REQUEST FOR APPLICATIONS

EDUCATION RESEARCH AND DEVELOPMENT CENTER PROGRAM

CFDA Number: 84.305C

Letter of Intent Due Date	Application Package Available	Application Due Date
https://iesreview.ed.gov/	http://www.grants.gov/	http://www.grants.gov/
June 6, 2013	June 6, 2013	September 4, 2013

PART I: OVERVIEW

1. REQUEST FOR APPLICATIONS

In this announcement, the Institute of Education Sciences (Institute) invites applications for research centers that will contribute to its Education Research and Development Center program (CFDA 84.305C). For the FY 2014 competition, the Institute will consider only applications that meet the requirements outlined below under *Part II: Education Research and Development Center Program* and *Part III: Requirements of the Proposed Research*.

PART II: EDUCATION RESEARCH AND DEVELOPMENT CENTER PROGRAM

1. PURPOSE

Under the Education Sciences Reform Act of 2002, the Institute supports national research and development centers (R&D Centers) that are intended to contribute significantly to the solution of education problems in the United States by engaging in research, development, evaluation, and national leadership activities aimed at improving the education system and, ultimately, student achievement. Each of the R&D Centers conducts a focused program of education research in its topic area. In addition, each Center conducts supplemental research within its broad topic area and provides national leadership in advancing evidence-based practice and policy within its topic area. For information on existing Institute R&D Centers, please see http://ies.ed.gov/ncer/RandD/.

The work of the Institute is grounded in the principle that effective education research must address the interests and needs of education practitioners and policymakers, as well as students, parents, and community members (see http://ies.ed.gov/director/board/priorities.asp for the Institute's priorities). To this end, the Institute encourages researchers to develop partnerships with stakeholder groups to advance the relevance of their work, the accessibility of their publications, and the usability of their findings for the day-to-day work of education practitioners and policymakers.

For the FY 2014 Education Research and Development Center competition, the Institute invites applications in the following two topic areas:

1) **Developmental Education Assessment and Instruction**
2) **Knowledge Utilization**

2. BACKGROUND

The Institute's R&D Centers grapple with key education issues that face our nation. Through this program, researchers have greater resources to tackle more complex education problems, create innovative education solutions, and contribute to knowledge and theory in the education sciences. For its FY 2014 R&D Center competition, the Institute is interested in applications that offer the greatest promise for

1) contributing to the solution of a specific education problem within each R&D Center topic described below and to the generation of new knowledge and theories relevant to the focus of the R&D Center;

2) providing relatively rapid research and scholarship on supplemental questions that emerge within the R&D Center's topic area and that are not being addressed adequately elsewhere; and

3) providing national leadership within the R&D Center's topic by developing position papers, hosting meetings, and engaging in dialogue with researchers, practitioners, and policymakers in

order to identify promising areas of research, development, and dissemination for the field and to advance evidence-based policy and practice.

PART III: REQUIREMENTS OF THE PROPOSED RESEARCH

1. TOPIC ONE: DEVELOPMENTAL EDUCATION ASSESSMENT AND INSTRUCTION

Large numbers of students who begin postsecondary education in community colleges and other open-access institutions are placed into developmental (or remedial) reading, writing, and mathematics courses before they can begin to accumulate course credits. Research suggests that the standardized tests that most institutions use to assess students' skill levels do not always determine which students will benefit from developmental education. Moreover, longitudinal studies show that many students who are placed into developmental education do not complete the courses or earn college degrees. A variety of new approaches to developmental education assessment and instruction have been proposed or implemented, but most are small pilots, and relatively few have been rigorously evaluated.

The Institute seeks to create a national Research and Development Center on Developmental Education Assessment and Instruction to **conduct research** that will

1) document current practices,

2) identify promising programs and support further innovation, and

3) rigorously evaluate the effectiveness of programs that are already serving large numbers of students or that have the potential to be expanded, and assess the scalability of these programs (e.g., cost-effectiveness, ease of implementation).

and to **engage in leadership and outreach activities** that will

4) convene policymakers, practitioners, and researchers interested in improving developmental education and

5) assist efforts by States, colleges, and universities to bring effective models to scale.

During the past 40 years, the United States has made major advances in expanding access to postsecondary education. Total fall enrollment in degree-granting institutions rose from nearly 8.6 million in 1970 to over 21 million in 2010, and the characteristics of students attending college have greatly diversified (Snyder and Dillow, 2012; Baum, Kurose, and McPherson, 2013). Many factors contribute to this trend, including the growth of community colleges and other open-access institutions that serve students from all backgrounds and with varying levels of academic preparation. To assess basic skill levels in reading, writing, and mathematics, most community colleges and other open-access institutions administer a standardized test such as the Compass or the Accuplacer when students first enroll in college and place low-scoring students into developmental courses. Data collected by the National Center for Education Statistics indicate that 42 percent of first-year students in community colleges and 39 percent of first-year students in non-doctoral, public 4-year institutions took at least 1 developmental course. These students are disproportionately older (age 24 and over) and more likely to be Black or Hispanic than White or Asian (Aud et al., 2011).

A growing body of research suggests that the tests and other practices commonly used to assess entering students' skill levels often fail to predict who will benefit from developmental education. For example, several studies try to establish the causal effects of remediation by comparing outcomes for students who are just above and just below the cutoff score used to place students into developmental education. The results are mixed, with some studies showing that developmental education leads to

benefits such as increased persistence and college credits completed and with other studies showing no effect. More recent research suggests that some of the variability in effects may be due to differences in students' academic preparation. Specifically, students at the margin of needing remediation may experience large negative effects of being placed in developmental classes, while students who score lower on assessment tests may experience some benefit (Bettinger, Boatman, and Long, 2013).

Studies that track the progress of students who are placed into developmental education raise further questions about the long-term effects of remediation. Though some students only need to take one developmental course before they can advance to college-level work, others may be required to take many developmental courses. One recent study found that fewer than half of community college students who were referred to developmental English and math courses completed the entire sequence to which they were assigned. Men, older students, African American students, part-time students, and students in vocational education were less likely to progress through their developmental course sequence than their counterparts (Bailey, Jeong, and Cho, 2010). Another study that tracked students as they entered college from high school found that, even after controlling for high school preparation and family background, taking developmental courses reduced students' chances of graduation from 4-year colleges and universities by six to seven percent. The same study found that taking developmental courses did *not* reduce the chances of graduation among community college students, though it lengthened the time to earn a degree (Attewell et al., 2006).

In response to this and other research, a growing number of policymakers and practitioners have come to see existing developmental education practices as more of a hindrance than a support for college completion. Some go so far as to call developmental education a "bridge to nowhere" and argue that it is engineered for failure (Complete College America, 2012). Cost is a major concern, both from the taxpayer side (e.g., annual federal and State expenditures for instruction) and from the student perspective (e.g., course fees and the opportunity costs associated with not working or taking courses that count toward a college degree). Few education leaders would argue that students should take whatever courses they want without regard to ability, but there is growing suspicion that more students are assigned to developmental education than actually need it, and that standard approaches to teaching underprepared students take too much time and often are not effective.

A number of ideas for reforming developmental education assessment and instruction have emerged from States, colleges, research centers, and other organizations that work with underprepared students. With regard to assessment, some experts have suggested replacing the current standardized basic skill assessments with alternative procedures, such as a review of students' high school transcripts. The hope is that such approaches will lead to more accurate assessments of skill levels and better placement into appropriate courses (Belfield and Crosta, 2012). Others have proposed experimenting with the cut scores used to place students into developmental education and/or augmenting the current standardized tests with additional cognitive and noncognitive indicators of college readiness such as motivation and problem-solving skills (Hughes and Scott-Clayton, 2011). In California, the Early Assessment Program (EAP) is attempting to reduce the need for students to take developmental education classes in college by having high school students take the same assessment tests used for entering freshmen in the California State University system, under the theory that students and teachers should focus on college readiness while students are still in high school (Policy Analysis for California Education, 2012). Institute-funded evaluations of EAP and a similar program, the Florida College and Career Readiness Initiative, are in currently progress. Other states may be moving in this direction as part of the Common Core State Standards initiative.

Between 2006 and 2012, the Institute funded two large evaluations of developmental education reforms under the auspices of the National Center for Postsecondary Research (www.postsecondaryresearch.org). One evaluation at a group of community colleges and 4-year universities in Texas examined the impact of summer bridge programs that tried to help recent high school graduates improve English or math skills before starting college in the fall. Another examined the impact of learning communities that paired

developmental education courses with "student success" courses, which taught students how to study and other general college survival skills, or content-oriented courses in several community colleges across the U.S. Both interventions led to modest gains in advancing students through the targeted subject (developmental English or math) but did not improve students' ability to pass college-level courses or to persist in college (Barnett et al., 2012; Visher et al., 2012).

Some experts argue that more fundamental changes are needed in how developmental education is structured and taught. One strategy is to accelerate the pace of developmental education instruction by compressing what would normally be taught in a semester or year into a more intensive and shorter sequence or by modularizing instruction so that students need to focus only on the discrete topics or skills that they lack. Another approach is to "mainstream" developmental education students into college-level courses with additional support (Zachry and Schneider, 2011). Washington State's Integrated Basic Education and Skills Training (I-BEST) program provides basic reading, writing, math, and English language instruction within the context of specific occupational fields that students choose, such as health care or automotive repair (Jenkins, Zeidenberg, and Kienzl, 2009). Two major initiatives led by the Carnegie Foundation for the Advancement of Teaching and the Charles A. Dana Center at the University of Texas at Austin are working to replace conventional developmental math courses in community colleges and State universities with a new curriculum focused on quantitative reasoning and statistics (for more information, see www.carnegiefoundation.org and www.utdanacenter.org). The list of innovations continues to grow as more States, schools, and programs attempt to better assist their students.

Though there is widespread dissatisfaction with developmental education assessment and instruction as conventionally delivered, there is not much evidence on the impact of alternative approaches. With the exception of summer bridge programs and learning communities, most evaluations have been limited to one or two sites and have relied on quasi-experimental methods. Finally, there has been relatively little attention to the scalability of alternative strategies for developmental education assessment and instruction (e.g., whether they can be implemented easily and are cost-effective). In response, the Institute is establishing a National Research and Development Center for Developmental Education Assessment and Instruction to strengthen the evidence base and help policymakers and practitioners improve student outcomes.

There are **three major components of the focused program of research** for the Center: one descriptive study and two evaluation studies. The goal of the descriptive study is to provide policymakers with better information on developmental education practices (both assessments and instruction) that are currently being used. The goal of the evaluation studies is to determine whether particular instructional practices or assessments are more likely to lead to improved student outcomes (e.g., reading proficiency, progression through developmental programs). The Institute expects that the Center will be prepared to start the descriptive study at the beginning of the performance period and that one of the two evaluation studies will start soon thereafter. The second study may follow at a later point and build off of the findings from one of the other studies.

A. Significance of the Focused Program of Research
In the Significance section of your application, justify why your approach is well-suited for addressing the goals of the Center. You should explain your understanding of the problems the Center is meant to address, propose an overall vision for the Center, and describe a coordinated set of research and leadership activities that you believe will produce the most benefit for the postsecondary institutions and students that will participate. The Institute encourages applications that propose research that is relevant to community colleges and open-access, 4-year colleges and universities. The Institute also encourages applications that include States or postsecondary education systems as active partners in developing research plans and utilizing the research.

a. Descriptive Study

You must propose to conduct a descriptive study that will document current developmental education instructional practices and assessments, used by community colleges and other open-access institutions across the U.S. or in states selected by the Center for investigation. The purpose of the descriptive study is to better understand current assessment and instructional practices in these settings.

The major research questions to be addressed in this study include the following:

1) What assessment tools and practices do community colleges and other open-access institutions currently use to assess the reading, writing, and mathematics skills of incoming students and determine their readiness for college-level courses?

2) What considerations or factors underlie institutions' choices for particular practices?

3) What are the major strategies they use to teach developmental education?

4) Are there different approaches used for traditional students (coming straight from high school) than for nontraditional students (those who may be older and coming from the workforce or from adult education programs)?

5) To what extent are developmental education assessment and instructional practices aligned with the college and career readiness criteria reflected in the Common Core State Standards?

You may expand on these questions or suggest your own. If you modify the questions substantially, you should explain why.

The descriptive study may involve an institutional survey, qualitative interviews with individuals responsible for developmental education and instruction at colleges, secondary data analysis, or a combination. You should explain your approach, how you will select your sample, what you intend to learn from the surveys or interviews, and the timeframe for initiating and completing the descriptive study. Stronger applications will include a nationally representative sample of community colleges and other open-access institutions. If resources do not permit a nationally representative sample, applicants should focus on institutions in the States or postsecondary education systems where the evaluation studies will take place.

b. Evaluation Studies

You must propose to conduct at least two evaluations of programs or strategies that are already serving large numbers of students or that have the potential to be expanded to measure effects on student outcomes. The intervention[1] may target reading, writing, math, English language proficiency, or any combination of these; however, you should justify your selection of the intervention and the content area(s). Although many of the interventions currently being used may lack a fully explicated theory of change, you should discuss why the intervention is believed to be effective. Such a discussion is crucial to understand the design and analysis of your studies. Also, although an intervention may be in use, it may need to be refined or scaled up for the evaluation. You should explain whether any such modifications are needed and how they will be handled (e.g., whether Center staff or other partners will be involved). You should also make clear what criteria you will use to ensure that the intervention is ready for an evaluation and provide documentation that you will have access to the administrative records or other data needed for the analysis.

1) One evaluation should be focused on a program or strategy for improving current practices for **assessment and placement**.

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[1] By *intervention*, the Institute means curricula, instructional approaches, instructional supports, technology, education practices, programs, and policies whose end purpose is to improve the education outcomes of students.

Possible research questions to be addressed include the following:

a. How can community colleges and other open-access institutions improve upon current assessments or assessment practices to make sure students are placed into appropriate-level courses?

b. What are the effects of alternative assessment and placement strategies on students' overall academic performance (e.g., in reading, writing, or mathematics), persistence, and progress toward college degrees?

2) The other evaluation should be focused on a program or strategy for improving developmental education **instruction**.

Possible research questions to be addressed include the following:

a. For students determined to be in need of remediation, how can community colleges and other open-access institutions help them prepare for college-level courses in the shortest amount of time?

b. What are the impacts of different approaches to developmental education instruction on student learning, overall academic performance (e.g., in reading, writing, or math), persistence, and progress toward college degrees?

You may expand on these questions or suggest modifications. However, **the evaluations you propose must also include questions about the impacts of these programs or strategies for key subgroups.** For example, are different approaches needed to serve students who have recently finished high school and students who have been out of school for several years? Are different strategies needed for students who need developmental education in one subject versus two or three subjects? Furthermore, **the evaluations you propose must address issues about the scalability, especially the cost-benefits, of these reforms**. For example, what are the costs of alternative assessment and instructional strategies (including the status quo)? How much of the costs are absorbed by government, institutions, and students? Which strategies are most cost-effective?

In addition to the descriptive study and the two evaluation studies, you may wish to conduct additional exploratory research, pilots of new innovations, or further development or refinement of innovations. Such activities may be proposed as supplemental studies, and a brief description of them is encouraged. However, you should be mindful of the requirements above (i.e., one descriptive and two evaluation studies) and the budgetary and time constraints of the Center.

B. Research Plan for the Focused Program of Research
The R&D Center on Developmental Education Assessment and Instruction is expected to support a variety of research projects. At a minimum, you must conduct a descriptive study on current developmental education assessment and instruction practices and select at least two major interventions to evaluate for impacts on student outcomes (e.g., improved English language or math proficiency, course completion, persistence in college). At least one evaluation is to be focused on a strategy for improving current practices for assessment and placement, and at least one evaluation is to be focused on a strategy for improving developmental education instruction. Interventions may target reading, writing, math, English language proficiency, or any combination of these; either way, you should justify your selection.

a. Methodological Requirements for the Descriptive Study

Present a research plan that describes

  1) The research questions guiding the study,

  2) The population from which you will select your sample and how you will select your sample,

  3) The measures you will use,

  4) A data analysis plan, and

  5) A timeline.

b. Methodological Requirements for the Evaluation Studies
Present a research plan for each evaluation study that describes

  1) The research questions guiding the study;

  2) The sample and setting;

  3) An appropriate research design that meets What Works Clearinghouse evidence standards (with or without reservations);

  4) A detailed power analysis;

  5) The measures that will be used to assess proximal and distal outcomes, fidelity of implementation, and comparison group practices;

  6) Key moderators or mediators;

  7) A plan to analyze implementation fidelity and comparison group practices;

  8) A data analysis plan; and

  9) A timeline.

C. Leadership and Outreach Activities
Working with the Institute after an award, the R&D Center will identify and be actively engaged in leadership and outreach activities that serve the mission of the R&D Center to improve developmental education assessment and instruction. The primary goals of these activities are to

  1) Convene policymakers, practitioners, and researchers interested in developmental education reform; and to

  2) Assist efforts by States, colleges, and universities to bring effective models to scale.

The Institute encourages applicants to develop a Center website that provides links to reports, papers, and other resources. The Institute also encourages webinars, podcasts, and other innovative uses of technology to share information efficiently and facilitate broad awareness and discussion of the Center's work among policymakers and practitioners.

D. Maximum Awards
The maximum duration of an R&D Center on Developmental Education Assessment and Instruction is 5 years. An application proposing a Center length of greater than 5 years will be deemed nonresponsive to the Request for Applications and will not be accepted for review. **The maximum award for an R&D Center on Developmental Education Assessment and Instruction is $10,000,000 (total cost = direct costs + indirect costs).** An application proposing a budget higher than the maximum award will be deemed nonresponsive to the Request for Applications and will not be accepted for review. The **focused program of research is to comprise at least 75 percent of the total budget** for the Center.2.

2. TOPIC TWO: KNOWLEDGE UTILIZATION

Education researchers have made enormous strides in studying the impacts of education policies and interventions designed to improve outcomes for students. Despite this accumulation of knowledge, there is pervasive concern that this work has not resulted in widespread adoption of practices shown to have positive effects or improvements in educational outcomes for large numbers of students. The Institute seeks to create a Research and Development Center on Knowledge Utilization to explore questions of how education researchers can make their work more relevant and useful to practitioners located in State and local education agencies and in individual schools, how the work of practitioners can inform research efforts, and how practitioners can make productive decisions based on research evidence.

The Institute seeks to create an R&D Center on Knowledge Utilization to **conduct research** that will

1) Develop tools for observing and measuring research use in schools,

2) Describe the conditions under which practitioners use research and factors that promote or inhibit research use in schools, and

3) Identify strategies that researchers can adopt to make their work more meaningful to and impactful on education practice;

and to **engage in leadership and outreach activities** that will

4) Demonstrate effective means of knowledge transfer, including interactive meetings and use of technology to foster meaningful exchange among researchers, practitioners, and other stakeholders on how research can best be used to improve school performance and student outcomes.

In recent years, the education research community has made enormous strides in conducting high-quality research and evaluation on the impact of education policies and interventions designed to improve outcomes for students. The Institute-funded What Works Clearinghouse, for example, maintains a registry of nearly 400 studies that meet the highest scientific standards for research and that show evidence of efficacy (http://ies.ed.gov/ncee/wwc/default.aspx); similarly, the privately-funded Coalition for Evidence-Based Practice reviews and maintains a listing of education interventions that show positive effects through randomized controlled trials (http://evidencebasedprograms.org/). Despite this accumulation of knowledge, there is widespread concern that the evidence on effective programs and practices largely goes unnoticed or unheeded by practitioners. There is also concern that without useful, accessible research evidence on programs that have *not* worked as intended, practitioners may be doing things that have shown null or negative effects. Thus, knowledge utilization is important both in encouraging the use of promising educational practices and in discouraging the use of less than optimal practices.

The question of how best to make scientific education research more useful to practitioners is not a new one (see, for example, National Research Council, 2002; Rudalevige, 2008), and a number of scholars have tried to understand the nature of the problem and to explore potential solutions (see, for example, Hess, 2008a; Tseng, 2010 and 2012). A related issue of how schools use student test scores and other data to try to make improvements was examined in recent editions of the *American Journal of Education* and *Teachers College Record* (volumes 118 and 114, respectively, both published in 2012). In a review of studies that evaluated the effectiveness of data use in schools, Marsh (2012) found little effect on organizations and student achievement. Other scholars argue that the relationship between data use and practice has been under-conceptualized and that too little attention has been paid to "connecting the dots" between data use, instructional change, and student learning (Coburn and Turner, 2012; Daly, 2012; Henig, 2012; Honig and Venkateswaran, 2012; Little, 2012; Moss, 2012; Roderick, 2012; Spillane, 2012; Turner and Coburn, 2012).

Efforts to promote evidence-based decision-making and practice in schools may face similar challenges. For example, Tseng (2012) and Huston (2012) suggest that the major policy questions motivating federal legislators and agencies (e.g., "does it work?") may not align with what school officials, teachers, and staff need or want to know, such as what it takes to implement programs, how to improve their specific practices, and how to make adjustments based on whom they are serving and where they are operating. Tseng (2012) argues that the research community needs a better understanding of how practitioners define, acquire, interpret, and use research. A first step may be to understand the degree to which these entities already use research. Doing so may include both direct, instrumental uses as well as less direct, conceptual uses (Nutley et al., 2007). Strategies to capture variation in knowledge use across different time periods and contexts may also be needed.

Local and State education context may partially determine how practitioners find information and what practices are adopted. Tseng (2012) observes that practitioners function in social settings and that what research they become aware of—and how they respond to it—has much to do with the environments in which they work and how they interact with their colleagues. Research use is a multilevel phenomenon, and in order to understand how research use unfolds, it is important to pay attention to the practices of individuals at multiple levels of the educational system (e.g., classrooms, schools, and district offices) and to the relationships among them (see, for example, Coburn and Turner's (2012) discussion of data use). For example, teachers often learn from fellow teachers and may be more inclined to use research if they see that it matters to their colleagues. School leaders also play an important role by communicating what research they feel is important and in creating an overall climate that is supportive of organizational learning and improvement.

In order for scientific research to take hold in schools, researchers may also need to adopt new ways of working. For example, partnerships between researchers and practitioners could help to break the linear relationship of research to practice and instead introduce a bidirectional model in which researchers and practitioners work together and inform one another, thereby allowing researchers to supply evidence that practitioners find truly useful and to receive input and feedback from administrators, teachers, students, and families. Researchers may also need to learn better ways of communicating. Descriptions of research methodology and analyses of data can be intimidating, and social scientists often reveal problems to be more complex than first thought (Fusarelli, 2008). Moreover, the sheer volume of studies on any given topic can be overwhelming. Intermediary organizations (which may include nonpartisan experts, membership organizations, or mission-driven groups) could have a role in synthesizing research findings and helping practitioners understand and apply major lessons (Hess, 2008b).

The Institute seeks to create a Research and Development (R&D) Center on Knowledge Utilization to learn whether there are steps researchers can take to make their work more relevant and useful to practitioners and to see whether there are steps State and local education agencies can take to help school leaders and teachers become more familiar with and receptive to scientific education research.

There are **three major components of the focused program of research** for the Knowledge Utilization R&D Center: one measurement study and two descriptive studies. The purpose of the measurement study is to develop tools for observing and measuring research use in schools and school districts. The purpose of the first descriptive study is to understand the conditions under which research is used and factors that promote or inhibit research use in schools and school districts. The purpose of the second descriptive study is to identify skills or strategies that researchers can adopt to make their work more meaningful to and impactful on education practice. The Institute expects that the Center will begin with the measurement study in order to have a valid and reliable means of collecting data for the two descriptive studies. The two descriptive studies can occur simultaneously or sequentially. As noted below, applicants also have an option of substituting an evaluation study for the second descriptive study.

A. Significance of the Focused Program of Research
In the Significance section of your application, justify why your approach is well-suited for addressing the goals of the Center. You should explain your understanding of the problems the Center is meant to address, propose an overall vision for the Center, and describe a coordinated set of research and leadership activities that you believe will produce the most benefit for promoting the use of scientific education research in schools and school districts. The Institute particularly encourages applications that propose innovative strategies for engaging researchers and practitioners in the work of the Center and for communicating findings.

a. Measurement study
You must propose to develop and validate a measure or set of measures that can be used to observe and document research use in schools.

Possible research questions to be addressed in this study include the following:

1) What are the right indicators to know whether school administrators and teachers are making use of education research when determining which policies, programs, classroom practices to implement?

2) What are good strategies to capture variation in research use across schools and school districts and over time?

You may expand on these questions or suggest your own. However, **the Institute encourages you to consider the intended end users** of this measure or set of measures and **whether adaptation is needed for different contexts and purposes**. The Institute anticipates that the primary users will include other researchers, research funders, and State and local education agencies.

Include a well-specified conceptual framework to provide a theoretical basis for the assessment, the intended population, and the proposed validation activities.

b. Descriptive studies
You must propose to conduct at least two descriptive studies. **The purpose of the first descriptive study is to understand the conditions under which research is used and factors that promote or inhibit research use in schools.** Possible research questions to be addressed in this study include the following:

1) What role do State and local education agencies play in making research available to and known by school administrators, faculty, and staff?

2) What role do school leaders play?

3) How do education agencies, school leaders, and teachers obtain and process scientific information?

4) How do social networks within schools and school districts appear to support or hinder research use?

5) What are the major incentives or disincentives for practitioners to better understand and apply education research?

6) What contextual factors (e.g., political climate, administrative structures, hiring and tenure policies) seem to affect the use of research in schools and school districts?

The purpose of the second descriptive study is to identify researcher practices that are associated with greater use of research in schools and school districts. Possible questions to be addressed in this study include the following:

1) Are partnerships between researchers and practitioners associated with greater research use by practitioners? To what extent do researchers perceive partnerships with practitioners as an enhancement or a burden to their work?

2) Is the presence or absence of intermediaries—or an emphasis on particular activities by intermediaries—associated with greater use of research by practitioners?

3) Do certain communication strategies used by researchers or intermediaries correlate with greater use of research by practitioners?

4) Are particular technological innovations associated with greater use of research by practitioners?

For each of the descriptive studies, you may expand on the questions above or suggest your own. You should be sure to make clear why the questions you have chosen are the most important ones for the Center to address.

c. Option to conduct an evaluation or pilot study instead of the second descriptive study
The Institute encourages applicants to propose a rigorous evaluation to assess the impact of a particular practice on the use of research in schools or school districts as an alternative to the second descriptive study. For example, instead of looking to see if there is an association between certain researcher practices and use of research by schools or school districts, an applicant might propose evaluating the impact of one of these practices using an experimental methodology, perhaps by randomly assigning schools to receive different levels of researcher or intermediary support or different levels and types of communications from a research team.

Another option to an evaluation study would be to propose a pilot study that would provide evidence of the promise of a particular practice on the use of research in schools or school districts. The type of pilot study you propose will depend upon the complexity of the intervention, the level at which the intervention is implemented (e.g., school district, school, classroom). As a result, pilot studies may range along a continuum of rigor that includes

- Underpowered efficacy studies (e.g., randomized controlled studies with a small number of classrooms or schools that provide unbiased effect size estimates of practical consequence which can stand as evidence of promise while not statistically significant),

- Single-case studies that adhere to the criteria for single-case designs that meet the design standards set by the What Works Clearinghouse,[2] and

- Quasi-experimental studies based on the use of comparison groups with additional adjustments to address potential differences between groups (i.e., use of pretests, control variables, matching procedures).

Applicants who propose an evaluation or pilot study are still required to conduct the measurement study and the first descriptive study on the conditions under which research is used and the factors that promote or inhibit research use in schools.

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[2] Kratochwill, T. R., Hitchcock, J., Horner, R. H., Levin, J. R., Odom, S. L., Rindskopf, D. M. & Shadish, W. R. (2010). Single-case designs technical documentation, pp. 14-16. Retrieved from What Works Clearinghouse website: http://ies.ed.gov/ncee/wwc/pdf/wwc_scd.pdf.

B. Research Plan for the Focused Program of Research

The R&D Center on Knowledge Utilization is expected to include one measurement study and at least two descriptive studies. As noted above, an evaluation or pilot study of a particular practice may be substituted for the second descriptive study.

a. Methodological requirements for the measurement study

Present a research plan that describes

1) The methods for developing and validating the assessment(s),

2) How psychometric evidence will be gathered to support the utility of the assessment(s) for the prescribed purpose,

3) The sample and setting and how they will be appropriate for meeting the research aims of the project,

4) The characteristics, size, and analytic adequacy of the sample to be used in the study, including justification for exclusion and inclusion criteria, and

5) A timeline.

Provide a detailed description of the iterative development processes that you will use to develop the research use assessment(s), including field testing procedures and processes for item revision. Include a detailed description of the validation activities and the types of evidence you will gather on the reliability and validity of the assessment(s) for the specified purpose, populations, and contexts.

b. Methodological requirements for the descriptive studies

Present a research plan for each descriptive study that describes

1) The population from which you will select your sample and how you will select your sample,

2) The measures you will use,

3) A data analysis plan, and

4) A timeline.

The descriptive studies may involve surveys, qualitative interviews with key stakeholders, secondary data analysis, or a combination. You should explain your approach, how you will select your samples, what you intend to learn from the surveys or interviews, and the timeframe for initiating and completing the descriptive studies. **The Institute encourages you to select two or more research sites for the descriptive studies.** Strong applications will identify sites that vary on such dimensions as administrative structure, State-initiatives around education reform, school or district size, and population characteristics (e.g., urbanicity, grade level, and socioeconomic levels).

c. Methodological requirements for the optional evaluation or pilot study

If you decide to propose an evaluation or pilot study, present a research plan that describes

1) The research questions guiding the impact study;

2) The sample and setting;

3) An appropriate research design that meets What Works Clearinghouse evidence standards (with or without reservations);

4) A detailed power analysis;

5) The measures that will be used to assess proximal and distal outcomes, fidelity of implementation, and comparison group practices;

6) Key moderators or mediators;

7) A plan to analyze implementation fidelity and comparison group practices;

8) A data analysis plan; and

9) A timeline.

C. Leadership and Outreach Activities

The Institute encourages you to consider innovative approaches to foster dialogue among practitioners and researchers on the work of the Center, including interactive meeting formats and use of social media. To use available resources most efficiently, you might consider taking advantage of annual conferences and other forums where researchers and practitioners already gather. The Institute also encourages the R&D Center to develop a website on knowledge utilization that provides links to papers, measurement tools, and other resources that will advance scholarship and support efforts by researchers, research funders, and State and local education agencies to make high-quality education research more relevant to and impactful on improving teaching and learning in schools. Although the focus of the R&D Center is on research use in education, the Institute is open to learning how other applied social sciences such as public health, psychology, and social work have tried to encourage research use among practitioners and what lessons these efforts might hold for the education field.

D. Maximum Awards

The maximum duration of an R&D Center on Knowledge Utilization is 5 years. An application proposing a Center length of greater than 5 years will be deemed nonresponsive to the Request for Applications and will not be accepted for review. **The maximum award for an R&D Center on Knowledge Utilization is $5,000,000 (total cost = direct costs + indirect costs).** An application proposing a budget higher than the maximum award will be deemed nonresponsive to the Request for Applications and will not be accepted for review. The **focused program of research is to comprise at least 75 percent of the total budget** for the Center.

3. GENERAL REQUIREMENTS OF THE PROPOSED RESEARCH

A. Requirements for the Focused Program of Research

The Institute intends for the work of the R&D Center to include a focused program of research that ideally will result in solutions or answers to specific education problems at the end of 5 years. The Institute expects the *focused program of research* to comprise at least 75 percent of a Center's activities. The exact percentage will depend on the cost and effort required to carry out the focused program of research.

For the FY 2014 R&D Center competition, the Institute expects the focused program of research to consist of a set of tightly linked studies that build on each other and together accomplish the goals specified under *Topic 1: Developmental Education Assessment and Instruction* or *Topic 2: Knowledge Utilization*. The requirements for each of these topics are explained in Part III of this Request for Applications. The Institute strongly discourages applications that propose a model in which multiple investigators each conduct separate studies that are only loosely coordinated around the topic.

Although the Centers have broader functions than conducting a focused program of research, the research program is the only portion of the activities of a Center that can be well-specified in advance and, thus, can provide a fair basis for comparing and evaluating applications for funding. Consequently, the majority of the application should be a detailed description of the focused program of research.

B. Requirements for Other Center Activities

In addition to research on the focal topic, R&D Centers are required to conduct supplemental research studies as needed and to provide leadership in the topic area. Briefly describe the work you expect the Center to do in each of these areas, keeping in mind that the Institute will work cooperatively with the Center to develop complete plans for these activities once the Center is awarded.

a. Requirements for supplemental research studies

As part of the Center activities, you may conduct smaller, supplemental research projects that speak to other issues that are important within the context of the broad topic of the Center. These studies are typically ones that can be completed within 9 to 12 months.

The R&D Center will work cooperatively with the Institute to select and design supplemental studies to respond to pressing policy and practice needs within the topic covered by the Center. For this reason, the Institute does not expect a detailed research plan for these supplemental studies in the application. Instead, **provide two examples of supplemental studies that might be useful to undertake**, including a short rationale for each and brief description (two or three paragraphs) of the type of research approach that would be used. Capacity for conducting supplemental research projects will carry weight in the scoring of the application.

b. Requirements for national leadership and outreach activities

As part of the Center activities, you are expected to provide national leadership within the Center's topic area by engaging in dialogue with researchers, policymakers, and practitioners to identify promising areas of research, development, and dissemination for the field. The Institute encourages applicants to develop a Center website that provides links to reports, papers, and other resources. The Institute also encourages webinars, podcasts, and other innovative uses of technology to share information and encourage discussion of the Center's work among policymakers and practitioners.

Because the Center will work cooperatively with the Institute in the development and planning of such activities, you need not provide highly detailed plans for the leadership activities. Instead, **explain why the proposed Center staff is qualified to fulfill this leadership role** if awarded a Center and **describe at least two examples of the types of activities that might be useful to undertake**. In addition, identify appropriate organizations and agencies with which you might work in carrying out leadership activities. Capacity for carrying out leadership and national activities will carry weight in the scoring of the application.

C. Management and Institutional Resources

The Institute anticipates that the focused program of research, the supplemental studies, and the national leadership activities will require the coordination of multiple scientists and other partners. Therefore, describe your plans and procedures for the overall management of the Center and its diverse activities.

If the plans for the **first year** of grant activities include substantial work to be conducted in schools or other education delivery settings, document the availability and cooperation of the schools or other education delivery settings that will be required to carry out that work via a letter of agreement from the education organization(s) in Appendix C of your application.

You may involve curriculum or assessment developers or distributors (*including for-profit entities*) in the Center, from having the developers as full partners in the application to using off-the-shelf curriculum or assessment materials without involvement of the developer or publisher. However, involvement of the developer or distributor should not jeopardize the objectivity of the research. Describe the role, if any, of the developer/distributor in the Center and how objectivity in the research would be maintained.

D. Personnel
Competitive applications will have leadership and staff that collectively demonstrate

1) Expertise in the content areas relevant to the Center topic,

2) The methodological expertise to carry out the proposed projects,

3) Sufficient experience working with education delivery settings to carry out the proposed projects, and

4) Experience that is relevant to national leadership activities.

In the Center narrative, briefly describe the qualifications, roles, responsibilities, and percent of time (effort over the calendar year) to be devoted to the Center for all key personnel.

PART IV: GENERAL SUBMISSION AND REVIEW INFORMATION

1. MECHANISM OF SUPPORT
The Institute intends to award cooperative agreements pursuant to this Request for Applications. The maximum length of the award period is 5 years.

2. FUNDING AVAILABLE
The size of the award depends on the topic and scope of the R&D Center's activities. Please attend to the maximums set for Center length and budget for each topic. **If you request an award length longer than the maximum or a budget higher than the maximum, your application will be deemed nonresponsive and will not be reviewed.**

Topic 1: R&D Center on Developmental Education Assessment and Instruction
The size of the award depends on the scope of work for the Center. The maximum duration of the award is **5 years** and the maximum award for a 5-year Center is **$10,000,000** (total cost = direct + indirect).

Topic 2: R&D Center on Knowledge Utilization
The size of the award depends on the scope of work for the Center. The maximum duration of the award is **5 years** and the maximum award for a 5-year Center is **$5,000,000** (total cost = direct + indirect).

The Institute expects the *focused program of research* to comprise at least 75 percent of a Center's activities depending on the cost and effort required to carry out the focused program of research, with the remainder of the budget devoted to supplemental studies, leadership activities, and any administrative activities not included in the focused program of research.

Although the plans of the Institute include the Education Research and Development Center program described in this announcement, awards pursuant to this Request for Applications are contingent upon the availability of funds and the receipt of a sufficient number of meritorious applications. No more than one grant will be awarded under the Developmental Education Assessment and Instruction topic, and no more than one grant will be awarded under the Knowledge Utilization topic because **the Institute only intends to establish one Center for each topic**. However, because the Institute is committed to funding only high quality work, the Institute will make an award for a Center only if at least one application is deemed meritorious under peer review.

3. 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.

Can I apply to multiple competitions or topics?
> You may submit an application to more than one of the Institute's competitions in FY 2014. In addition, within a particular competition, you may submit multiple applications. However, you may submit a given application only once (i.e., you may not submit the same application or similar applications to multiple competitions). If you submit the same or similar applications, the Institute will determine whether and which applications will be accepted for review and/or will be eligible for funding.

Can I apply if I work at a for-profit developer or distributor of an intervention?
> Yes, you may apply if you or your collaborators develop, distribute, or otherwise market products or services (for-profit or nonprofit) that can be used as interventions or components of interventions 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 how you will ensure the objectivity of the research in the Center narrative.

Can I apply if I intend to copyright products developed using grant funds?
> Products derived from the grant 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 [34 C.F.R. § 74.36(a) (2013) (http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=1&SID=28ac4dbfeabba7d842fc8544fc835881&ty=HTML&h=L&r=SECTION&n=34y1.1.1.1.21.3.13.16)].

Can 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?
> You may submit an application if your institution is not located in the territorial United States. You may also propose working with sub-awardees who are not located in the territorial United States. In both cases, your proposed work must be relevant to education in the United States. Also, institutions not located in the territorial U.S. (both primary grantees and sub-awardees) **cannot charge indirect costs**.

Can I apply to do research on non-U.S. topics or using non-U.S. data?
> All research supported by the Institute **must be relevant to education in the United States**.

4. THE PRINCIPAL INVESTIGATOR

The Principal Investigator 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.

Your institution is responsible for identifying the Principal Investigator. Your institution may elect to designate more than one Principal Investigator. In so doing, the institution identifies them as individuals who share the authority and responsibility for leading and directing the Center intellectually and logistically. All Principal Investigators will be listed on any grant award notification.

However, institutions applying for funding must designate a single point of contact for the Center. The role of this person is primarily for communication purposes on the scientific and related budgetary

aspects of the Center and should be listed as the Principal Investigator. All other Principal Investigators should be listed as Co-Principal Investigators.

The Principal Investigator is expected to attend one meeting each year (for up to 3 days) in Washington, D.C. with other grantees and Institute staff. **The project's budget should include this meeting**.

5. COOPERATIVE AGREEMENTS
Through the terms of the cooperative agreement, grantees will work with the Institute to plan activities related to supplemental research and leadership activities.

6. SPECIAL CONSIDERATIONS FOR INDIRECT COST RATES AND FOR EXPENSES FOR HOSTING MEETINGS AND CONFERENCES
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 are requesting funds to cover expenses for hosting meetings or conferences, please note the statutory and regulatory requirements that specify whether costs are reasonable and necessary. Depending on the type of organization you belong to, refer to the Cost Principles for Federal Grants:
- 2 CFR Part 225 (OMB Circular A-87, State, Local, and Indian Tribal Governments), http://www.gpo.gov/fdsys/pkg/CFR-2011-title2-vol1/xml/CFR-2011-title2-vol1-part225.xml;
- 2 CFR Part 220 (OMB Circular A-21, Educational Institutions), http://www.gpo.gov/fdsys/pkg/CFR-2011-title2-vol1/xml/CFR-2011-title2-vol1-part220.xml; or
- 2 CFR 230 (OMB Circular A-122, Non-Profit Organizations), http://www.gpo.gov/fdsys/pkg/CFR-2011-title2-vol1/xml/CFR-2011-title2-vol1-part230.xml.

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 OMB Cost Principles.

7. DEMONSTRATING ACCESS TO DATA AND EDUCATION DELIVERY SETTINGS
You may propose to conduct research that requires access to studies currently under way, secondary data sets, or education delivery settings (e.g., classrooms, schools, districts). 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 support 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:
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 must be one of the members of the research team applying for the grant to conduct the new Center.

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 Center period.

Conducting research in or with education delivery 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 education delivery 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 Center 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 schools originally recruited for the application are still willing to partner in the research.

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.

8. PUBLIC AVAILABILITY OF 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, peer-reviewed 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.

9. SPECIAL CONDITIONS ON GRANTS

The Institute may impose special conditions on a grant if the Principal Investigator or Institution 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.

10. SUBMITTING A LETTER OF INTENT

The Institute asks that you submit a letter of intent by **4:30 p.m.** Washington D.C. time on **June 6, 2013**. Institute staff uses the information in the letters of intent to identify the expertise needed for the scientific peer review panels, secure a sufficient number of reviewers to handle the anticipated number of applications, and provide feedback to you on your research idea. The Institute encourages you to submit

a letter of intent even if you think you might later decide not to submit an application. **The letter of intent is not binding and does not enter into the review of a subsequent application**. The letter of intent must be submitted electronically using the instructions provided at https://iesreview.ed.gov. Receipt of the letter of intent will be acknowledged via email. **Should you miss the deadline for submitting a letter of intent, you still may submit an application**. If you miss the deadline, the Institute asks that you inform the relevant program officer (see Section 20 of this document) of your intention to submit an application.

A. Content
The letter of intent should include
> 1) Descriptive title;
> 2) Topic that you will address;
> 3) Brief description of the proposed R&D Center;
> 4) Name, institutional affiliation, address, telephone number and e-mail address of the Principal Investigator and any Co-Principal Investigators;
> 5) Name and institutional affiliation of any key collaborators and contractors;
> 6) Duration of the proposed Center; and
> 7) Estimated total budget request (the estimate need only be a rough approximation).

B. Format and Page Limitation
Begin by selecting the letter of intent form for the research competition and topic that you plan to submit your application under (http://iesreview.ed.gov). The online submission form contains fields for each of the seven content areas listed above. Use these fields to provide the requested information. The Center description should be single-spaced and should not exceed one page (about 3,500 characters).

11. APPLICATION INSTRUCTIONS AND APPLICATION PACKAGE
A. Documents Needed to Prepare an Application
To complete and submit an application, you need to review and use three documents: the Request for Applications, the IES Grants.gov Application Submission Guide, and the Application Package.

> 1) The *Request for Applications* for the National Education Research and Development Center program (CFDA 84.305C) describes the substantive requirements for a Center application.
>
> > ✓ Request for Applications   http://ies.ed.gov/funding/
>
> 2) The *IES Grants.gov Application Submission Guide* provides the instructions for completing and submitting the forms included in the Application Package.
>
> > ✓ IES Grants.gov Application Submission Guide   http://ies.ed.gov/funding/
>
> > Additional help navigating Grants.gov is available in the Grants.gov User Guides:
>
> > ✓ Grants.gov User Guides   http://www.grants.gov/applicants/app_help_reso.jsp
>
> 3) The *Application Package* provides all of the forms that you must complete and submit. The application form approved for use in the competitions specified in this RFA is the government-wide SF-424 Research and Related (R&R) Form (OMB Number 4040-0001). *Section C* below explains how to download the Application Package from Grants.gov.

B. Date Application Package is Available on Grants.gov
The Application Package will be available on http://www.grants.gov/ by **June 6, 2013**.

C. How to Download the Correct Application Package
a. CFDA number
To find the correct downloadable Application Package, you must first search by the CFDA number for the research competition *without* the alpha suffix. To submit an application to the Education Research and Development Center program, you must search on: **CFDA 84.305**.

b. Education Research and Development Center Application Package
The Grants.gov search on CFDA 84.305 will yield more than one Application Package. For the Education Research and Development Center program, download the Application Package marked

Education Research and Development Center program CFDA 84.305C

Download the Application Package that is designated for the grant competition and competition deadline. If you use a different Application Package, even if it is for an Institute competition, the application will be submitted to the wrong competition. Applications submitted using the incorrect application package may not be reviewed for the Education Research and Development Center competition.

12. MANDATORY ELECTRONIC SUBMISSION OF APPLICATIONS AND DEADLINE
Applications must be submitted electronically and received by 4:30:00 p.m., Washington, DC time on September 4, 2013. **Applications received by Grants.gov after the 4:30:00p.m. application deadline will be considered late and will not be sent forward for scientific peer review**.

Grant 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/. You must follow the application procedures and submission requirements described in the Institute's Grants.gov Application Submission Guide and the instructions in the User Guides provided by Grants.gov.

Please note that to submit an electronic application through Grants.gov, your institution must be registered with Grants.gov (http://www.grants.gov/applicants/organization_registration.jsp).

To register with Grants.gov, your institution must have
- a valid Dun and Bradstreet Data Universal Numbering Systems (DUNS) number and
- an active registration with the System for Award Management (SAM) (see https://www.sam.gov/portal/public/SAM/).

Your institution is strongly encouraged to start the Grants.gov registration process *at least 4 weeks* prior to the application due date. For more information on using Grants.gov, you should visit the Grants.gov web site.

Applications submitted in paper format will be rejected unless you (1) qualify for one of the allowable exceptions to the electronic submission requirement described in the Federal Register notice announcing the Education Research and Development Center Grant (CFDA Number 84.305C) competition described in this Request for Applications and (2) submit, no later than 2 weeks before the application deadline date, a written statement to the Institute that documents that you qualify for one of these exceptions.

13. TECHNICAL ASSISTANCE FOR APPLICANTS
The Institute encourages you to contact the Institute's Program Officers as you develop your application. Program Officers can offer advice on preparing applications, including more substantive advice on your research ideas and draft Center narrative. The Program Officer for the R&D Center competition is listed in Section 20 at the end of this document.

In addition, please 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 registration process, see
http://ies.ed.gov/funding/webinars/index.asp.

14. WRITING YOUR APPLICATION: CONTENT AND FORMATTING REQUIREMENTS
A. Overview
In this section, the Institute provides instructions regarding the content of the (1) Center summary/abstract, (2) Center narrative, (3) Appendix A, (4) Appendix B, (5) Appendix C, and (6) bibliography and references cited. Instructions for all other documents to be included in the application (i.e., the SF-424 forms, biographical sketches, narrative budget justification, and human subjects narrative) are provided in the *IES Grants.gov Application Submission Guide*.

B. General Format Requirements
Margin, format, and font size requirements for the Center summary/abstract, Center narrative, Appendix A, Appendix B, Appendix C, and bibliography are described in this section. You must adhere to the type size and format specifications for the entire narrative, including footnotes, to ensure that your text is easy for reviewers to read and that all applicants have the same amount of available space in which to describe their Centers.

a. Page and margin specifications
For the purposes of applications submitted under this RFA, a "page" is 8.5 in. x 11 in., on one side only, with 1-inch margins at the top, bottom, and both sides.

b. Spacing
Text must be single spaced in the narrative.

c. 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.
- The 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.
- The type size must yield no more than 6 lines of type within a vertical inch.

To ensure your font meets these requirements, 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. **These requirements apply to the PDF file as submitted.**

When applicants use small type size, it difficult for reviewers to read the application, and applicants may receive an unfair advantage by allowing for more text in their applications. **Consequently, the use of small type font is grounds for the Institute to not accept an application for review.**

As a practical matter, applicants who use a 12-point Times New Roman font without compressing, kerning, condensing, or other alterations typically meet these requirements. Figures, charts, tables, and figure legends may be in a smaller type size but must be readily legible.

d. Graphs, diagrams, tables
The Institute encourages applicants to use black and white in graphs, diagrams, tables, and charts. If you choose to use color, you must ensure that the material reproduces well when photocopied in black and white.

C. Center Summary/Abstract
a. Submission
The Center summary/abstract will be submitted as a separate PDF attachment.

b. Page limitations and format requirements
The Center summary/abstract is limited to one single-spaced page and must adhere to the margin, format, and font size requirements above.

c. Content
The Center summary/abstract should include the following:
- (1) Title of the proposed Center,
- (2) The topic under which the applicant is applying (i.e., "Education Research and Development Center on Developmental Education Assessment and Instruction" or "Education Research and Development Center on Knowledge Utilization"),
- (3) Brief description of the focused program of research, and
- (4) A list of the key Center personnel.

D. Center Narrative
a. Submission
The Center narrative will be submitted as a PDF attachment.

b. Page limitations and format requirements
The Center narrative is limited to **35 single-spaced pages** for all applicants. The 35-page limit for the Center narrative does not include any of the SF-424 forms, the 1-page summary/abstract, the appendices, research on human subjects information, bibliography and references cited, biographical sketches of senior/key personnel, narrative budget justification, subaward budget information, or certifications and assurances. If the narrative for the Center is determined to exceed the 35 single-spaced page limit, the Institute will remove any pages after the 35th page of the narrative.

Reviewers are able to conduct the highest quality review when applications are concise and easy to read, with pages numbered consecutively using 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 Center in the Center 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
To be compliant with the requirements of the Request for Applications, the Center narrative must include five sections: (a) **Significance** of the Focused Program of Research, (b) **Research Plan** for the Focused Program of Research, (c) **Other Center Activities**, (d) **Management and Institutional Resources**, and (e) **Personnel**. Information to be included in each of these sections is detailed in *Part III: Requirements of the Proposed Research*. Incorporating the requirements outlined in this section provides the majority of the information on which reviewers will evaluate the proposal.

E. Appendix A (Optional)
a. Submission
If you choose to have an Appendix A, you must include it at the end of the Center Narrative and submit it as part of the same PDF attachment.

b. Page limitations and format requirements
Appendix A is limited to 15 pages. It must adhere to the margin, format, and font size requirements described in *Section 14.B General Format Requirements*.

c. Content
You may include figures, charts, or tables that supplement the Center narrative as well as examples of measures (e.g., tests, surveys, observation and interview protocols) to be used in the Center's activities in Appendix A. These are the only materials that may be included in Appendix A; all other materials will be removed prior to review of the application. You should include narrative text in the 35-page Center narrative, not in Appendix A.

F. Appendix B (Optional)
a. Submission
If you choose to have an Appendix B, you must include it at the end of the Center narrative, following Appendix A (if included), and submit it as part of the same PDF attachment.

b. Page limitations and format requirements
Appendix B is limited to 10 pages. It must adhere to the margin, format, and font size requirements described in *Section 14.B General Format Requirements*.

c. Content
In Appendix B, 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 B; all other materials will be removed prior to review of the application. You should include narrative text describing these materials in the 35-page Center narrative, not in Appendix B.

G. Appendix C (Optional)
a. Submission
If you choose to have an Appendix C, you must include it at the end of the Center narrative, following Appendix B (or 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.

b. Page limitations and format requirements
Appendix C does not have a page limit. Appendix C contains letters of agreement from research partners (e.g., schools, districts, States, consultants). Ensure that the letters reproduce well so that reviewers can easily read them. Do not reduce the size of the letters.

c. Content
Include in Appendix C the letters of agreement from partners (e.g., schools and districts), data sources (e.g., State agencies holding administrative data), and consultants.

Letters of agreement should include enough information to make it clear that the author of the letter understands the nature of the commitment of time, space, and resources to the Center that will be required if the application is funded. A common reason for R&D Centers 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.

H. Bibliography and References Cited
a. Submission
Submit this section as a separate PDF attachment.

b. Page limitations and format requirements
There are no limitations to the number of pages in the bibliography. Use the margin, format, and font size requirements described in *Section 13.B General Format Requirements*.

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.

15. APPLICATION PROCESSING
Applications must be **submitted electronically and received by 4:30:00 p.m., Washington, D.C. time** on **September 4, 2013**. 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 be returned to applicants without further consideration.

Once you formally submit an application, Institute personnel will not comment on its status until the award decisions are announced except with respect to issues of completeness and eligibility.

16. PEER REVIEW PROCESS
The Institute will forward all applications that are compliant and responsive to this Request 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 Request for Applications.

Each compliant and responsive application is assigned to one of the Institute's scientific review panels. At least three 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 Institutes 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.

17. REVIEW CRITERIA FOR SCIENTIFIC MERIT
The purpose of Institute-supported research is to contribute to the solution of 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. Reviewers for all applications will be expected 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 also described in *Part III: Requirements of the Proposed Research*.

A. Significance of the Focused Program of Research
Does the applicant provide a compelling rationale for the significance of the Center as defined in the sections on the significance of the focused program of research?

B. Research Plan for the Focused Program of Research
Does the applicant meet the requirements described in the sections detailing the methodological requirements for the focused program of research?

C. Plans for Other Center Activities
Do both the content of the examples of proposed supplemental studies and leadership activities and the description of the applicant's capacity to conduct such activities demonstrate that the applicant has the ideas, experience, and capability to successfully carry-out such activities in cooperation with the Institute?

D. Management and Institutional Resources
Do the plans and procedures for the overall management of the Center indicate that the applicant has the capacity to efficiently and successfully complete the proposed research, dissemination, and leadership activities? 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 proposed Center activities?

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

18. RECEIPT AND START DATE SCHEDULE
A. Letter of Intent Receipt Date
> June 6, 2013

B. Application Deadline Date
> September 4, 2013

C. Earliest Anticipated Start Date
> July 1, 2014

D. Latest Possible Start Date
> September 1, 2014

19. AWARD DECISIONS
The following will be considered in making award decisions:
- Scientific merit as determined by peer review,
- Responsiveness to the requirements of this request,
- Performance and use of funds under a previous Federal award,
- Contribution to the overall program of research described in this request, and
- Availability of funds.

20. INQUIRIES MAY BE SENT TO
Dr. Rebecca Kang McGill-Wilkinson
Institute of Education Sciences
400 Maryland Ave, SW
CP - 621
Washington, DC 20202

Email: Rebecca.McGill@ed.gov
Telephone: (202) 208-0638

21. 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.

22. APPLICABLE REGULATIONS

The Education Department General Administrative Regulations (EDGAR) in 34 CFR parts 74, 77, 80, 81, 82, 84, 85, 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(a)-(c), 75.219, 75.220, 75.221, 75.222, and 75.230.

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