and will provide meeting space to help reduce costs.

(ii) **Coordinating Network Supplementary Activities.** The Institute will set aside $1,000,000 for the network to conduct supplementary activities that will advance the network's goals. For example, network members may want to work together on common measures for their studies, conduct additional exploratory research, or co-author and disseminate a synthesis of the network's research. The Network Lead will work with network members to set priorities for supplementary activities and will coordinate with the Institute to gain approval. The Institute will begin accepting proposals for supplementary activities from the network starting in the second year that the network is in operation, and will review proposals on a rolling basis to support time-sensitive research.

(iii) **Developing and Hosting a Network Website.** The Institute views the network website as an important vehicle for communicating the goals and objectives of the network, describing the projects of individual Research Teams and the Assessment Team, and making the network's research papers and products available to the public at no cost. Ideally, the website will include graphics and interactive features to make it engaging and useful for visitors.

(iv) **Organizing Briefings and Presentations.** The Institute expects the Network Lead to organize briefings or presentations for federal and state policymakers who are working on early learning issues. These events should be two-directional, allowing network members the opportunity to discuss their research while at the same time eliciting feedback to improve the quality and relevance of the network's various projects. The Network Lead is also expected to work with network members to plan presentations or discussions at meetings and conferences attended by practitioners and other researchers.

(v) **Meeting with Preschool Development Grant (PDG) recipients.** Working in conjunction with the U.S. Department of Education's Office of Early Learning, the Network Lead will organize and host an annual workshop for PDG teams of evaluators and practitioners (approximately 100

people) to discuss the network's research findings and to provide technical assistance on evaluation design and measurement of classroom quality.

(vi) **Providing research guidance and tools for early childhood practitioners.** The Network Lead will serve as an information source for Preschool Development Grant recipients and other early childhood practitioners who are seeking advice on how to assess and improve their programs. For example, the Network Lead may provide technical assistance to practitioners about what research shows to be effective practices in early childhood education and what indicators to use to monitor the quality of their programs. This support may be provided via the internet (e.g., through webinars, social media, and other online forums) and/or via meetings or conferences attended by practitioners. The Institute anticipates that the classroom observation tool for practitioners (developed by the Assessment Team) will be the primary focus of this work.

b) General Requirements

Only applicants for an Early Learning Network Research Team or an Early Learning Network Assessment Team will be considered for Network Lead. If you wish to be considered as a Network Lead, you **must** submit an application that describes your plans and qualifications. You should make sure you provide sufficient information in your Network Lead application for reviewers to understand your plans and qualifications, since the Network Lead application will be reviewed and scored separately from your other application to be a network member. You are allowed up to 15 pages of narrative for your Network Lead application. Your application **must meet the requirements set out under b) General Requirements (this section) and c) Awards** in order to be responsive and sent forward for scientific peer review.

Requirements: In order to be responsive and sent forward for peer review, your application for Network Lead **must** include:

(i) A description of your plans.

(ii) A description of your qualifications.

Recommendations for a Strong Application: In order to address the above requirements, the Institute recommends that you include the following in your application:

Network Plans:

- Describe your understanding of the network's goals as they relate to the current fields of research, policy, and practice regarding Early Learning.

- Describe your vision of how the Network Lead will help the network accomplish its goals.

- Discuss your approach to the six minimum requirements for Network Lead:
    o Planning and facilitating network meetings.
    o Coordinating network supplementary studies.
    o Developing and hosting a network website.
    o Organizing briefings and presentations.
    o Meeting with PDG recipients.
    o Providing research guidance and tools for early childhood practitioners.

- Describe how you envision network meetings to run. You might consider including a proposed agenda for a kickoff meeting in your narrative or in Appendix B.

- Describe your approach to communicating with policymakers, practitioners, and researchers outside the network regarding the network's goals and objectives.

- Provide at least one example of a project or activity that you think would benefit from collaboration by network members.

- Discuss some of the major challenges you expect the network might face. These might include challenges internal to the network (e.g., keeping the group focused and on track) or external challenges (e.g., presenting research findings to policymakers and practitioners in a way that helps them identify weaknesses in current programs and make improvements). Describe how, as Network Lead, you would work with network members to overcome these challenges.

- Discuss your plans for incorporating early career researchers (i.e., individuals who have earned their Ph.D. within the last five years) into network meetings and activities.

- Discuss how you envision network members working together to develop a classroom observation tool for practitioners.

- Identify target audiences for dissemination and propose a plan for engaging with communities of interest, including recipients of Race to the Top-Early Learning Challenge and Preschool Development Grants, and other stakeholders in the federal, state, and local early childhood and early elementary school communities.

- Describe your plan for disseminating research findings to early childhood practitioners and policy makers, including PDG recipients.

- Describe the research guidance you would offer to PDG grantees and other early childhood practitioners, including how you would help practitioners understand the practical implications of research findings and identify useful indicators for monitoring program quality.

Qualifications to be Network Lead:

- Discuss the PI's professional background as it pertains to the network. Attach a biographical sketch to the Research and Related Senior/Key Person Profile (Expanded) form.

- Describe the PI's past experience working in a research network or collaboration, either as a member or a leader. Discuss what the network or collaboration intended to do and what it actually accomplished, along with any lessons you drew from this experience.

- Identify key personnel who will be working to support you as Network Lead and the roles they will play. Include information on the educational background and professional experience of key personnel. Attach their biographical sketches to the Research and Related Senior/Key Person Profile (Expanded) form.

- Provide information on the percentage of time each key personnel will devote to the Network Lead role.

- Discuss what resources your university, research firm, or organization provides for the Network Lead role (e.g., a conferencing center, communications office, etc.)

- Describe your past experience working with early childhood practitioners and policy makers.

- Describe your past experience disseminating research findings and providing technical support and guidance to early childhood practitioners.

c) **Awards**

Duration Maximum:

- **The maximum duration of a Network Lead award is 5 years.** An application of this type proposing a project length of greater than 5 years will be deemed nonresponsive to the Request for Applications and will not be accepted for review.

Cost Maximum:

- **The maximum award for the Early Learning Network Lead is $2,000,000 (total cost = direct costs + indirect costs).** An application of this type proposing a budget higher than the maximum award will be deemed nonresponsive to the Request for Applications and will not be accepted for review.

Maximum Number of Awards:

- The Institute will make no more than **one** award for the Early Learning Network Lead.

4. Scalable Strategies to Encourage College Completion: <u>Research Team Requirements</u>

Program Officer: Dr. James Benson (202-219-2129; James.Benson@ed.gov)

The Institute requests proposals from researchers to form a College Completion Network to evaluate the impacts and determine the costs of interventions designed to support increased degree attainment among students attending open- and broad-access institutions, such as community colleges and four-year colleges and universities that accept 75 percent or more of their applicants.[3] Researchers may propose to study either a fully developed intervention or an intervention that requires some development before the formal evaluation begins, so long as the efficacy study begins by the beginning of the third year of the project. The interventions should be operating in a postsecondary education system or group of institutions rather than a single institution. The College Completion Network will meet regularly to discuss ways to strengthen its collective work, such as conducting exploratory research, developing new measures, or planning joint dissemination activities. The Institute's goal is to advance the field's understanding of promising or effective strategies that will benefit large numbers of students, and that will provide useful information that policymakers and practitioners can use to improve postsecondary education systems.

a) Overview

While policymakers at the state and national levels have identified college completion as a priority, many open- and broad-access public colleges and universities are struggling to find effective, affordable strategies that will support increased degree attainment without lowering educational standards. Nationally, approximately half of degree-seeking students at community colleges complete a credential or transfer to a four-year institution.[4] Although on average, over 80 percent of students at selective four-year public institutions attain a degree within six years,[5] only half of students at broad-access public four-year institutions do,[6] and completion rates for students from under-represented minority groups at these institutions are significantly less than 50 percent.[7]

Open- and broad-access institutions are central to the goal of increasing degree completion because of their scope and the population they serve. They serve as entryways to opportunity for a large population of students, including a majority of first-time degree-seeking students.[8] Unfortunately, their low rates of degree completion translate into minimal returns on investments for many of these students and their families. Research consistently finds that, on average, students who attend college without attaining a degree earn significantly less than those who attain an Associate's or Bachelor's degree (Carnevale, Rose,

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[3] Open-access institutions do not have application requirements for enrollment, although they have them for specific courses and programs of study; broad-access institutions have application requirements and accept between 75 and 100 percent of applicants.
[4] Fifty-one percent of 1995-96 beginning postsecondary students first enrolled in public 2-year institutions and expecting to attain a degree or transfer to a 4-year institution had done so by the end of 2001; statistic obtained from Table 7b of U.S Department of Education, National Center for Education Statistics (2003-164).
[5] The six-year graduation rate for the 2007 cohort of first-time, full-time, degree-seeking students at public 4-year universities accepting less than 25.0 percent of applicants was 84.8 percent; SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Fall 2007 through Spring 2014, Graduation Rates component.
[6] The average six-year graduation rate for the 2007 cohort of first-time, full-time, degree-seeking students at public 4-year universities accepting between 75.0 and 100.0 percent of applicants was 50.2 percent; SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Fall 2007 through Spring 2014, Graduation Rates component.
[7] Six-year graduation rates for Black, Hispanic, and American Indian/Alaska Native students in the 2005 cohort of first-time, full-time degree-seeking students at broad-access public 4-year institutions are all less than 50.0 percent; statistics obtained from Table 376 of the 2012 Digest of Education Statistics, accessed here (on December 16, 2014):
http://nces.ed.gov/programs/digest/d12/tables/dt12_376.asp
[8] The percentage of students in the 2007 cohort of first-time, full-time, degree-seeking students first enrolled at broad-access 4-year institutions and 2-year institutions is 59.1 percent; SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Fall 2007 Enrollment component.

and Cheah, 2011), and many end up earning no more than those with only a high school diploma (Rosenbaum et al., 2015).

During the last ten years, the Institute and other research funding agencies have made substantial investments in postsecondary research projects.[9] Much of this research has focused on getting students into college and over the early hurdle of developmental (or remedial) coursework. For example, several Institute-funded projects have assessed, or are in the process of assessing, programs that reach out to and assist low-income and first generation students with applying to college and completing the Free Application for Federal Student Aid (FAFSA). The Center for the Analysis of Postsecondary Readiness is conducting a national survey of strategies for re-structuring developmental education, and is also evaluating both an alternate system for placing students into developmental coursework and an innovative curriculum for teaching developmental math (http://ccrc.tc.columbia.edu/research-project/center-analysis-postsecondary-readiness.html).

Within the past five years, the field has begun to identify promising strategies for encouraging students to persist during college, although most studies have not tracked students for long enough to assess degree completion. Researchers have identified positive impacts for: financial aid that supplements the Pell grant while enforcing modest academic progress requirements (Castleman and Long, in press; Barrow et al., 2014); social-psychological interventions that promote a sense of belonging to and a capability to succeed in the college environment (Walton and Cohen, 2011); enhanced student supports (Chaney, 2010); and coaching (Bettinger and Baker, 2011). Some of the most promising results have been obtained in studies assessing efforts to restructure educational programs or apply multi-pronged intervention strategies as means for promoting degree completion (Scrivener and Weiss, 2013).

While these studies have found positive impacts on academic progress and persistence, other studies evaluating similar strategies have produced null findings or findings that quickly fade (see, for example, Barnett et al., 2012; Visher et al., 2012). Also, many of the projects listed above fielded interventions within narrow settings or with small samples that did not include all degree-seeking student groups. Thus, it is too early to know whether the strategies work equally well in different settings or conditions, whether and how the strategies affect outcomes for a broader group of students, whether they can help students move all the way to completion, and whether they can be implemented at scale in ways that preserve their quality and impact.

The research base on college persistence and completion points to at least five areas of challenge for students that can also be leverage points for interventions seeking to boost completion:

- **Institutional barriers**. On the path from enrollment to completion, students interact with multiple divisions within their college, and often with multiple institutions. Complex institutional rules regarding course selection, sequencing, and transfer of credits can create unnecessary bottlenecks and pose barriers that impede students' degree completion. Possible reforms include improvements in information delivered to students about their credential and course options; simplification of course selection and scheduling procedures; use of administrative data to address bottlenecks for students as they move through the postsecondary pipeline; and systematic procedures that facilitate credit accumulation and degree completion (Rosenbaum et al., 2015). Some states are also introducing or strengthening policies to facilitate transfer of college credits across institutions (U.S. Government Accountability Office, 2005).

- **Financial burdens**. Many students, especially those from low-income families, struggle to cover the cost of enrollment and living expenses, and may take low-wage jobs or high-interest loans to make ends meet. They may lack important knowledge about their options for financing postsecondary education, and may experience need-based aid programs as complex and unpredictable. Although researchers have found mixed results when investigating the impact of financial aid on degree completion, well-designed financial aid programs have the potential to boost completion (Dynarski and Scott-Clayton, 2013). Several types of finance interventions hold

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[9] Between 2006 and 2014, IES invested $89.9 million in 57 postsecondary research projects.

promise, including those that: provide students with accurate and timely financial information; supplement the Pell grant while setting modest academic requirements; integrate multiple sources of financial and other resources (e.g., housing, books, and/or transportation); and simplify the FAFSA application process. Some states and cities (e.g., Tennessee and Chicago) have introduced policies to make college free for students who meet certain conditions.

- **Curriculum and pedagogy.** Without positive classroom experiences characterized by effective, organized instruction, students may become dissatisfied and lose the will to persist in their studies (Pascarella, Seifert, and Whitt, 2008). Despite their good intentions, instructors may lack the training, curriculum materials, or professional support to engage their students and support their students' learning. Professional development for college instructors has the potential to improve the quality of instruction in ways that support student learning and persistence (Weimer & Lenz, 1997). Although the research base is small, research projects and campus-based initiatives point to a handful of promising strategies including re-designing curricula in gateway courses to include meaningful problem-solving activities, adapt to individual students' learning needs, and use technology for analysis as well as assisting students in their coursework (Barker et al. 2004; Bell and Federman, 2013; Reddy et al. 2013).

- **Insufficient advising**. Throughout the college experience, students need to make high-stakes decisions (e.g., choice of college, choice of major, whether to persist), as well as more routine decisions regarding time management within the context of competing demands from school, family, and work. Students often lack sufficient information, skills, and support for making these decisions. Although research on student advising and support services has arrived at mixed results when considering persistence beyond the time of intervention (Bettinger, Boatman and Long, 2013), there remains the compelling prospect that adults and peers who understand how to navigate postsecondary pathways can help students make decisions that significantly increase their odds of completing degrees. Some institutions are developing technology systems that enhance and streamline advising and support services in order to improve student progress toward degree completion (Karp and Fletcher, 2014).

- **Social/psychological factors**. How students handle difficulty in school, how they conceive of intelligence, and how they view their social standing within the school can influence their level of effort and their relations with adults and peers at the school. By targeting students' interpretations of their school experiences, social-psychological interventions can induce students to take better advantage of learning opportunities within school, thus increasing overall performance while reducing group inequality (Yeager and Walton, 2011). If scaled effectively, they have the potential to augment reforms along the dimensions listed above. Social-behavioral competencies, such as self-regulation, goal setting, and monitoring progress toward goals, have the potential to enhance students' levels of persistence while engaging in difficult tasks (Farrington et al., 2012).

The College Completion Network is intended to support researchers who are working closely with states, postsecondary systems, or postsecondary institutions to develop and evaluate interventions that address one or more these challenges in order to identify strategies that will increase the number of students earning Associate's and Bachelor's degrees. The network will focus on interventions that are suitable for open- and broad-access institutions and that support students as they move through the college pipeline – i.e., from developmental education or freshman-year courses into and through their chosen fields of study. In addition, the network will focus on interventions that are operating or have the potential to operate at scale – e.g., in a state postsecondary education system or across multiple institutions, including Minority Serving Institutions (MSIs).[10] The ultimate goal of the College Completion Network is to provide evidence on a range of strategies that policymakers and college leaders may consider adopting or expanding in their states and institutions.

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[10] See *United States Department of Education Lists of Postsecondary Institutions Enrolling Populations with Significant Percentages of Undergraduate Minority Students*, https://www2.ed.gov/about/offices/list/ocr/edlite-minorityinst.html

Each Research Team in the College Completion Network will conduct the following:

(i) An **efficacy study** to measure the impacts and determine the costs of an intervention designed to support college completion. You have the option of studying an intervention that is fully developed or an intervention that requires some development before the efficacy study begins, provided that you are ready to begin the efficacy study by the beginning of the third year of the project.

In addition, members of the College Completion Network are expected to engage in **joint activities** that include:

(i) Meeting with other network members to discuss research plans and progress, give and receive constructive feedback, and identify ways to coordinate research activities;

(ii) Proposing supplementary activities that will be undertaken jointly by Network members to strengthen their work, such as development of common measures or exploratory research that will benefit several projects; and

(iii) Planning and conducting dissemination activities that are accessible and useful to policymakers, practitioners, and researchers engaged in efforts to increase degree completion.

b) General Requirements

Applications to the College Completion Network **must** meet the sample, outcomes, and setting requirements listed below in order to be responsive and sent forward for scientific peer review.

(1) Sample

- Your research **must** focus on students who are enrolled in a postsecondary institution, and are eligible for attaining an Associate's or Bachelor's degree.

- Your application **must** include plans to address degree completion for at least one subgroup of interest, which may include first-generation students; low-income students; and/or students from historically underrepresented groups, such as African American, Hispanic or Latino, and/or Native American students.

(2) Outcomes

- At a minimum, your study **must** include measures of progression through postsecondary education that are closely tied to degree completion (e.g., persistence from year-to-year, number of college credits earned, etc.).

- Efficacy studies of fully developed interventions **must** include degree completion outcomes. If the intervention requires development before the efficacy study begins, researchers are encouraged to include degree completion outcomes when it makes sense to do so (for example, if the study is taking place in a community college, degree completion outcomes may be possible within the five-year period allotted for the study).

(3) Setting

- Your research **must** be conducted at open- or broad-access institutions of higher education that are under either public or private non-profit control. These settings include institutions that accept all applicants, as well as institutions that accept approximately 75 percent or more of applicants.

c) Narrative Requirements

An application under the Scalable Strategies to Encourage College Completion Network grant program **must meet the requirements set out under (1) Project Narrative and (2) Awards** in order to be responsive and sent forward for scientific peer review. The requirements are the minimum necessary for an application to be sent forward for peer review. In order to improve the quality of your application, the Institute offers recommendations following each set of Project Narrative requirements.

Applications **must** also include a Data Management Plan as described in **(3) Data Management Plan**.

(1) Project Narrative

The 30-page Project Narrative for an application under the College Completion Network grant program **must** include four sections:

  (i) Significance

  (ii) Research plan

  (iii) Personnel

  (iv) Resources

a. Significance

The purpose of the Significance section is to provide a rationale for your approach to addressing the objectives of the College Completion Network. You should: explain your understanding of the issues the Research Network is meant to address; describe why it is important to test the chosen intervention strategy within the proposed setting; provide a theory of change for the impact of the intervention strategy; and describe how your program of research will inform policy and practice in open- or broad-access institutions.

Requirements: In order to be responsive and sent forward for peer review, applications **must** include a Significance section that:

  (i) Describes the intervention that will be the focus of your study.

Recommendations for a Strong Application: In order to address the above requirements, the Institute recommends that you include the following in your Significance section to provide a compelling rationale for your work.

- Discuss the primary challenges that stand in the way of increased degree completion among U.S. college students. You should focus on the challenges faced by student groups within open- and broad-access institutional settings, including the specific setting in which you will be conducting research.

- Describe how you collaborated with state or institutional leaders to plan your study, and how you will continue to work together during your research project. The Institute particularly encourages applications that reflect the participation of and input from system-level and/or institution-level leaders and staff.

- Present a conceptual framework that will guide the research design, data collection, and analysis plans described later in the proposal.

- Describe the intervention that will be the focus of your research, including its major features or components. Make clear how it differs from standard, business-as-usual practices or policy.

- Discuss the theoretical and empirical foundation for the intervention you have selected. Include a theory of change diagram to show how the intervention will lead to the desired student education outcomes (see Figure 1), and explain the theory in your narrative.
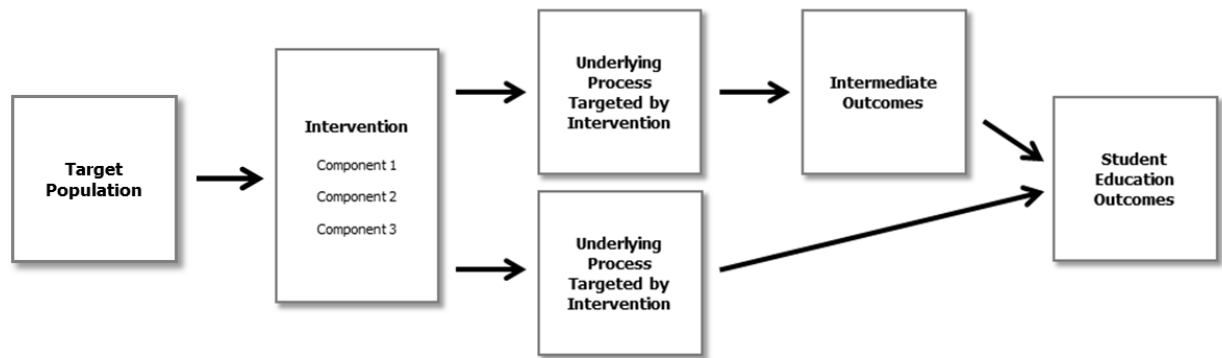
Figure 1. A diagram of a simple theory of change.

- Describe the research sites where you will conduct your study. Strong applications will focus on an intervention that is being used by, or developed for, a postsecondary system or a group of institutions.

- Describe your history working with the research sites and how you developed your research plans with input from relevant stakeholders. Explain their objectives for participating in the study.

- Discuss the number of students currently served by the intervention (if already operating), and that will be served during the course of your research project. Explain how the intervention has the potential to be scaled after your project, if shown to be effective.

b. **Research Plan**

The purpose of this section is to describe how you will conduct your study.

Requirements: In order to be responsive and sent forward for peer review, applications **must** include a Research Plan section that provides a description of the:

(i) Sample and Setting

(ii) Development process *(if you are proposing development work prior to launching the efficacy study)*

(iii) Research design

(iv) Power analysis

(v) Measures

(vi) Data analysis procedures

(vii) Cost analysis

Recommendations for a Strong Application: In order to address the above requirements, the Institute recommends that you include the following in your Research Plan section to strengthen its methodological rigor.

Sample and Setting:

- Discuss the population you intend to study, including key student subgroups, and how your sample and sampling procedures will allow you to draw inferences for this population.

- Define your sample and sampling procedures for the proposed study, including justification for exclusion and inclusion criteria.

- Describe strategies to increase the likelihood that students or other participants will join the study and remain in the study over the course of the evaluation.

Development Process (only if you are proposing development work):

- Describe the starting point for your development work (i.e., the stage you expect the intervention to be in when your project commences).

- Lay out your plan for carrying out a systematic, iterative, development process.[11] Discuss how you will assess the feasibility of the intervention.

- Make clear when you expect the development process to be completed and when you expect to begin implementing and testing the intervention. Note that for this competition, the Institute expects that you should be ready to conduct an efficacy study by the beginning of the third year of the project.

- Include a timeline that lays out the sequence of the development process. Timelines may be placed in either the Project Narrative or Appendix B but may only be discussed in the Project Narrative (Appendix B cannot include narrative).

Research Design:

- Describe how you will be able to make causal inferences based on the results from your design and how potential threats to internal validity will be addressed. Typical designs for assessing the efficacy of interventions include the following:

  - Randomized controlled trials are preferred whenever feasible because they have the strongest internal validity for causal conclusions. Clearly identify and present a convincing rationale for the unit of randomization (e.g., student, course, instructor, or college), and explain the procedures for random assignment to intervention or comparison conditions, including how the integrity of the assignment process will be ensured.

  - Regression discontinuity designs can also provide unbiased estimates of the effects of education interventions. Explain the appropriateness of the assignment variable, show that there is a true discontinuity, document that no manipulation of the assignment variable has occurred and that the compositions of the treatment and comparison groups do not differ in ways that would indicate selection bias, and

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[11] The development process often includes small-scale studies in which different components of or approaches to using the intervention are tried in order to obtain feedback for revision. The Institute does not require or endorse any specific model of iterative development and suggests that you review models that have been used to develop interventions (e.g., Fuchs and Fuchs, 2001; Diamond and Powell, 2011) to identify processes appropriate for your work. There is no ideal number of iterations (revise, implement, observe, revise). Identify and justify your proposed number of iterations based on the complexity of the intervention and its implementation. This process should continue until you determine that the intervention can be successfully used by the intended end users within the constraints of their postsecondary institution.

include sensitivity analyses to assess the influence of key procedural or analytic decisions on the results.

- o Quasi-experimental designs (other than a regression discontinuity design) can be proposed when randomization is not possible. Justify how the proposed design permits drawing causal conclusions about the effect of the intervention on the intended outcomes, explain how selection bias will be minimized or modeled,[12] and discuss those threats to internal validity that are not addressed convincingly by the design and how conclusions from the research will be tempered in light of these threats. Because quasi-experimental designs can meet the WWC's standards for evidence with reservations only, it is also important to detail how you will ensure that the study meets these standards (e.g., by establishing baseline equivalence between treatment and comparison groups and preventing high and/or differential attrition).

- For all types of research designs, including those using random assignment, explain how you will document that the intervention and comparison conditions are equivalent at the outset of the study and how you will document the level of bias occurring from overall and differential attrition rates.

- Describe and justify the counterfactual. In evaluations of education interventions, individuals in the comparison group typically receive some kind of treatment. It may be a well-defined alternative treatment or a less well-defined standard or frequent practice across institutions or systems. A clear description of the intervention and the counterfactual helps reviewers decide whether the intervention is sufficiently different from what the comparison group receives to produce different student education outcomes.

- Describe strategies or existing conditions that will reduce potential contamination between treatment and comparison groups.

Power Analysis:

- Discuss the statistical power of the research design to detect a reasonably expected and minimally important effect of the intervention on the student education outcomes, and consider how the clustering of participants (e.g., students in courses, campuses, or institutions) will affect statistical power.

- Identify the minimum effect of the intervention that you will be able to detect, justify why this level of effect would be expected from the intervention, and explain why this would be a practically important effect.

- Detail the procedure used to calculate either the power for detecting the minimum effect or the minimum detectable effect size. Include the following:

  - o The statistical formula you used.

  - o The parameters with known values used in the formula (e.g., number of clusters, number of participants within the clusters).

  - o The parameters whose values are estimated and how those estimates were made (e.g., intraclass correlations, role of covariates).

  - o Other aspects of the design and how they may affect power (e.g., stratified sampling/blocking, repeated observations).

  - o Predicted attrition and how it was addressed in the power analysis.

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[12] For more information, see Shadish, W. R., Cook, T. D., and Campbell, D. T. (2002). Experimental and quasi-experimental designs for generalized causal inference. Boston, MA: Houghton Mifflin Company.

- Provide a similar discussion regarding power for any causal analyses to be done using subgroups of the proposed sample.

Outcome Measures:

- For full-length efficacy studies, describe your measures of academic degree completion (e.g., on-time completion of an Associate's or Bachelor's degree, or graduation within 150 percent of normal time for Associate's degrees).

- For shorter studies that include development work, describe your measures of progress through postsecondary education that are closely tied to degree completion (e.g., persisting from year to year, completing college-level credits, or progressing to Junior status for four-year college students).

- Include short-term outcomes (e.g., course completion, semester-to-semester persistence) if your theory of change suggests that the intervention will affect these outcomes on the way to impacting degree completion.

- For interventions designed to directly change the instructional or institutional environment and, in doing so, indirectly affect student outcomes, provide measures of the intermediate outcomes (e.g., institutional procedures; faculty, instructor, or support staff practices; or social/psychological factors) that are hypothesized to be directly linked to the intervention.

Moderators and Mediators:

- Analysis of moderators and mediators can strengthen your application. Such analyses can make your research more useful to policymakers and practitioners by helping to explain how or under what conditions a program or policy improves student education outcomes. Most efficacy studies are not designed or powered to test the effects of specific mediating variables; however, exploratory analyses can be used to better understand potential mediators of the intervention.

- Focus on a small set of moderators for which there is a strong theoretical and/or empirical base to expect they will moderate the impact of the intervention on the student education outcomes measured. Give particular consideration to factors that may affect the generalizability of the study (e.g., whether the intervention works for some groups of students but not others, or in institutions or settings with particular characteristics).

Determining Fidelity of Implementation and Comparison Group Practice:

- Strong applications will include measures of the fidelity of implementation of the intervention and describe how they capture the core components of the intervention. Fidelity of implementation measures should be sufficient in quality to facilitate analysis of factors that mediate the intervention's impact. If needed, you can propose devoting a short period of time (e.g., 2-6 months) to develop a measure of fidelity of implementation or comparison group practice. [13]

- Strong applications will also include measures of comparison group practices, so that you can compare intervention and comparison groups on the implementation of critical features of the intervention and determine whether there was clear distinction in what the groups received or whether both groups received key elements of the intervention.

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[13] As efficacy studies may take place under ideal conditions, an early finding of low fidelity during the first year of implementation can be addressed (e.g., by increasing implementation support and monitoring activities, addressing obstacles to implementation, replacing or supplementing the sample in ways that preserve the design). Findings of unexpected similar practice in the comparison group may also be addressed (e.g., by further differentiation of the intervention or additional data collection to determine how similar practice is in both groups). Such actions are to prevent studies that find no impacts of an intervention but cannot determine whether the finding was due to the intervention or its implementation.

Data Analysis:

- Describe your data analysis procedures for all analyses (e.g., impact study, subgroup analyses, fidelity of implementation study), including both quantitative and qualitative methods.

- Make clear how the data analyses directly answer your research questions.

- Address any clustering of students in classrooms, courses, or colleges.

- Discuss how exclusion from testing and missing data will be handled in your analysis.

- If you intend to link multiple data sets, provide sufficient detail for reviewers to judge the feasibility of the linking plan.

Cost Analysis:

- Include a description of your plan to conduct a cost analysis. The cost analysis should help colleges and systems understand the monetary costs of implementing the intervention (e.g., expenditures for personnel, facilities, equipment, materials, training, and other relevant inputs). Annual costs should be assessed to adequately reflect expenditures across the lifespan of the program (e.g., start-up costs and maintenance costs). Intervention costs can be contrasted with the costs of comparison group practice to reflect the difference between them. The Institute is not requiring a cost-benefit, cost-utility, or cost-effectiveness analysis, although such analyses can be proposed.

- In your plan, you should include information about the following:

  - How you will identify all potential expenditures;

  - How you will compute per-unit costs for each expenditure;

  - How you will separate development or start-up costs from annual maintenance costs and how you will estimate the total cost of each; and

  - The degree to which your cost analysis, based on your study's sample, will generalize to other institutions and systems.

Timeline:

- Provide a timeline for each step in your project including such actions as sample selection and assignment, baseline data collection, development process, intervention implementation, ongoing data collections, fidelity of implementation and comparison group practice study, impact analysis, and dissemination.

- Indicate procedures to guard against bias entering into the data collection process (e.g., pretests occurring after the intervention has been implemented or differential timing of assessments for treatment and control groups).

- Timelines may be placed in either the Project Narrative or Appendix B but may only be discussed in the Project Narrative (Appendix B cannot include narrative).

c. Personnel

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

Requirements: In order to be responsive and sent forward for peer review, applications **must** include a Personnel section that:

(i) Identifies the key members of the Research Team and discusses their qualifications.

Recommendations for a Strong Application: In order to address the above requirement, the Institute recommends that you include the following in your Personnel section to demonstrate that your team possesses the appropriate training and experience, and will commit sufficient time to competently implement the proposed research.

- Identify personnel at the primary applicant institution, any subaward institutions, and any consultants.

- Identify and briefly describe the following for all key personnel (i.e., Principal Investigator, co-Principal Investigators, co-Investigators) on the project team: qualifications to carry out the proposed work; roles and responsibilities within the project; percent of time and calendar months per year (academic plus summer) to be devoted to the project; and past success at disseminating research findings in peer-reviewed scientific journals and to policymaker or practitioner audiences.

- Identify the management structure and procedures that will be used to keep your project on track and ensure the quality of its work. This is especially important for projects involving multiple institutions carrying out different tasks that must be coordinated and/or integrated.

- Provide an organization chart to illustrate how key personnel will relate to one another on the project (this chart can be placed in Appendix B).

d. Resources

The purpose of this section is to explain how you have the institutional capacity to complete a project of this size and complexity and to disseminate the results.

Requirements: In order to be responsive and sent forward for peer review, applications **must** include a Resources section that describes the resources to:

(i) Conduct the project

(ii) Disseminate the results

Recommendations for a Strong Application: In order to address the above requirements, the Institute recommends that you include the following in your Resources section to demonstrate that your team has: a plan for acquiring or accessing the facilities, equipment, supplies, and other resources required to support the conduct and dissemination of the proposed project; and the commitments of each partner for the implementation and success of the project.

Resources to conduct the project:

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

- Describe your access to resources available at the primary institution and any subaward institutions.

- Describe your plan for acquiring any resources that are not currently accessible, will require significant expenditures, and are necessary for the successful completion of the project (e.g., equipment, test materials, curriculum or training materials).

- Describe your access to the colleges or universities where the research will take place. Include letters of agreement in Appendix D documenting the participation and cooperation of the institutions. Convincing letters will convey that the organizations understand what their participation in the study will involve (e.g., working with the research team to finalize research plans, providing access to data, implementing procedures to prevent control group members from receiving the intervention, etc.).

- Include information about financial incentives for study sites to participate in the research, if applicable.

- Your project budget may include funding for colleges or universities to develop or strengthen their interventions (e.g., purchase a new curriculum, hire extra student advisors, etc.). The majority of the project budget, however, should be devoted to your research activities.

- Describe your access to any data sets that you will require. Include letters of agreement, data licenses, or existing Memoranda of Understanding in Appendix D to document that you will be able to access the data for your proposed use.

Resources to disseminate the results:

- Describe your capacity to disseminate information about the findings from your research. For example, your university or research firm may have a communications office that can assist with disseminating the results of your project, or you may have members of your research team who have experience disseminating research to nontechnical audiences.

- Identify the audiences that you expect will be most likely to benefit from your research (e.g., other researchers, federal or state policymakers, college and university administrators, college and university faculty or counselors, students, and others).

- Discuss the ways in which you intend to reach these audiences through the major publications, presentations, and products you expect from your project.

- Keep in mind that some dissemination activities, including meetings with national and state policymakers and hosting of a Network website, will be coordinated by the Network Lead. In your budget, you should allocate sufficient time to participate in or contribute to these activities.

- Allocate time for the PI and other key personnel to participate in at least two in-person network meetings in the first year and at least one in-person network meeting each year thereafter. For budgeting purposes, assume the meetings will take place in Washington, D.C.

(2) Awards

All College Completion Network projects **must** conform to the following limits on duration and cost:

Duration Maximum:

- **The maximum duration of a College Completion Research Network project is 5 years.** An application of this type proposing a project length of greater than 5 years will be deemed nonresponsive to the Request for Applications and will not be accepted for review.

Cost Maximum:

- **The maximum award for a College Completion Research Network project is $4,000,000 (total cost = direct costs + indirect costs).** An application of this type proposing a budget higher than the maximum award will be deemed nonresponsive to the Request for Applications and will not be accepted for review.

In addition to these awards, the Institute will allocate up to $1,000,000 for the Network to conduct **supplementary activities**. Applicants should **not** include a budget for supplementary activities in their applications, as these funds are intended for use by the entire Network. The Network Lead will negotiate a budget for supplementary activities with the Institute after the Network is formed.

Maximum Number of Awards:

- The Institute intends to make up to **four awards** to research teams to form the College Completion Network.

(3) Data Management Plan

Applications for the Research Team must include a Data Management Plan (DMP, no more than five pages in Appendix E) that describes your plans for making the final research data from the proposed projects accessible to others. Resources that may be of interest to researchers in developing a data management plan can be found at http://ies.ed.gov/funding/researchaccess.asp.

DMPs are expected to differ depending on the nature of the project and the data collected. By addressing the items identified below, your DMP describes how you will meet the requirements of the IES policy for data sharing. The DMP should include the following:

- Type of data to be shared.

- Procedures for managing and for maintaining the confidentiality of Personally Identifiable Information.

- Roles and responsibilities of project or institutional staff in the management and retention of research data, including a discussion of any changes to the roles and responsibilities that will occur should the Project Director/Principal Investigator and/or co-Project Directors/co-Principal Investigators leave the project or their institution.

- Expected schedule for data access, including how long the data will remain accessible (at least 10 years) and acknowledgement that the timeframe of data accessibility will be reviewed at the annual progress reviews and revised as necessary.

- Format of the final dataset.

- Dataset documentation to be provided.

- Method of data access (e.g., provided by the Project Director/Principal Investigator, through a data archive) and how those interested in using the data can locate and access them.

- Whether or not a data agreement that specifies conditions under which the data will be shared will be required.

- Any circumstances that prevent all or some of the data from being made accessible. This includes data that may fall under multiple statutes and, hence, must meet the confidentiality requirements for each applicable statute (e.g., data covered by Common Rule for Protection of Human Subjects, FERPA and HIPAA).

The costs of the DMP can be covered by the grant and should be included in the budget and explained in the budget narrative. The peer-review process will not include the DMP in the scoring of the scientific merit of the application. The Institute's Program Officers will be responsible for reviewing the completeness of the proposed DMP. If your application is being considered for funding based on the scores received during the peer-review process but your DMP is determined incomplete, you will have to complete your DMP before an award will be made.

5. Scalable Strategies to Encourage College Completion: <u>Network Lead Requirements</u>

Program Officer: Dr. James Benson (202-219-2129; James.Benson@ed.gov)

a) Overview

The Institute requests applications from institutions interested in serving as Network Lead for the College Completion Network. The Network Lead is responsible for making sure the network runs smoothly and accomplishes its goals and objectives. The Network Lead should possess subject-area expertise in postsecondary education, and should be committed to helping the network produce a body of work that will be informative and useful to policymakers, practitioners, and other researchers. The ideal Network Lead will show respect for different perspectives, foster collaboration, and encourage innovation.

The Institute welcomes applicants' ideas on how best to structure and carry out the Network Lead role. The minimum responsibilities include the following:

(i) **Planning and Facilitating Network Meetings.** The Institute envisions network meetings as serving multiple purposes: building interpersonal and cross-team relationships, sharing ideas and information, encouraging constructive review and feedback, planning and launching joint studies, and coordinating dissemination. The Network Lead is responsible for planning and facilitating at least two in-person meetings during the first year the network is in operation, and at least one in-person meeting a year for the next four years. Additional in-person and teleconference meetings may be arranged as needed, and may be convened as the Network Lead deems appropriate. The Institute requests that at least one in-person meeting each year be held in Washington, D.C. to allow participation by Institute staff, and will provide meeting space to help reduce costs.

(ii) **Coordinating Network Supplementary Activities.** The Institute will set aside $1,000,000 for the network to conduct supplementary activities that will advance the network's goals. For example, network members may want to work together on common measures for their studies, conduct additional exploratory research, or co-author and disseminate a synthesis of the network's research. The Network Lead will work with network members to set priorities for supplementary activities and will coordinate with the Institute to gain approval. The Institute will begin accepting proposals for supplementary activities from the network starting in the second year that the network is in operation, and will review proposals on a rolling basis to support time-sensitive research.

(iii) **Developing and Hosting a Network Website.** The Institute views the network website as an important vehicle for communicating the goals and objectives of the network, describing the projects of individual Research Teams, and making the network's research papers and products available to the public at no cost. Ideally, the website will include graphics and interactive features to make it engaging and useful for visitors.

(iv) **Organizing Briefings and Presentations.** The Institute expects the Network Lead to organize briefings or presentations for federal and state policymakers who are working on college completion issues. These events should be two-directional, allowing network members the opportunity to discuss their research while at the same time eliciting feedback to improve the quality and relevance of the network's various projects. The Network Lead is also expected to work with members to plan presentations or discussions at meetings and conferences attended by practitioners and other researchers.

b) General Requirements

Only applicants for a College Completion Network Research Team will be considered for Network Lead. If you wish to be considered for the role, you **must** submit an application that describes your plans and qualifications. You should make sure you provide sufficient information in your Network Lead proposal for

reviewers to understand your plans and qualifications, since the Network Lead application will be reviewed and scored separately from your other application to be a network member. You are allowed up to 10 pages of narrative for your Network Lead application. Your application **must meet the requirements set out under b) General Requirements (this section) and c) Awards** in order to be responsive and sent forward for scientific peer review.

Requirements: In order to be responsive and sent forward for peer review, your application for Network Lead **must** include:

(i) A description of your plans.

(ii) A description of your qualifications.

Recommendations for a Strong Application: In order to address the above requirements, the Institute recommends that you include the following in your application:

Network Plans:

- Describe your understanding of the network's goals as they relate to the current fields of research, policy, and practice regarding College Completion.

- Describe your vision of how the Network Lead will help the network accomplish its goals.

- Discuss your approach to the four minimum requirements for Network Lead:

  o Planning and facilitating network meetings.

  o Coordinating network supplementary studies.

  o Developing and hosting a network website.

  o Organizing briefings and presentations.

- Describe how you envision network meetings to run. You might consider including a proposed agenda for a kickoff meeting in your narrative or in Appendix B.

- Describe your approach to communicating with policymakers, practitioners, and researchers outside the network regarding the network's goals and objectives.

- Provide at least one example of a project or activity that you think would benefit from collaboration by network members.

- Discuss some of the major challenges you expect the network might face. These might include challenges internal to the network (e.g., keeping the group focused and on track) or external challenges (e.g., delivering findings of null effects to policymakers and practitioners in a way that helps them move forward). Describe how, as Network Lead, you would work with network members to overcome these challenges.

- Discuss your plans for incorporating early career researchers (i.e., individuals who have earned their Ph.D. within the last five years) into network meetings and activities.

Qualifications to be Network Lead:

- Discuss the PI's professional background as it pertains to the network. Attach a biographical sketch to the Research and Related Senior/Key Person Profile (Expanded) form.

- Describe the PI's past experience working in a research network or collaboration, either as a member or a leader. Discuss what the network or collaboration intended to do and what it actually accomplished, along with any lessons you drew from this experience.

- Identify key personnel who will be working to support your institution as Network Lead and the roles they will play. Include information on the educational background and professional

experience of key personnel. Attach their biographical sketches to the [Research and Related Senior/Key Person Profile (Expanded)](#) form.

- Provide information on the percentage of time each key personnel will devote to the Network Lead role.

- Discuss what resources your university, research firm, or organization provides for the Network Lead role (e.g., a conferencing center, communications office, etc.).

c) Awards

Duration Maximum:

- **The maximum duration of a Network Lead award is 5 years.** An application of this type proposing a project length of greater than 5 years will be deemed nonresponsive to the Request for Applications and will not be accepted for review.

Cost Maximum:

- **The maximum award for the College Completion Network Lead is $1,000,000 (total cost = direct costs + indirect costs).** An application of this type proposing a budget higher than the maximum award will be deemed nonresponsive to the Request for Applications and will not be accepted for review.

Maximum Number of Awards:

- The Institute will make no more than **one** award for the College Completion Network Lead.

PART III: COMPETITION REGULATIONS AND REVIEW CRITERIA

A. FUNDING MECHANISMS AND RESTRICTIONS

1. Mechanism of Support

The Institute intends to award cooperative agreements pursuant to this Request for Applications.

2. Funding Available

Although the Institute intends to support the network topics 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. The Institute makes its awards to the highest quality applications, as determined through scientific peer review, regardless of topic or goal.

The size of the award depends on the network topic and network role. Please attend to the duration and budget maximums set for each network topic and role in Part II. **If you request an award duration longer than the maximum or a budget higher than the maximum, your application will be deemed nonresponsive and will not be reviewed.**

Network Topic	Network Role	Maximum Number of Awards	Maximum Grant Duration	Maximum Grant Award
Supporting Early Learning from Preschool through Early Elementary School Grades	Research Team	4	5 years	$4,500,000 ($4,000,000 for Primary Research and $500,000 for Assessment work)
	Assessment Team	1	5 Years	$2,000,000
	Network Lead	1	5 Years	$2,000,000

Network Topic	Network Role	Maximum Number of Awards	Maximum Grant Duration	Maximum Grant Award
Scalable Strategies to Support College Completion	Research Team	4	5 years	$4,000,000
	Network Lead	1	5 Years	$1,000,000

3. Cooperative Agreement

Through the terms of the cooperative agreement, grantees will work with the Institute to plan work related to Research Team, Network Lead, and Assessment Team (Early Learning Network only) activities.

4. Special Considerations for Budget Expenses

Indirect Cost Rate

When calculating your expenses for research conducted in field settings, you should apply your institution's federally negotiated off-campus indirect cost rate. Questions about indirect cost rates should

be directed to the U.S. Department of Education's Indirect Cost Group: http://www2.ed.gov/about/offices/list/ocfo/fipao/icgindex.html.

Institutions, both primary grantees and subawardees, not located in the territorial U.S. cannot charge indirect costs.

Meetings and Conferences

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

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

5. Program Authority

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

6. Applicable Regulations

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

B. ADDITIONAL AWARD REQUIREMENTS

1. Public Availability of Data and Results

Recipients of awards are expected to publish or otherwise make publicly available the results of the work supported through this program. Institute-funded investigators must submit final manuscripts resulting from research supported in whole or in part by the Institute to the Educational Resources Information Center (ERIC, http://eric.ed.gov) upon acceptance for publication. An author's final manuscript is defined as the final version accepted for journal publication and includes all graphics and supplemental materials that are associated with the article. The Institute will make the manuscript available to the public through ERIC no later than 12 months after the official date of publication. Investigators and their institutions are responsible for ensuring that any publishing or copyright agreements concerning submitted articles fully comply with this requirement.

Data Management Plan

Research Team applications under both networks must include a Data Management Plan (DMP, no more than five pages in Appendix E) that describes your plans for making the final research data from the proposed projects accessible to others. Resources that may be of interest to researchers in developing a data management plan can be found at http://ies.ed.gov/funding/researchaccess.asp.

DMPs are expected to differ depending on the nature of the project and the data collected. By addressing the items identified below, your DMP describes how you will meet the requirements of the IES policy for data sharing. The DMP should include the following:

- Type of data to be shared.

- Procedures for managing and for maintaining the confidentiality of Personally Identifiable Information.

- Roles and responsibilities of project or institutional staff in the management and retention of research data, including a discussion of any changes to the roles and responsibilities that will occur should the Project Director/Principal Investigator and/or co-Project Directors/co-Principal Investigators leave the project or their institution.

- Expected schedule for data access, including how long the data will remain accessible (at least 10 years) and acknowledgement that the timeframe of data accessibility will be reviewed at the annual progress reviews and revised as necessary.

- Format of the final dataset.

- Dataset documentation to be provided.

- Method of data access (e.g., provided by the Project Director/Principal Investigator, through a data archive) and how those interested in using the data can locate and access them.

- Whether or not a data agreement that specifies conditions under which the data will be shared will be required.

- Any circumstances that prevent all or some of the data from being made accessible. This includes data that may fall under multiple statutes and, hence, must meet the confidentiality requirements for each applicable statute (e.g., data covered by Common Rule for Protection of Human Subjects, FERPA and HIPAA).

The costs of the DMP can be covered by the grant and should be included in the budget and explained in the budget narrative. The peer-review process will not include the DMP in the scoring of the scientific merit of the application. The Institute's Program Officers will be responsible for reviewing the completeness of the proposed DMP. If your application is being considered for funding based on the scores received during the peer-review process but your DMP is determined incomplete, you will have to complete your DMP before an award will be made.

2. Special Conditions on Grants

The Institute may impose special conditions on a grant if the grantee is not financially stable, has a history of unsatisfactory performance, has an unsatisfactory financial or other management system, has not fulfilled the conditions of a prior grant, or is otherwise not responsible.

3. Demonstrating Access to Data and Authentic Education Settings

The research you propose to do will most likely require that you have (or will obtain) access to authentic education settings (e.g., classrooms, schools, districts), secondary data sets, or studies currently under way. In such cases, you will need to provide evidence that you have access to these resources prior to

receiving funding. Whenever possible, include letters of agreement in [Appendix D](#) from those who have responsibility for or access to the data or settings you wish to incorporate when you submit your application. Even in circumstances where you have included such letters with your application, **the Institute may require additional supporting evidence prior to the release of funds**. If you cannot provide such documentation, the Institute may not award the grant or may withhold funds.

You will need supporting evidence of partnership or access if you are:

- *Conducting research in or with authentic education settings* - If your application is being considered for funding based on scientific merit scores from the peer-review panel and your research relies on access to authentic education settings (e.g., schools), you will need to provide documentation that you have access to the necessary settings in order to receive the grant. This means that if you do not have permission to conduct the proposed project in the necessary number of settings at the time of application, you will need to provide documentation to the Institute 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, the Institute may ask you to provide documentation that the settings originally recruited for the application are still willing to partner in the research.

- *Using secondary data sets* - If your application is being considered for funding based on scientific merit scores from the peer-review panel and your research relies on access to secondary data sets (such as federally-collected data sets, 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 data sets in order to receive the grant. This means that if you do not have permission to use the proposed data sets at the time of application, you must provide documentation to the Institute from the entity controlling the data set(s) before the grant will be awarded. This documentation must indicate that you have permission to use the data for the proposed research for the time period discussed in the application. If you obtained permission to use a proposed data set prior to submitting your application, the Institute may ask you to provide updated documentation indicating that you still have permission to use the data set to conduct the proposed research during the project period.

- *Building off of existing studies -* You may propose studies that piggyback onto an ongoing study (i.e., that require access to subjects and data from another study). In such cases, the Principal Investigator of the existing study should be one of the members of the Research Team or Assessment Team applying for the grant to conduct the new project.

In addition to obtaining evidence of access, the Institute strongly advises applicants to establish a written agreement, within 3 months of receipt of an award, among all key collaborators and their institutions (e.g., Principal and Co-Principal Investigators) regarding roles, responsibilities, access to data, publication rights, and decision-making procedures.

C. OVERVIEW OF APPLICATION AND PEER REVIEW PROCESS

1. Submitting a Letter of Intent

The Institute strongly encourages potential applicants to submit a Letter of Intent by June 4, 2015. Letters of Intent are optional, non-binding, and not used in the peer review of a subsequent application. When you submit a Letter of Intent, one of the Institute's Program Officers will contact you regarding your proposed research to offer assistance. The Institute also uses the Letter of Intent to identify the expertise needed for the scientific peer-review panels and to secure a sufficient number of reviewers to handle the anticipated number of applications. Should you miss the deadline for submitting a Letter of

Intent, you still may submit an application. If you miss the Letter of Intent deadline, the Institute asks that you inform the relevant program officer of your intention to submit an application.

Letters of Intent are submitted online at (https://iesreview.ed.gov). **Select the Letter of Intent form for the topic under which you plan to submit your application**. The online submission form contains fields for each of the seven content areas listed below. Use these fields to provide the requested information. The project description should be single-spaced and should not exceed one page (about 3,500 characters).

- Descriptive title

- Network Topic (i.e., Early Learning or College Completion)

- Network role(s) (e.g., Research Team, Assessment Team, Network Lead)

- Brief description of the proposed Network project

- Name, institutional affiliation, address, telephone number and e-mail address of the Principal Investigator and any Co-Principal Investigators

- Name and institutional affiliation of any key collaborators and contractors

- Duration of the proposed project (attend to the Duration maximum)

- Estimated total budget request (attend to the Budget maximum)

You may use the same Letter of Intent to indicate whether you plan to submit a proposal to be a network member and to be Network Lead.

2. Application Processing

Applications must be submitted electronically and received by 4:30:00 p.m., Washington, DC time on August 6, 2015 through the Internet using the software provided on the Grants.gov website: http://www.grants.gov/. You must follow the application procedures and submission requirements described in Part IV Preparing Your Application and Part V Submitting Your Application and the instructions in the User Guides provided by Grants.gov http://www.grants.gov/web/grants/applicants/applicant-resources.html.

After receiving the applications, Institute staff will review each application for compliance and responsiveness to this Request for Applications. Applications that do not address specific requirements of this request will not be considered further.

Once you formally submit an application, Institute staff will not comment on its status until the award decisions are announced (no later than December 15, 2015) except with respect to issues of compliance and responsiveness. This communication will come through the Applicant Notification System (https://iesreview.ed.gov/).

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

3. Peer Review Process

The Institute 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 Institute's website, http://ies.ed.gov/director/sro/peer_review/application_review.asp, by a panel of scientists who have substantive and methodological expertise appropriate to the program of research and Request for Applications.

Each compliant and responsive application is assigned to one of the Institute's scientific review panels. 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, the Institute calculates an average overall score for each application and prepares a preliminary rank order of applications before the full peer-review panel convenes to complete the review of applications.

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

4. Review Criteria for Scientific Merit

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

Research Team and Assessment Team applications

a) Significance

Does the applicant provide a compelling rationale for the significance of the project as defined in the Significance section for the topic under which the applicant is submitting the application?

b) Research Plan

Does the applicant meet the methodological requirements and address the recommendations described in the Research Plan section for the topic under which the applicant is submitting the application?

c) Personnel

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

d) Resources

Does the applicant have the facilities, equipment, supplies, and other resources required to support the proposed activities? Do the commitments of each partner show support for the implementation and success of the project? Does the applicant have adequate capacity to disseminate results to a range of audiences in ways that are useful to them and reflective of the type of research done?

Network Lead applications

a) Plan

Does the applicant provide a clear description of the major goals of the Network? Does the applicant describe a clear plan for how the Network will function? Does the applicant describe plans for working with Network members to generate plans for supplemental activities, leading Network meetings, and organizing dissemination efforts? For the Early Learning Network, does the applicant present a plan for meeting with Preschool Development Grant recipients and serving as an information source for early childhood practitioners who seek advice on evaluating their programs?

b) Qualifications

Does the PI have expertise in the content area? Does the PI bring experience working in a research network as either a member or a leader? Does the applicant organization have the capacity to provide administrative and logistic support for the Network? For the Early Learning Network, does the applicant organization have the capacity to provide research guidance to early childhood practitioners via the internet and/or other forums?

5. Award Decisions

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

- Scientific merit as determined by 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.

- Availability of funds.

- Because of the place-based nature of the Early Learning Network's research, the Institute will also consider the location in which the research is taking place so that no more than one Research Team is working in the same (or essentially the same) geographic location.

PART IV: PREPARING YOUR APPLICATION

A. OVERVIEW

The application contents – individual forms and their PDF attachments – represent the body of an application to the Institute. All applications for Institute funding must be self-contained. As an example, reviewers are under no obligation to view an internet website if you include the site address (URL) in the application. In addition, **you may not submit additional materials directly to the Institute after the application package is submitted**.

B. GRANT APPLICATION PACKAGE

The Application Package for this competition (84-305N2016) provides all of the forms that you must complete and submit. The application form approved for use in the competition specified in this Request for Applications is the government-wide SF-424 Research and Related (R&R) Form (OMB Number 4040-0001).

1. Date Application Package is Available on Grants.gov

The Application Package will be available on http://www.grants.gov/ by May 21, 2015.

2. How to Download the Correct Application Package

To find the correct downloadable Application Package, you must first search by the CFDA number for this research competition without the alpha suffix. To submit an application to the Research Networks Focused on Critical Problems of Policy and Practice program, you must search on: CFDA 84.305.

The Grants.gov search on CFDA 84.305 will yield more than one Application Package. For the Research Networks Focused on Critical Problems of Policy and Practice program, you must download the Application Package marked:

- Research Networks Focused on Critical Problems of Policy and Practice CFDA 84.305N

You must download the Application Package that is designated for this grant competition. If you use a different Application Package, even if it is for another Institute competition, the application will be submitted to the wrong competition. Applications submitted using the incorrect application package run the risk of not being reviewed according to the requirements and recommendations for the Research Networks Focused on Critical Problems of Policy and Practice competition.

See Part V Submitting Your Application, for a complete description of the forms that make up the application package and directions for filling out these forms.

C. GENERAL FORMATTING

For a complete application, you must submit the following as individual attachments to the R&R forms that are contained in the application package for this competition in Adobe Portable Document Format (PDF):

- Project Summary/Abstract;
- Project Narrative and, if applicable, Appendix A, Appendix B, Appendix C, Appendix D, and Appendix E (all together as one PDF file);
- Bibliography and References Cited;
- Research on Human Subjects Narrative (i.e., Exempt or Non-Exempt Research Narrative);
- A Biographical Sketch for each senior/key person;

- A List of Current and Pending Support for each senior/key person;

- A Narrative Budget Justification for the total Project budget; and

- Subaward Budget(s) that has (have) been extracted from the R&R Subaward Budget (Fed/Non-Fed) Attachment(s) Form, if applicable.

Information about the formatting requirements for all of these documents except the Subaward budget attachment (see Part V.E.6) is provided below.

1. Page and Margin Specifications

For all Institute research 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 six lines of type within a vertical inch.

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

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

5. Graphs, Diagrams, and Tables

You are encouraged to use black and white in graphs, diagrams, tables, and charts. If color is used, you should ensure that the material reproduces well when 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.

D. PDF ATTACHMENTS

1. Project Summary/Abstract

a) Submission

You must submit the project summary/abstract as a separate PDF attachment at Item 7 of the Other Project Information form (see Part V.E.4 Research & Related Other Project Information).

b) Page limitations

The project summary/abstract is limited to one single-spaced page.

c) Content

The project summary/abstract should include the following:

- **Title** of the proposed project.
- The **topic** under which the applicant is applying (e.g., "Supporting Early Learning from Preschool through Early Elementary School Grades," "Scalable Strategies to Support College Completion").
- **Purpose**: A brief description of the purpose of the project and its significance for improving education outcomes for U.S. students.
- **Setting**: A brief description of the location (e.g., state or states) where the research will take place and other important characteristics of the locale (e.g., urban/suburban/rural).
- **Sample**: A brief description of the sample that will be involved in the study (e.g., number of participants, age or grade level, race/ethnicity, SES).
- **Intervention/Assessment**: If applicable, a brief description of the intervention or assessment to be developed, evaluated, or validated.
- **Control Condition**: If applicable, a brief description of the control or comparison condition (i.e., who the participants in the control condition are and what they will experience).
- **Research Design and Methods**: Briefly describe the major features of the design and methodology to be used (e.g., randomized controlled trial, quasi-experimental design, mixed method design; iterative design process).
- **Key Measures:** A brief description of key measures and outcomes.
- **Data Analytic Strategy**: A brief description of the data analytic strategy that will be used to answer research questions.

Please see http://ies.ed.gov/ncer/projects for examples of the content to be included in your project summary/abstract.

2. Project Narrative

a) Submission

You must submit the project narrative as a separate PDF attachment at Item 8 of the Other Project Information form (see Part V.E.4 Research & Related Other Project Information).

b) Page limitations

The page limitations for the project narrative differ by network topic and role, as shown below:

Network Topic	Network Role	Page Limitation
Supporting Early Learning from Preschool through Early Elementary School Grades	Research Team	30
	Assessment Team	25
	Network Lead	15

Network Topic	Network Role	Page Limitation
Scalable Strategies to Support College Completion	Research Team	30
	Network Lead	10

Applicants are advised to adhere to these page limits. If applications go over the limit, the Institute will remove the excess pages before forwarding the applications to peer review.

To help reviewers locate information and conduct the highest quality review, you should write a concise and easy to read narrative, with pages numbered consecutively using the header or footer function to place numbers at the top or bottom right-hand corner.

c) Format for citing references in text

To ensure that all applicants have the same amount of available space in which to describe their project in the project narrative, use the author-date style of citation (e.g., James, 2004), such as that described in the Publication Manual of the American Psychological Association, 6th Ed. (American Psychological Association, 2009).

d) Content

Applications for Research Team and Assessment Team **must** include four sections in order to be compliant with the requirements of this Request for Applications: (1) Significance, (2) Research Plan, (3) Personnel, and (4) Resources. Applications for Network Lead **must** include two sections: (1) Plans and (2) Qualifications. Information to be included in each of these sections is detailed in Part II Network Requirements. **The information you include in each of these four sections will provide the majority of the information on which reviewers will evaluate the application**.

3. Appendix A

Appendix A is reserved for resubmissions of applications. Because the network competition is new in FY 2016, it does not apply.

4. Appendix B (Optional)

a) Submission

If you choose to have an Appendix B, you must include it at the end of the project narrative, following Appendix A (if applicable), and submit it as part of the same PDF attachment at Item 8 of the Other Project Information form (see Part V.E.4 Research & Related Other Project Information).

b) Page limitations

Appendix B is limited to 15 pages.

c) Content

You may include figures, charts (e.g., timelines for your research projects), or tables that supplement the project narrative as well as examples of measures (e.g., tests, surveys, observation and interview protocols) to be used in the project in Appendix B. These are the only materials that may be included in Appendix B; all other materials will be removed prior to review of the application. You should include narrative text that describes your project in the project narrative, not in Appendix B.

5. Appendix C (Optional)

a) Submission

If you choose to have an Appendix C, you must include it at the end of the project narrative, following Appendix B (if no Appendix B is included, then Appendix C should follow Appendix A if it is included) and submit it as part of the same PDF attachment at Item 8 of the Other Project Information form (see Part V.E.4 Research & Related Other Project Information).

b) Page limitations

Appendix C is limited to 10 pages.

c) Content

In Appendix C, if you are proposing to study, develop, evaluate, or validate an intervention or assessment you may include examples of curriculum material, computer screen shots, assessment items, or other materials used in the intervention or assessment to be studied, developed, evaluated, or validated. These are the only materials that may be included in Appendix C; all other materials will be removed prior to review of the application. You should include narrative text describing these materials in the 25-page project narrative (or 10-page project narrative for Network Lead applications), not in Appendix C.

6. Appendix D (Optional)

a) Submission

Appendix D must be included at the end of the project narrative, following Appendix C (if no Appendix C is included, then Appendix D should follow Appendix B if it is included, or Appendix A if it is included) and submit it as part of the same PDF attachment at Item 8 of the Other Project Information form (see Part V.D.4 Research & Related Other Project Information).

b) Page limitations

Appendix D does not have a page limit.

c) Content

Include in Appendix D the letters of agreement from partners (e.g., schools and districts), data sources (e.g., state agencies holding administrative data), and consultants. Ensure that the letters reproduce well so that reviewers can easily read them. Do not reduce the size of the letters. Although, see Part V.D.4 Attaching Files for guidance regarding the size of file attachments.

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

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

7. Appendix E (Required for Research Team applications)

a) Submission

Research Team applications under both networks and Assessment Team applications under the Early Learning Network must include a Data Management Plan in Appendix E at the end of the project narrative, following the other Appendices included, and submit it as part of the same PDF attachment at Item 8 of the Other Project Information form (see Part V.E.4 Research & Related Other Project Information).

b) Page limitations

Appendix E is limited to 5 pages.

c) Content

Include your Data Management Plan (DMP) in Appendix E. The content of the DMP is discussed in Part II.B: Requirements for Network Topics and Roles. These are the only materials that may be included in Appendix E; all other materials will be removed prior to review of the application.

8. Bibliography and References Cited

a) Submission

You must submit this section as a separate PDF attachment at Item 9 of the Other Project Information form (see Part V.E.4 Research & Related Other Project Information).

b) Page limitations

The Bibliography and References Cited does not have a page limit.

c) Content

You should include complete citations, including the names of all authors (in the same sequence in which they appear in the publication), titles (e.g., article and journal, chapter and book, book), page numbers, and year of publication for literature cited in the project narrative.

9. Research on Human Subjects Narrative

a) Submission

The human subjects narrative must be submitted as a PDF attachment at Item 12 of the Other Project Information form (see Part V.E.4 Research & Related Other Project Information).

b) Page limitations

The human subjects narrative does not have a page limit.

c) Content

The human subjects narrative should address the information specified by the U.S. Department of Education's Regulations for the Protection of Human Subjects (see http://www2.ed.gov/about/offices/list/ocfo/humansub.html for additional information).

Exempt Research on Human Subjects Narrative

Provide an "exempt" narrative if you checked "yes" on Item 1 of the Research & Related Other Project Information form (see Part V.E.4 Research & Related Other Project Information). The narrative must contain sufficient information about the involvement of human subjects in the proposed research to allow a determination by the Department that the designated exemption(s) are appropriate. The six categories of research that qualify for exemption from coverage by the regulations are described on the Department's website http://www2.ed.gov/policy/fund/guid/humansub/overview.html.

Non-exempt Research on Human Subjects Narrative

If some or all of the planned research activities are covered (not exempt) from the Human Subjects Regulations and you checked "no" on Item 1 of the Research & Related Other Project Information form (see Part V.E.4 Research & Related Other Project Information), provide a "nonexempt research" narrative. The nonexempt narrative should describe the following: the characteristics of the subject population; the data to be collected from human subjects; recruitment and consent procedures; any potential risks; planned procedures for protecting against or minimizing potential risks; the importance of the knowledge to be gained relative to potential risks; and any other sites where human subjects are involved.

Note that the U.S. Department of Education does not require certification of Institutional Review Board approval at the time you submit your application. However, if an application that involves non-exempt human subjects research is recommended/selected 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 after the formal request.

10. Biographical Sketches of Senior/Key Personnel

a) Submission

Each sketch will be submitted as a separate PDF attachment and attached to the Research & Related Senior/Key Person Profile (Expanded) form (see Part V.E.2 Research & Related Senior/Key Person Profile (Expanded)).

b) Page limitations

Each biographical sketch is limited to four pages.

c) Content

Provide a biographical sketch for the Principal Investigator, each co-Principal Investigator, and each co-Investigator that includes information sufficient to demonstrate that key personnel possess training and expertise commensurate with their specified duties on the proposed project (e.g., publications, grants, and relevant research experience). If you'd like, you may also include biographical sketches for consultants (this form will allow for up to 40 biographical sketches in total).

11. Current & Pending Support of Senior/Key Personnel

a) Submission

Each list of current and pending support will be submitted as a separate PDF attachment to the Research & Related Senior/Key Person Profile (Expanded) form (see Part V.E.2 Research & Related Senior/Key Person Profile (Expanded)).

b) Page limitations

Each list is limited to one page.

c) Content

Provide a list of current and pending grants for the Principal Investigator, each co-Principal Investigator, and each co-Investigator, along with the proportion of his/her time, expressed as percent effort over a 12-month calendar year, allocated to each project. This information should be provided as a table.

Note: Each senior/key person must include the proposed project as one of his/her pending grants in this list. If the total 12-month calendar year percent effort across all current and pending projects exceeds 100 percent, you must explain how time will be allocated if all pending applications are successful in the Narrative Budget Justification.

12. Narrative Budget Justification

a) Submission

The narrative budget justification must be submitted as a PDF attachment at Section K of the first project period of the Research & Related Budget (SF 424) Sections A & B; C, D, & E; and F-K form for the Project (see Part V.E.5 Research & Related Budget (Total Federal + Non-Federal) - Sections A & B; C, D, & E; and F-K). For grant submissions with a subaward(s), a separate narrative budget justification for each subaward must be submitted and attached at Section K of the Research & Related Budget (SF 424) for the specific Subaward/Consortium that has been extracted and attached using the R&R Subaward Budget (Fed/Non-Fed) Attachment(s) Form (see Part V.E.6).

b) Page limitations

The narrative budget justification does not have a page limit.

c) Content

A narrative budget justification must be submitted for the project budget, and a separate narrative budget justification must be submitted for any subaward budgets included in the application. Each narrative budget justification should provide sufficient detail to allow reviewers to judge whether reasonable costs have been attributed to the project and its subawards, if applicable. The budget justification should correspond to the itemized breakdown of project costs that is provided in the corresponding Research & Related Budget (SF 424) Sections A & B; C, D, & E; and F-K form for each year of the project. The narrative should include the time commitments for key personnel expressed as annual percent effort (i.e., calculated over a 12-month period) and brief descriptions of the responsibilities of key personnel. For consultants, the narrative should include the number of days of anticipated consultation, the expected rate of compensation, travel, per diem, and other related costs. A justification for equipment purchases, supplies, travel (including information regarding number of days of travel, mode of transportation, per diem rates, number of travelers, etc.), and other related project costs should also be provided in the budget narrative for each project year outlined in the Research & Related Budget (SF 424).

d) Indirect cost rate

You must use your institution's federally negotiated indirect cost rate see Part III.A.3: Special Considerations for Budget Expenses). When calculating your indirect costs on expenses for research conducted in field settings, you should apply your institution's federally negotiated off-campus indirect cost rate.

If your institution does not have a federally negotiated indirect cost rate you should consult a member of the Indirect Cost Group (ICG) in the U.S. Department of Education's Office of the Chief Financial Officer http://www2.ed.gov/about/offices/list/ocfo/fipao/icgreps.html to help you estimate the indirect cost rate to put in your application.

PART V: SUBMITTING YOUR APPLICATION

This part of the RFA describes important submission procedures you need to be aware of to ensure your application is received on time (no later than 4:30:00pm Washington, DC time on August 6, 2015) and accepted by the Institute. Any questions that you may have about electronic submission via Grants.gov should first be addressed to the Grants.gov Contact Center at support@grants.gov, http://www.grants.gov/web/grants/about/contact-us.html, or call 1-800-518-4726.

Additional help with submitting an application electronically through the Grants.gov website is available at http://www.grants.gov/web/grants/applicants/applicant-resources.html. The Institute also offers webinars on the application submission process http://ies.ed.gov/funding/webinars/index.asp.

A. MANDATORY ELECTRONIC SUBMISSION OF APPLICATIONS AND DEADLINE

Applications must be submitted electronically through the Internet using the software and application package provided on the Grants.gov web site: http://www.grants.gov/. Applications must be received (fully uploaded and processed by Grants.gov) no later than 4:30:00 pm Washington, DC time on August 6, 2015. Applications received by Grants.gov after the 4:30:00 pm application deadline will be considered late and will not be sent forward for scientific peer review.

Electronic submission is required unless you qualify for one of the exceptions to the electronic submission requirement *and* submit, no later than 2 weeks before the application deadline date, a written statement to the Department that you qualify for one of these exceptions. A description of the Allowable Exceptions to Electronic Submissions is provided at the end of this document.

Please consider submitting your application ahead of the deadline date (the Institute recommends 3 to 4 days in advance of the closing date and time) to avoid running the risk of a late submission that will not be reviewed. The Institute does not accept late applications.

B. REGISTER ON GRANTS.GOV

To submit an application through Grants.gov, your institution must be registered with Grants.gov (http://www.grants.gov/web/grants/register.html).

Grants.gov registration involves many steps including registration in the System for Award Management (SAM, formerly known as the CCR - Central Contractor Registry, http://www.sam.gov). Grants.gov recommends that your institution begin the registration process at least 4 weeks prior to the application deadline date.

1. Register Early

Registration involves multiple steps (described below) and takes at least 3 to 5 business days, or as long as 4 weeks, to complete. You must complete all registration steps to allow a successful application submission via Grants.gov. You may begin working on your application while completing the registration process, but you will not be permitted to submit your application until all of the Registration Steps are complete.

2. How to Register

- Choose "Organization Applicant" for the type of registration.

- Complete the DUNS OR DUNS+4 Number field.

- o If your organization does not already have a DUNS Number, you can request one online by using the form at the Dun & Bradstreet website http://fedgov.dnb.com/webform or by phone (866-705-5711).

- o To submit your application successfully, the DUNS number in your application must be the one that was used when you registered as an Authorized Organization Representative (AOR) on Grants.gov. This DUNS number is typically the same number used when your organization registered with the SAM. **If you don't enter the same DUNS number as the DUNS you registered with, Grants.gov will reject your application**.

- Register with the System for Award Management (SAM) http://www.sam.gov.

  - o You can learn more about the SAM and the registration process for grant applicants in the SAM user guide: https://www.sam.gov/sam/transcript/Quick_Guide_for_Grants_Registrations_v1.7.pdf

    For further assistance, please consult the tip sheet that the U.S. Department of Education has prepared for help with the SAM system http://www2.ed.gov/fund/grant/apply/sam-faqs.html.

  - o Registration with the SAM may take a week to complete, but could take as many as several weeks to complete, depending on the completeness and accuracy of the data entered into the SAM database by an applicant. **The SAM registration must be updated annually.**

  - o Once your SAM registration is active, it will take 24 to 48 hours for the information to be available in Grants.gov. You will only be able to submit your application via Grants.gov once the SAM information is available in Grants.gov.

- Create your Username & Password

  - o Complete your AOR profile on Grants.gov and create your username and password. You will need to use your organization's DUNS Number to complete this step. https://apply07.grants.gov/apply/OrcRegister.

- AOR Authorization

  - o The E-Business Point of Contact (E-Biz POC) at your organization must login to Grants.gov to confirm you as an AOR. Please note that there can be more than one AOR for your organization. In some cases the E-Biz POC is also the AOR for an organization.

C. SUBMISSION AND SUBMISSION VERIFICATION

1. Submit Early

The Institute strongly recommends that you not wait until the deadline date to submit an application. Grants.gov will put a date/time stamp on the application and then process it after it is fully uploaded. **The time it takes to upload an application will vary depending on a number of factors including the size of the application and the speed of your internet connection.** If Grants.gov rejects your application due to errors in the application package, you will need to resubmit successfully before 4:30:00 p.m. Washington, DC time on the deadline date as determined by Grants.gov. As an example, if you begin the submission process at 4:00:00 p.m. Washington, DC time on the deadline date,

and Grants.gov rejects the application at 4:15:00 p.m. Washington, DC time, there may not be enough time for you to locate the error that caused the submission to be rejected, correct it, and then attempt to submit the application again before the 4:30:00 p.m. Washington, DC time deadline. **You are strongly encouraged to begin the submission process at least 3 to 4 days before the deadline date to ensure a successful, on-time submission.**

2. Verify Submission is OK

The Institute urges you to verify that Grants.gov and the Institute have received the application on time and that it was validated successfully. To see the date and time that your application was received by Grants.gov, you need to log on to Grants.gov and click on the "Track My Application" link http://www.grants.gov/web/grants/applicants/track-my-application.html. For a successful submission, the date/time received should be no later than 4:30:00 p.m. Washington DC time on the deadline date, AND the application status should be: (1) Validated (i.e., no errors in submission), (2) Received by Agency (i.e., Grants.gov has transmitted the submission to the U.S. Department of Education), or (3) Agency Tracking Number Assigned (the U.S. Department of Education has assigned a unique PR/Award Number to the application).

Note: If the date/time received is later than 4:30:00 p.m. Washington, DC time on the deadline date, the application is late. If the application has a status of "Received" it is still awaiting validation by Grants.gov. Once validation is complete, the status will change either to "Validated" or "Rejected with Errors." If the status is "Rejected with Errors," the application has not been received successfully. Grants.gov provides information on reasons why applications may be rejected in its Frequently Asked Questions (FAQ) page.

- Grants.gov FAQ
  http://www.grants.gov/web/grants/support/general-support/faqs.html

- Grants.gov Adobe Reader FAQs
  http://www.grants.gov/web/grants/support/general-support/faqs/adobe-reader-faqs.html

You will receive four emails regarding the status of your submission; the first three will come from Grants.gov and the fourth will come from the U.S. Department of Education. Within 2 days of submitting a grant application to Grants.gov, you will receive three emails from Grants.gov:

- The first email message will confirm receipt of the application by the Grants.gov system and will provide you with an application tracking number beginning with the word "GRANT", for example GRANT00234567. You can use this number to track your application on Grants.gov using the "Track My Application" link http://www.grants.gov/web/grants/applicants/track-my-application.html before it is transmitted to the U.S. Department of Education.

- The second email message will indicate that the application EITHER has been successfully validated by the Grants.gov system prior to transmission to the U.S. Department of Education OR has been rejected due to errors, in which case it will not be transmitted to the Department.

- The third email message will indicate that the U.S. Department of Education has confirmed retrieval of the application from Grants.gov once it has been validated.

If the second email message indicates that the application, as identified by its unique application tracking number, is valid and the time of receipt was no later than 4:30:00 p.m. Washington DC time, then the application is successful and on-time.

Note: You should not rely solely on e-mail to confirm whether an application has been received on time and validated successfully. The Institute urges you to use the "Track My Application" link on Grants.gov

to verify on-time, valid submissions in addition to the confirmation emails.
http://www.grants.gov/web/grants/applicants/track-my-application.html

Once Grants.gov validates the application and transmits it to the U.S. Department of Education, you will receive an email from the U.S. Department of Education.

- This fourth email message will indicate that the application has been assigned a PR/Award number unique to the application beginning with the letter R, followed by the section of the CFDA number unique to that research competition (e.g., 305N), the fiscal year for the submission (e.g., 16 for fiscal year 2016), and finally four digits unique to the application, for example R305N16XXXX. If the application was received after the closing date/time, this email will also indicate that the application is late and will not be given further consideration.

Note: The Institute strongly recommends that you begin the submission process at least 3 to 4 days in advance of the deadline date to allow for a successful and timely submission.

3. Late Applications

If your application is submitted after 4:30:00 p.m. Washington, DC time on the application deadline date your application will not be accepted and will not be reviewed. **The Institute does not accept late applications.**

However, if you believe that a technical problem with the Grants.gov system prevented you from being able to submit your application on time, you must contact the Grants.gov Support Desk at support@grants.gov, http://www.grants.gov/web/grants/about/contact-us.html, or call 1-800-518-4726. The Grants.gov Support Desk will assign a Case Number (e.g., 1-12345678) that you must keep as a record of the problems. If you wish to petition that the Institute accepts your late application due to technical problems with the Grants.gov system you should contact the Program Officer for the topic designated in your application and provide an explanation of the problem experienced with Grants.gov, along with the Grants.gov Support Desk Case Number. **Your application will be accepted only if it is possible to confirm that a technical problem occurred with the Grants.gov system and that the problem (as documented with the Grants.gov Support Desk) affected your ability to submit the application by 4:30:00 p.m. Washington, DC time on the application deadline date.** The Institute will contact you approximately 1 month after the submission deadline as to whether the application will be accepted.

D. TIPS FOR WORKING WITH GRANTS.GOV

The Institute strongly encourages you to use the "Check Application for Errors" button at the top of the grant application package to identify errors or missing required information that can prevent an application from being processed and sent forward for review.

Note: You must click the "Save and Submit" button at the top of the application package to upload the application to the Grants.gov website. The "Save and Submit" button will become active only after you have used the "Check Package for Errors" button and then clicked the "Save" button. Once the "Save and Submit" button is clicked, you will need to enter the user name and password that were created upon registration with Grants.gov.

1. Working Offline

When you download the application package from Grants.gov, you will be working offline and saving data on your computer. You will need to logon to Grants.gov to upload the completed application package and submit the application.

2. Connecting to the Internet

- Using a dial-up connection to upload and submit an application can take significantly longer than using a high-speed connection to the internet (e.g., cable modem/DSL/T1). Although times will vary depending upon the size of the application, it can take a few minutes to a few hours to complete the grant submission using a dial-up connection.

- Browser Support: Grants.gov is a Custom Java Application that uses standard web-browsers as the client. Grants.gov leverages the latest web technologies such as Ajax which relies extensively on JavaScript, HTML, and CSS. Grants.gov recommends you use the most up-to-date web browser to ensure an on-time submission.

3. Software Requirements

You will need Adobe software (at least Adobe Reader 10.1.14) to read and complete the application forms for submission through Grants.gov. You can verify if your Adobe software version is compatible with Grants.gov, and if it is not a compatible version, you can download the necessary version of Adobe from Grants.gov (http://www.grants.gov/web/grants/support/technical-support/recommended-software.html).

4. Attaching Files

The forms included in the application package provide the means for you to attach Adobe Portable Document Format (PDF) files. **You must attach read-only, non-modifiable PDF files**; any other file attachment will cause your application to be rejected by Grants.gov.

Grants.gov provides help for converting files to a PDF format: http://www.grants.gov/web/grants/support/general-support/faqs/adobe-reader-faqs.html.

If you include scanned documents as part of a PDF file (e.g., Letters of Agreement in Appendix D), scan them at the lowest resolution to minimize the size of the file and expedite the upload process. PDF files that contain graphics and/or scanned material can greatly increase the size of the file attachments and can result in difficulties opening the files. The average discretionary grant application package totals 1 to 2 MB; therefore, **check the total size of your application package before you attempt to submit it.** Very large application packages can take a long time to upload, putting the application at risk of being received late and therefore not accepted by the Institute.

PDF files included in the application **must** be:

- **In a read-only, non-modifiable format.**
- **Individual files** (attachments that contain files within a file, such as PDF Portfolio files, or an interactive or fillable PDF file will not be read).
- **Not password protected.**
- **Given a file name that:**
  - **Is unique -** Grants.gov cannot process an application that includes two or more file attachments that have the same name.
  - **Is no more than 50 characters.**
  - **Contains no special characters (e.g., &,–,*,percent,/,#), blank spaces, periods, or accent marks in the file name** (you may use an underscore to indicate word separation in file names such as "my_Attached_File.pdf").

Please note that if these guidelines are not followed, your application will be rejected by Grants.gov and not forwarded to the U.S. Department of Education.

E. REQUIRED RESEARCH & RELATED (R&R) FORMS AND OTHER FORMS

You must complete and submit the R&R forms described below. All of these forms are provided in the application package for this competition (84-305N2016). Please note that fields marked by an asterisk, highlighted in yellow and outlined in red on these forms are required fields and must be completed to ensure a successful submission.

Note: Although not required fields, Items 4a (Federal Identifier) and b (Agency Routing Number) on the Application for Federal Assistance SF 424 (R&R) form provide critical information to the Institute and should be filled out for an application to this research grant competition.

1. Application for Federal Assistance SF 424 (R&R)

This form asks for general information about the applicant, including but not limited to the following: contact information; an Employer Identification Number (EIN); a DUNS number; a descriptive title for the project; an indication of the project topic and the appropriate goal; Principal Investigator contact information; start and end dates for the project; congressional district; total estimated project funding; and Authorized Representative contact information.

Because information on this form populates selected fields on some of the other forms described below, you should complete this form first. This form also allows you to attach a cover letter; however, the Institute does not require a cover letter so do not attach one here.

Provide the requested information using the drop down menus when available. Guidance for completing selected items follows.

- Item 1

  Type of Submission. Select either "Application" or "Changed/Corrected Application." "Changed/Corrected Application" should only be selected in the event that you need to submit an updated version of an already submitted application (e.g., due to an error). The Institute does not require Pre-applications for its grant competitions.

- Item 2

  Date Submitted. Enter the date the application is submitted to the Institute.

  Applicant Identifier. Leave this blank.

- Item 3

  Date Received by State and State Application Identifier. Leave these items blank.

- Item 4

  Note: This item provides important information that is used by the Institute to screen applications for responsiveness to the competition requirements and for assignment to the appropriate scientific peer review panel. **It is critical that you complete this information completely and accurately or the application may be rejected as nonresponsive or assigned inaccurately for scientific review of merit**.

o   Item 4a: Federal Identifier. This field is used if the application is a resubmission of an application that was submitted to an Institute grant competition in a prior fiscal year (e.g., FY 2015). Because the Research Networks competition is new, you should leave this blank.

o   Item 4b: Agency Routing Number. **Enter the code for the topic application addresses in this field. Applications to the Research Networks Focused on** Critical Problems of Policy and Practice Program (CFDA 84.305N) program must be submitted to one of the two topics outlined in Part II.B: Requirements for Network Topics and Roles.

Topic	Code
Supporting Early Learning from Preschool through Early Elementary School Grades – Research Team	NCER-ELR
Supporting Early Learning from Preschool through Early Elementary School Grades – Assessment Team	NCER-ELA
Supporting Early Learning from Preschool through Early Elementary School Grades – Network Lead	NCER-ELNL
Scalable Strategies to Encourage College Completion – Research Team	NCER-CCR
Scalable Strategies to Encourage College Completion – Network Lead	NCER-CCNL

It is critical that you use the appropriate code in this field and that the code shown in this field agrees with the information included in the application abstract. Indicating the correct code facilitates the appropriate processing and review of the application. Failure to do so may result in delays to processing and puts your application at risk for being identified as nonresponsive and not considered for further review.

o   Item 4c: Previous Grants.gov Tracking ID. If you are submitting a "Changed/Corrected" application (see Item 1) to correct an error, enter the Grants.gov Tracking Number associated with the application that was already submitted through Grants.gov. Note: If you need to correct an error and submit a "Changed/Corrected" application, contact the Program Officer listed on the application package and provide the Grants.gov tracking numbers associated with both applications (the one with the error and the one that has been corrected) and identify which one should be reviewed by the Institute.

• Item 5

Applicant Information. Enter all of the information requested, including the legal name of the applicant, the name of the primary organizational unit (e.g., school, department, division, etc.) that will undertake the activity, and the address, including the county and the 9-digit ZIP/Postal Code of the primary performance site (i.e., the Applicant institution) location. This field is required if the Project Performance Site is located in the United States. The field for "Country" is pre-populated with "USA: UNITED STATES." For applicants located in another country, contact the cognizant program officer (see Part II.B Requirements for Network Topics and Roles or the list of program officers in Part V.H) before submitting the application. Use the drop down menus where they are provided.

Organizational DUNS. Enter the DUNS or DUNS+4 number of the applicant organization. A **Data Universal Numbering System (DUNS)** number is a unique 9-character identification number provided by the commercial company Dun & Bradstreet (D&B) to identify organizations. If your institution does not have a DUNS number and therefore needs to register for one, a DUNS

number can be obtained through the Dun & Bradstreet website
http://fedgov.dnb.com/webform/displayHomePage.do.

Note: The DUNS number provided on this form must be the same DUNS number used to register on Grants.gov (and the same as the DUNS number used when registering with the SAM). **If the DUNS number used in the application is not the same as the DUNS number used to register with Grants.gov, the application will be rejected with errors by Grants.gov**.

Person to Be Contacted on Matters Involving this Application. Enter all of the information requested, including the name, telephone and fax numbers, and email address of the person to be contacted on matters involving this application. The role of this person is primarily for communication purposes on the budgetary aspects of the project. As an example, this may be the contact person from the applicant institution's office of sponsored projects. Use the drop down menus where they are provided.

- Item 6

  Employer Identification (EIN) or (TIN). Enter either the Employer Identification Number (EIN) or Tax Identification Number (TIN) as assigned by the Internal Revenue Service. If the applicant organization is not located in the United States, enter 44-4444444.

- Item 7

  Type of Applicant. Use the drop down menu to select the type of applicant. If Other, please specify.

  Small Business Organization Type. If "Small Business" is selected as Type of Applicant, indicate whether or not the applicant is a "Women Owned" small business – a small business that is at least 51% owned by a woman or women, who also control and operate it. Also indicate whether or not the applicant is a "Socially and Economically Disadvantaged" small business, as determined by the U.S. Small Business Administration pursuant to section 8(a) of the Small Business Act U.S.C. 637(a).

- Item 8

  Type of Application. Select "New."

  Submission to Other Agencies. Indicate whether or not this application is being submitted to another agency or agencies. If yes, indicate the name of the agency or agencies.

- Item 9

  Name of Federal Agency. Do not complete this item. The name of the federal agency to which the application is being submitted will already be entered on the form.

- Item 10

  Catalog of Federal Domestic Assistance Number. Do not complete this item. The CFDA number of the program competition to which the application is being submitted will already be entered on the form. The CFDA number can be found in the Federal Register Notice and on the face page of the Request for Applications.

- Item 11

  Descriptive Title of Applicant's Project. **Enter a distinctive, descriptive title for the Project**. The maximum number of characters allowed in this item field is 200.

- Item 12

  Proposed Project Start Date and Ending Date. Enter the proposed start date of the project and the proposed end date of the project. The start date must not be earlier than January 1, 2016, which is the Earliest Anticipated Start Date listed in this Request for Applications, and must not be later than June 1, 2016. The end date is restricted based on the duration maximums for the network topic and role selected within this competition (See Part II).

- Item 13

  Congressional District of Applicant. For both the applicant and the project, enter the Congressional District in this format: 2-character State Abbreviation and 3-character District Number (e.g., CA-005 for California's 5th district, CA-012 for California's 12th district). Grants.gov provides help for finding this information http://www.grants.gov/web/grants/applicants/applicant-faqs/applying-for-grants.html under "How can I find my congressional district code?" If the program/project is outside the U.S., enter 00-000.

- Item 14

  Project Director/Principal Investigator Contact Information. Enter all of the information requested for the Project Director/Principal Investigator, including position/title, name, address (including county), organizational affiliation (e.g., organization, department, division, etc.), telephone and fax numbers, and email address. Use the drop down menus where they are provided.

- Item 15

  Estimated Project Funding

    o Total Federal Funds Requested. Enter the total Federal funds requested for the entire project period.

    o Total Non-federal Funds. Enter the total Non-federal funds requested for the entire project period.

    o Total Federal & Non-Federal Funds. Enter the total estimated funds for the entire project period, including both Federal and non-Federal funds.

    o Estimated Program Income. Identify any program income estimated for the project period, if applicable.

- Item 16

  Is Application Subject to Review by State Executive Order 12372 Process? The Institute is not soliciting applications that are subject to review by Executive Order 12372; therefore, check the box "Program is not covered by E.O. 12372" to indicate "No" for this item.

- Item 17

  This is the Authorized Organization Representative's electronic signature.

  By providing the electronic signature, the Authorized Organization Representative certifies the following:

  - To the statements contained in the list of certifications
  - That the statements are true, complete and accurate to the best of his/her knowledge.

  By providing the electronic signature, the Authorized Organization Representative also provides the required assurances, agrees to comply with any resulting terms if an award is accepted, and acknowledges that any false, fictitious, or fraudulent statements or claims may subject him/her to criminal, civil, or administrative penalties.

  Note: The certifications and assurances referred to here are described in Part V.E.7 Other Forms Included in the Application Package).

- Item 18

  SF LLL or other Explanatory Documentation. Do not add the SF LLL here. A copy of the SF LLL is provided as an optional document within the application package. See Part V.E.7 Other Forms Included in the Application Package to determine applicability. If it is applicable to the grant submission, choose the SF LLL from the optional document menu, complete it, and save the completed SF LLL form as part of the application package.

- Item 19

  Authorized Representative. The Authorized Representative is the official who has the authority both to legally commit the applicant to (1) accept federal funding and (2) execute the proposed project. Enter all information requested for the Authorized Representative, including name, title, organizational affiliation (e.g., organization, department, division, etc.), address, telephone and fax numbers, and email address of the Authorized Representative. Use the drop down menus where they are provided.

  Signature of Authorized Representative. Leave this item blank as it is automatically completed when the application is submitted through Grants.gov.

  Date Signed. Leave this item blank as the date is automatically generated when the application is submitted through Grants.gov.

- Item 20

  Pre-application. Do not complete this item as the Institute does not require pre-applications for its grant competitions.

- Item 21

  Cover letter. Do not complete this item as the Institute does not require cover letters for its grant competitions.

2. Research & Related Senior/Key Person Profile (Expanded)

This form asks you to: (a) identify the Project Director/Principal Investigator and other senior and/or key persons involved in the project; (b) specify the role key staff will serve; and (c) provide contact information for each senior/key person identified. The form also requests information about the highest academic or professional degree or other credentials earned and the degree year.

This form also provides the means for attaching the Biographical Sketches of senior/key personnel and the Lists of Current and Pending Funding for senior/key personnel as PDF files. This form will allow for the attachment of a total of 40 biographical sketches and 40 lists of current and pending support: one of each for the project director/principal investigator and up to 39 additional sketches and lists for senior/key staff. See Part IV.D.10 Biographical Sketches of Senior/Key Personnel for information about page limitations, format requirements, and content to be included in the biographical sketches and lists of current and pending funding. The persons listed on this form should be the same persons listed in the Personnel section of the Project Narrative.

3. Project/Performance Site Location(s)

This form asks you to identify the primary site where project work will be performed. You must complete the information for the primary site. If a portion of the project will be performed at any other site(s), the form also asks you to identify and provide information about the additional site(s). As an example, a research proposal to an Institute competition may include the applicant institution as the primary site and one or more schools where data collection will take place as additional sites. The form permits the identification of eight project/performance site locations in total. This form requires the applicant to identify the Congressional District for each site. See above, Application for Federal Assistance SF 424 (R&R), Item 13 for information about Congressional Districts. DUNS number information is optional on this form.

4. Research & Related Other Project Information

This form asks you to provide information about any research that will be conducted involving Human Subjects, including: (a) whether human subjects are involved; (b) if human subjects are involved, whether or not the project is exempt from the human subjects regulations; (c) if the project is exempt from the regulations, an indication of the exemption number(s); and, (d) if the project is not exempt from the regulations, whether an Institutional Review Board (IRB) review is pending; and if IRB approval has been given, the date on which the project was approved; and, the Human Subject Assurance number. This form also asks you: (a) whether there is proprietary information included in the application; (b) whether the project has an actual or potential impact on the environment; (c) whether the research site is designated or eligible to be designated as an historic place; and, (d) if the project involves activities outside the U.S., to identify the countries involved.

This form also provides the means for attaching a number of PDF files (see Part IV.D PDF Attachments for information about page limitations, format requirements, and content) including the following:

- Project Summary/Abstract,
- Project Narrative and Appendices,
- Bibliography and References Cited, and
- Research on Human Subjects Narrative.

- Item 1

  Are Human Subjects Involved? If activities involving human subjects are planned at any time during the proposed project at any performance site or collaborating institution, you must check "Yes." (You must check "Yes" even if the proposed project is exempt from Regulations for the Protection of Human Subjects.) If there are no activities involving human subjects planned at any time during the proposed project at any performance site or collaborating institution, you may check "No" and skip to Item 2.

  Is the Project Exempt from Federal Regulations? If all human subject activities are exempt from Human Subjects regulations, then you may check "Yes." You are required to answer this question if you answered "yes" to the first question "Are Human Subjects Involved?"

  If you answer "yes" to the question "Is the Project Exempt from Federal Regulations?" you are required to check the appropriate exemption number box or boxes corresponding to one or more of the exemption categories. The six categories of research that qualify for exemption from coverage by the regulations are described on the U.S. Department of Education's website http://www2.ed.gov/policy/fund/guid/humansub/overview.html. Provide an Exempt Research on Human Subjects Narrative at Item 12 of this form (see Part IV.D.9 Research on Human Subjects Narrative).

  If you answer "no" to the question "Is the Project Exempt from Federal Regulations?" you will be prompted to answer questions about the Institutional Review Board (IRB) review.

  If no, is the IRB review pending? Answer either "Yes" or "No."

  If you answer "yes" because the review is pending, then leave the IRB approval date blank. If you answer "no" because the review is not pending, then you are required to enter the latest IRB approval date, if available. Therefore, you should select "No" only if a date is available for IRB approval.

  Note: IRB Approval may not be pending because you have not begun the IRB process. In this case, an IRB Approval Date will not be available. However, a date must be entered in this field if "No" is selected or the application will be rejected with errors by Grants.gov. Therefore, you should check "Yes" to the question "Is the IRB review pending?" if an IRB Approval date is not available.

  If you answer "no" to the question "Is the Project Exempt from Federal Regulations?" provide a Non-exempt Research on Human Subjects Narrative at Item 12 of this form (see Part IV.D.9 Research on Human Subjects Narrative).

  Human Subject Assurance Number: Leave this item blank.

- Item 2

  Are Vertebrate Animals used? Check whether or not vertebrate animals will be used in this project.

- Item 3

  Is proprietary/privileged information included in the application? Patentable ideas, trade secrets, privileged or confidential commercial or financial information, disclosure of which may harm the applicant, should be included in applications only when such information is necessary to convey

an understanding of the proposed project. If the application includes such information, check "Yes" and clearly mark each line or paragraph on the pages containing the proprietary/privileged information with a legend similar to, "The following contains proprietary/privileged information that (name of applicant) requests not be released to persons outside the Government, except for purposes of review and evaluation."

- Item 4

  Does this project have an actual or potential impact on the environment? Check whether or not this project will have an actual or potential impact on the environment.

- Item 5

  Is the research site designated or eligible to be designated as a historic place? Check whether or not the research site is designated or eligible to be designated as a historic place. Explain if necessary.

- Item 6

  Does the project involve activities outside of the United States or partnerships with international collaborators? Check "Yes" or "No." If the answer is "Yes," then you need to identify the countries with which international cooperative activities are involved. An explanation of these international activities or partnerships is optional.

- Item 7.

  Project Summary/Abstract. Attach the Project Summary/Abstract as a PDF file here. See Part IV.D PDF Attachments for information about content, formatting, and page limitations for this PDF file.

- Item 8.

  Project Narrative. Create a single PDF file that contains the Project Narrative as well as, when applicable, Appendix A, Appendix B, Appendix C, Appendix D, and Appendix E. Attach that single PDF file here. See Part IV.D PDF Attachments for information about content, formatting, and page limitations for this PDF file.

- Item 9.

  Bibliography and References Cited. Attach the Bibliography and References Cited as a PDF file here. See Part IV.D PDF Attachments for information about content, formatting, and page limitations for this PDF file.

- Item 10.

  Facilities and Other Resources. The Institute does not want an attachment here. Explanatory information about facilities and other resources must be included in the Resources section of the 25-page Project Narrative (or 10-page project narrative for Network Lead applications) for the application and may also be included in the Narrative Budget Justification. In the project narrative of competitive proposals, applicants describe having access to institutional resources that adequately support research activities and access to schools in which to conduct the research. Strong applications document the availability and cooperation of the schools or other education delivery settings that will be required to carry out the research proposed in the

application via a letter of agreement from the education organization. Include letters of agreement in [Appendix D](#).

- Item 11.

  Equipment. The Institute does not want an attachment here. Explanatory information about equipment may be included in the Narrative Budget Justification.

- Item 12.

  Other Attachments. Attach a Research on Human Subjects Narrative as a PDF file here. You must attach either an Exempt Research on Human Subjects Narrative or a Non-Exempt Research on Human Subjects Narrative. See [Part IV.D PDF Attachments](#) for information about content, formatting, and page limitations for this PDF file.

  If you checked "Yes" to Item 1 of this form "Are Human Subjects Involved?" and designated an exemption number(s), then you must provide an "Exempt Research" narrative. If some or all of the planned research activities are covered by (not exempt from) the Human Subjects Regulations, then you must provide a "Nonexempt Research" narrative.

5. Research & Related Budget (Total Federal+Non-Federal)-Sections A & B; C, D, & E; F-K

This form asks you to provide detailed budget information for each year of support requested for the applicant institution (i.e., the Project Budget). The form also asks you to indicate any non-federal funds supporting the project. You should provide this budget information for each project year using all sections of the R&R Budget form. Note that the budget form has multiple sections for each budget year: A & B; C, D, & E; and F-K.

- Sections A & B ask for information about Senior/Key Persons and Other Personnel
- Sections C, D & E ask for information about Equipment, Travel, and Participant/Trainee Costs
- Sections F - K ask for information about Other Direct Costs and Indirect Costs

You must complete each of these sections for as many budget periods (i.e., project years) as you are requesting funds.

Note: The narrative budget justification for each of the project budget years must be attached at Section K of the first budget period; otherwise you will not be able to enter budget information for subsequent project years.

Note: Budget information for a subaward(s) on the project must be entered using a separate form, the R&R Subaward Budget (Fed/Non-Fed) Attachment(s) Form, described in [Part V.E.6](#). This is the only form that can be used to extract the proper file format to complete subaward budget information. **The application will be rejected with errors by Grants.gov if subaward budget information is included using any other form or file format.**

Enter the Federal Funds requested for all budget line items as instructed below. If any Non-Federal funds will be contributed to the project, enter the amount of those funds for the relevant budget categories in the spaces provided.

All fields asking for total funds in this form will auto calculate.

- Organizational DUNS.

If you completed the SF 424 R&R Application for Federal Assistance form first the DUNS number will be pre-populated here. Otherwise, the organizational DUNS number must be entered here. See Part V.E.1 for information on the DUNS number.

- Budget Type.

  Check the box labeled "Project" to indicate that this is the budget requested for the primary applicant organization. If the project involves a subaward(s), you must access the R&R Subaward Budget (Fed/Non-Fed) Attachment(s) Form to complete a subaward budget (see Part V.E.6 for instructions regarding budgets for a subaward).

- Budget Period Information.

  Enter the start date and the end date for each budget period. Note: If you activate an extra budget period and leave it blank this may cause your application to be rejected with errors by Grants.gov.

- Budget Sections A & B

  A. Senior/Key Person. The project director/principal investigator information will be pre-populated here from the SF 424 R&R Application for Federal Assistance form if it was completed first. Then, enter all of the information requested for each of the remaining senior/key personnel, including the project role of each and the number of months each will devote to the project, i.e., calendar or academic + summer. You may enter the annual compensation (base salary – dollars) paid by the employer for each senior/key person; however, you may choose to leave this field blank. Regardless of the number of months devoted to the project, indicate only the amount of salary being requested for each budget period for each senior/key person. Enter applicable fringe benefits, if any, for each senior/key person. Enter the Federal dollars and, if applicable, the Non-Federal dollars.

  B. Other Personnel. Enter all of the information requested for each project role listed – for example Postdoctoral Associates, Graduate Students, Undergraduate Students, Secretary/Clerical, etc. – including, for each project role, the number of personnel proposed and the number of months devoted to the project (calendar or academic + summer). Regardless of the number of months devoted to the project, indicate only the amount of salary/wages being requested for each project role. Enter applicable fringe benefits, if any, for each project role category. Enter the Federal dollars and, if applicable, the Non-Federal dollars.

  Total Salary, Wages, and Fringe Benefits (A + B). This total will auto calculate.

- Budget Sections C, D & E

  C. Equipment Description. Enter all of the information requested for Equipment. Equipment is defined as an item of property that has an acquisition cost of $5,000 or more (unless the applicant organization has established lower levels) and an expected service life of more than 1 year. List each item of equipment separately and justify each in the narrative budget justification. Allowable items ordinarily will be limited to research equipment and apparatus not already available for the conduct of the work. General-purpose equipment, such as a personal computer, is not eligible for support unless primarily or exclusively used in the actual conduct of scientific research. Enter the Federal dollars and, if applicable, the Non-Federal dollars.

  Total C. Equipment. This total will auto calculate.

D. Travel. Enter all of the information requested for Travel.

Enter the total funds requested for domestic travel. In the narrative budget justification, include the purpose, destination, dates of travel (if known), applicable per diem rates, and number of individuals for each trip. If the dates of travel are not known, specify the estimated length of the trip (e.g., 3 days). Enter the Federal dollars and, if applicable, the Non-Federal dollars.

Enter the total funds requested for foreign travel. In the narrative budget justification, include the purpose, destination, dates of travel (if known), applicable per diem rates, and number of individuals for each trip. If the dates of travel are not known, specify the estimated length of the trip (e.g., 3 days). Enter the Federal dollars and, if applicable, the Non-Federal dollars.

Total D. Travel Costs. This total will auto calculate.

E. Participant/Trainee Support Costs. Do not enter information here; this category is not used for project budgets for this competition.

Number of Participants/Trainees. Do not enter information here; this category is not used for project budgets for this competition.

Total E. Participants/Trainee Support Costs. Do not enter information here; this category is not used for project budgets for this competition.

- Budget Sections F-K

F. Other Direct Costs. Enter all of the information requested under the various cost categories. Enter the Federal dollars and, if applicable, the Non-Federal dollars.

Materials and Supplies. Enter the total funds requested for materials and supplies. In the narrative budget justification, indicate the general categories of supplies, including an amount for each category. Categories less than $1,000 are not required to be itemized.

Publication Costs. Enter the total publication funds requested. The proposed budget may request funds for the costs of documenting, preparing, publishing or otherwise making available to others the findings and products of the work conducted under the award. In the narrative budget justification, include supporting information.

Consultant Services. Enter the total costs for all consultant services. In the narrative budget justification, identify each consultant, the services he/she will perform, total number of days, travel costs, and total estimated costs. Note: Travel costs for consultants can be included here or in Section D. Travel.

ADP/Computer Services. Enter the total funds requested for ADP/computer services. The cost of computer services, including computer-based retrieval of scientific, technical, and education information may be requested. In the narrative budget justification, include the established computer service rates at the proposing organization if applicable.

Subaward/Consortium/Contractual Costs. Enter the total funds requested for (1) all subaward/consortium organization(s) proposed for the project and (2) any other contractual costs proposed for the project. Use the R&R Subaward Budget (Fed/Non-Fed) Attachment(s) Form to provide detailed subaward information (see Part V.E.6).

Equipment or Facility Rental/User Fees. Enter the total funds requested for equipment or facility rental/user fees. In the narrative budget justification, identify each rental user fee and justify.

Alterations and Renovations. Leave this field blank. The Institute does not provide funds for construction costs.

Other. Describe any other direct costs in the space provided and enter the total funds requested for this "Other" category of direct costs. Use the narrative budget justification to further itemize and justify.

Total F. Other Direct Costs. This total will auto calculate.

- G. Direct Costs

Total Direct Costs (A thru F). This total will auto calculate.

- H. Indirect Costs

Enter all of the information requested for Indirect Costs. Principal investigators should note that if they are requesting reimbursement for indirect costs, this information is to be completed by their Business Office.

Indirect Cost Type. Indicate the type of base (e.g., Salary & Wages, Modified Total Direct Costs, Other [explain]). In addition, indicate if the Indirect Cost type is Off-site. If more than one rate/base is involved, use separate lines for each. When calculating your expenses for research conducted in field settings, you should apply your institution's negotiated off-campus indirect cost rate, as directed by the terms of your institution's negotiated agreement with the federal government.

Institutions, both primary grantees and sub-awardees, not located in the territorial US cannot charge indirect costs.

If you do not have a current indirect rate(s) approved by a Federal agency, indicate "None--will negotiate". **If your institution does not have a federally negotiated indirect cost rate,** you should consult a member of the Indirect Cost Group (ICG) in the U.S. Department of Education's Office of the Chief Financial Officer http://www2.ed.gov/about/offices/list/ocfo/fipao/icgreps.html to help you estimate the indirect cost rate to put in your application.

Indirect Cost Rate (%). Indicate the most recent Indirect Cost rate(s) (also known as Facilities & Administrative Costs [F&A]) established with the cognizant Federal office, or in the case of for-profit organizations, the rate(s) established with the appropriate agency.

If your institution has a cognizant/oversight agency and your application is selected for an award, you must submit the indirect cost rate proposal to that cognizant/oversight agency office for approval.

Indirect Cost Base ($). Enter the amount of the base (dollars) for each indirect cost type. Depending on the grant program to which you are applying and/or the applicant institution's approved Indirect Cost Rate Agreement, some direct cost budget categories in the grant application budget may not be included in the base and multiplied by the indirect cost rate. Use the narrative budget justification to explain which costs are included and which costs are excluded from the base to which the indirect cost rate is applied. If your grant application is

selected for an award, the Institute will request a copy of the applicant institution's approved Indirect Cost Rate Agreement.

Indirect Cost Funds Requested. Enter the funds requested (Federal dollars and, if applicable, the Non-Federal dollars) for each indirect cost type.

Total H. Indirect Costs. This total will auto calculate.

Cognizant Agency. Enter the name of the Federal agency responsible for approving the indirect cost rate(s) for the applicant. Enter the name and telephone number of the individual responsible for negotiating the indirect cost rate. If a Cognizant Agency is not known, enter "None."

- I. Total Direct and Indirect Costs

Total Direct and Indirect Costs (G + H). This total will auto calculate.

- J. Fee.

Do not enter a dollar amount here as you are not allowed to charge a fee on a grant or cooperative agreement.

- K. Budget Justification

Attach the Narrative Budget Justification as a PDF file at Section K of the first budget period (see Part IV.D.12 for information about content, formatting, and page limitations for this PDF file). Note that if the justification is not attached at Section K of the first budget period, you will not be able to access the form for the second budget period and all subsequent budget periods. The single narrative must provide a budget justification for each year of the entire project.

- Cumulative Budget. This section will auto calculate all cost categories for all budget periods included.

Final Note: The overall grant budget cannot exceed the maximum grant award for the topic being applied under as listed in the table below. Applications with budgets and durations greater than the maximums listed will not be forwarded for review.

Network Topic	Network Role	Maximum Grant Duration	Maximum Grant Award
Supporting Early Learning from Preschool through Early Elementary School Grades	Research Team	5 years	$4,500,000
	Assessment Team	5 Years	$2,000,000
	Network Lead	5 Years	$2,000,000

Network Topic	Network Role	Maximum Grant Duration	Maximum Grant Award
Scalable Strategies to Support College Completion	Research Team	5 years	$4,000,000
	Network Lead	5 Years	$1,000,000

6. R&R Subaward Budget (Fed/Non-Fed) Attachment(s) Form

This form provides the means to both extract and attach the Research & Related Budget (Total Fed + Non-Fed) form that is to be used by an institution that will hold a subaward on the grant. Please note that separate budgets are required only for subawardee/consortium organizations that perform a substantive portion of the project. As with the Primary Budget, the extracted Research & Related Budget (Total Fed + Non-Fed) form asks you to provide detailed budget information for each year of support requested for a subaward/consortium member with substantive involvement in the project. The budget form also asks for information regarding non-federal funds supporting the project at the subaward/consortium member level. You should provide this budget information for each project year using all sections of the R&R Budget form. Note that the budget form has multiple sections for each budget year: A & B; C, D, & E; and F-K.

- Sections A & B ask for information about Senior/Key Persons and Other Personnel.

- Sections C, D & E ask for information about Equipment, Travel, and Participant/Trainee Costs.

- Sections F - K ask for information about Other Direct Costs and Indirect Costs.

"Subaward/Consortium" must be selected as the Budget Type, and all sections of the budget form for each project year must be completed in accordance with the R&R (Federal/Non-Federal) Budget instructions provided above in Part V.E.5. Note that subaward organizations are also required to provide their DUNS or DUNS+4 number.

You may extract and attach up to 10 subaward budget forms. When you use the button "Click here to extract the R&R Budget (Fed/Non-Fed) Attachment," a Research & Related Budget (Total Fed + Non-Fed) form will open. Each institution that will hold a subaward to perform a substantive portion of the project must complete one of these forms and save it as a PDF file with the name of the subawardee organization. Once each subawardee institution has completed the form, you must attach these completed subaward budget form files to the R&R Subaward Budget (Fed/Non-Fed) Attachment(s) Form. Each subaward budget form file attached to this form must have a unique name.

Note: This R&R Subaward Budget (Fed/Non-Fed) Attachment(s) Form must be used to attach only one or more Research & Related Budget (Total Fed + Non-Fed) form(s) that have been extracted from this form. Note the form's instruction: "Click here to extract the R&R Budget (Fed/Non-Fed) Attachment". **If you attach a file format to this form that was not extracted from this attachment form your application will be rejected with errors by Grants.gov.**

7. Other Forms Included in the Application Package

You are required to submit the first two forms identified here. You are not required to submit the third form, Disclosure of Lobbying Activities – Standard Form LLL, unless it is applicable.

- SF 424B-Assurances-Non-Construction Programs.
- Grants.gov Lobbying form (formerly ED 80-0013 form).
- Disclosure of Lobbying Activities – Standard Form LLL (if applicable).

F. SUMMARY OF REQUIRED APPLICATION CONTENT

R&R Form	Required	Instructions Provided	Additional Information
Application for Federal Assistance SF 424 (R & R)	☑	Part V.E.1	Form provided in Grants.gov application package
Senior/Key Person Profile (Expanded)	☑	Part V.E.2	Form provided in Grants.gov application package
Project/Performance Site Location(s)	☑	Part V.E.3	Form provided in Grants.gov application package
Other Project Information	☑	Part V.E.4	Form provided in Grants.gov application package
Budget (Total Federal + Non-Federal): Sections A & B Sections C, D, & E Sections F - K	☑	Part V.E.5	Form provided in Grants.gov application package
R&R Subaward Budget (Fed/Non-Fed) Attachment(s) Form	--	Part V.E.6	Form provided in Grants.gov application package. Use this form to *extract and attach* a subaward budget(s).
SF 424B Assurances – Non-Construction Programs	☑	Part V.E.7	Forms provided in Grants.gov application package
Grants.gov Lobbying form (formerly ED 80-0013 form)	☑		
Disclosure of Lobby Activities – Standard Form LLL (if applicable)	--		
Project Summary/Abstract	☑	Part IV.D.1	Add as an attachment (PDF file) using Item 7 of the "Other Project Information" form
Project Narrative and Appendices		Part IV.D.2-7	The Project Narrative, and if applicable Appendix A, Appendix B, Appendix C, Appendix D, and Appendix E must ALL be included together in one PDF file and attached at Item 8 of the "Other Project Information" form.
• Narrative	☑		
• Appendix A	--		
• Appendix B	--		
• Appendix C	--		
• Appendix D	--		
• Appendix E			
Bibliography and References Cited	☑	Part IV.D.8	Add as an attachment (PDF file) using Item 9 of the "Other Project Information" form.
Research on Human Subjects Narrative, if human subjects are involved	☑	Part IV.D.9	Add as an attachment (PDF file) using Item 12 of the "Other Project Information" form.
Biographical Sketches of Senior/Key Personnel	☑	Part IV.D.10	Add each as a separate attachment (PDF file) using the "Senior/Key Person Profile

			(Expanded)" form.
Lists of Current & Pending Support for Senior/Key Personnel	☑	Part IV.D.11	Add each as a separate attachment (PDF file) using the "Senior/Key Person Profile (Expanded)" form.
Narrative Budget Justification	☑	Part IV.D.12	Add as an attachment (PDF file) using *Section K – Budget Period 1* of the "Budget (Total Federal + Non-Federal)" form.

G. APPLICATION CHECKLIST

Have each of the following forms been completed?	
	SF 424 Application for Federal Assistance
	Item 4a may be left blank.
	For item 4b, is the correct topic code included following the instructions in Part V.E.1?
	For item 8, is the Type of Application appropriately marked as either "New" or "Resubmission" following the instructions in Part V.E.1?
	Senior/Key Person Profile (Expanded)
	Project/Performance Site Location(s)
	Other Project Information
	Budget (Total Federal + Non-Federal): Sections A & B; Sections C, D, & E; Sections F - K
	R&R Subaward Budget (Federal/Non-Federal) Attachment(s) form (if applicable)
	SF 424B Assurances – Non-Construction Programs
	Grants.gov Lobbying form (formerly ED 80-0013 form)
	Disclosure of Lobby Activities – Standard Form LLL (if applicable)
Have each of the following items been attached as PDF files in the correct place?	
	Project Summary/Abstract, using Item 7 of the "Other Project Information" form
	Project Narrative, and where applicable, Appendix A, Appendix B, Appendix C, Appendix D, and Appendix E as a single file using Item 8 of the "Other Project Information" form
	Bibliography and References Cited, using Item 9 of the "Other Project Information" form
	Research on Human Subjects Narrative, either the Exempt Research Narrative or the Non-exempt Research Narrative, using Item 12 of the "Other Project Information" form
	Biographical Sketches of Senior/Key Personnel, using "Attach Biographical Sketch" of the "Senior/Key Person Profile (Expanded)" form
	Lists of Current & Pending Support, using "Attach Current & Pending Support" of the "Senior/Key Person Profile (Expanded)" form
	Narrative Budget Justification, using Section K – Budget Period 1 of the "Budget (Total Federal + Non-Federal" form
	Budget (Total Federal + Non-Federal): Sections A & B; Sections C, D, & E; Sections F – K for the Subaward(s), using the "R&R Subaward Budget (Federal/Non-Federal) Attachment(s)" form, as

	appropriate, that conforms to the Award Duration and Cost Maximums for the Network topic and role selected
Have the following actions been completed?	
	The correct PDF files are attached to the proper forms in the Grants.gov application package
	The "Check Package for Errors" button at the top of the grant application package has been used to identify errors or missing required information that prevents an application from being processed
	The "Track My Application" link has been used to verify that the upload was fully completed and that the application was processed and validated successfully by Grants.gov before 4:30:00 p.m., Washington, DC time on the deadline date

H. PROGRAM OFFICER CONTACT INFORMATION

As a reminder, please contact the Institute's program officers with any questions you may have. Program officers function as knowledgeable colleagues who can provide substantive feedback on your research idea, including reading a draft of your project narrative. Program officers can also help you with any questions you may have about the content and preparation of PDF file attachments. However, any questions you have about individual forms within the application package and electronic submission of your application through Grants.gov should be directed first to the Grants.gov Contact Center at support@grants.gov, http://www.grants.gov/web/grants/about/contact-us.html, or call 1-800-518-4726.

Supporting Early Learning from Preschool through Early Elementary School Grades
> Dr. Caroline Ebanks
> Email: Caroline.Ebanks@ed.gov
> Telephone: (202) 219-1410

Scalable Strategies to Encourage College Completion
> Dr. James Benson
> Email: James.Benson@ed.gov
> Telephone: (202) 219-2129

GLOSSARY

Assessment: "Any systematic method of obtaining information, used to draw inferences about characteristics of people, objects, or programs; a systematic process to measure or evaluate the characteristics or performance of individuals, programs, or other entities, for purposes of drawing inferences; sometimes used synonymously with test" (AERA, 2014).

Assessment framework: Includes the definition of the construct(s); theoretical model on which the assessment is based; and the rationale for validity evidence to support its use for the intended purpose and population.

Authentic education setting: Proposed research must be relevant to education in the United States and must address factors under the control of the U.S. education system (be it at the national, state, local, and/or school level). To help ensure such relevance, the Institute requires research to work within or with data from authentic education settings. Authentic education settings include both in-school settings (including PreK Centers) and formal programs that take place after school or out of school (e.g., after-school programs, distance learning programs, on-line programs) under the control of schools or state and local education agencies. Formal programs not under the control of schools or state and local education agencies are not considered as taking place in an authentic education setting and are not appropriate for study under the Research Networks program. For this competition, authentic education settings can be identified for the following education levels:

- **Authentic PreK Education Settings** are defined as center-based prekindergarten settings that include:
    - Public prekindergarten programs
    - Child care centers.
    - Head Start programs.

- **Authentic K-12 Education Settings** are defined as the following:
    - Schools and alternative school settings (e.g., alternative schools or juvenile justice settings).
    - School systems (e.g., local education agencies or state education agencies).
    - Settings that deliver supplemental education services (as defined in Section 1116(e) of the Elementary and Secondary Education Act of 1965, as amended by the No Child Left Behind Act of 2001) (http://www2.ed.gov/policy/elsec/leg/esea02/index.html).

- **Authentic Postsecondary Education Settings** are defined as the following:
    - 2-year and 4-year colleges and universities that have education programs leading to Associate's or Bachelor's degrees.

Center-based prekindergarten settings: Center-based settings include public prekindergarten classrooms, child care centers, and Head Start programs.

Compliant: The part of the process of screening applications for acceptance for review that focuses on compliance with the application rules (e.g., page length and formatting requirements, completion of all parts of the application).

Development process: The process used to develop and/or refine an intervention or assessment.

Efficacy study: A study that tests an intervention's beneficial impacts on student education outcomes in comparison to an alternative practice, program, or policy.

Fidelity of implementation: The extent to which the intervention is being delivered as it was designed to be by end users in an authentic education setting.

Final manuscript: The author's final version of a manuscript accepted for publication that includes all modifications from the peer-review process.

Final research data: The recorded factual materials commonly accepted in the scientific community as necessary to document and support research findings. For most studies, an electronic file will constitute the final research data. This dataset will include both raw data and derived variables, which will be fully described in accompanying documentation. Researchers are expected to take appropriate precautions to protect the privacy of human subjects. Note that final research data does not mean summary statistics or tables, but rather, the factual information on which summary statistics and tables are based. Final research data do not include laboratory notebooks, preliminary analyses, drafts of scientific papers, plans for future research, peer-reviewed reports, or communications with colleagues.

Fully developed intervention: An intervention is fully developed when all materials and products required for its implementation by the end user are readily available for use in authentic education settings.

Intervention: The wide range of education curricula, instructional approaches, professional development, technology, and practices, programs, and policies that are implemented at the student, classroom, school, district, state, or federal level to improve student education outcomes.

Moderators: Factors that affect the strength or the direction of the relationship between the intervention and student education outcomes (e.g., an intervention's impacts may differ by such student characteristics as achievement level, motivation, or social-economic status; and by organizational or contextual factors, such as school size or neighborhood characteristics)

Mediators: Factors through which the relationship between the intervention and student education outcomes occurs (e.g., many interventions aimed at changing individual student education outcomes work through changing teacher behavior, student peer behavior, and/or student behavior).

Reliability: "The degree to which test scores for a group of test takers are consistent over repeated applications of a measurement procedure and hence are inferred to be dependable and consistent for an individual test taker; the degree to which scores are free of random error of measurement for a given group" (AERA, 2014).

Responsive: The part of the process of screening applications for acceptance for review that focuses on responsiveness to the Request for Applications. This screening includes making sure applications 1) are submitted to the correct competition and/or topic and 2) meet the basic requirements set out in the Request for Applications.

Student education outcomes: The outcomes to be changed by the intervention. The intervention may be expected to directly affect these outcomes or indirectly affect them through intermediate student or instructional personnel outcomes. There are two types of student education outcomes. The topic you choose will determine the types of student education outcomes you can study.

- Student academic outcomes: The Institute supports research on a diverse set of student academic outcomes that fall under two categories. The first category includes academic outcomes that reflect learning and achievement in the core academic content areas (e.g., measures of understanding and achievement in reading, writing, math, and science). The second category includes academic outcomes that reflect students' successful progression through the education system (e.g., course and grade completion and retention in grade K through 12; high school graduation and dropout; postsecondary enrollment, progress, and completion).

- <u>Social and behavioral competencies</u>: Social skills, attitudes, and behaviors that may be important to students' academic and post-academic success.

<u>Theory of change</u>: The underlying process through which key components of a specific intervention are expected to lead to the desired student education outcomes. A theory of change should be specific enough to guide the design of the evaluation (e.g., selecting an appropriate sample, measures and comparison condition).

<u>Validity</u>: "The degree to which accumulated evidence and theory support a specific interpretation of test scores for a given use of a test. If multiple interpretations of a test score for different uses are intended, validity evidence for each interpretation is needed" (AERA, 2014).

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> Institute of Education Sciences, U.S. Department of Education
> 555 New Jersey Avenue, NW, Room 600E
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