



IES Funding Opportunities Webinar: Grant Writing Workshop for Minority Serving Institutions

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IES Funding Opportunities Webinar: Grant Writing Workshop for Minority Serving Institutions

**Presented by:
Katina Stapleton, Ph.D.
Program Officer
National Center for Education Research**

**Carol O'Donnell, Ed.D.
Program Officer
National Center for Education Research**

**Transcript
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Slide 1

Welcome everyone, this is Dr. Katina Stapleton. I want to welcome you to today's webinar, which focuses on grant writing for minority serving institutions.

At the end of today's webinar, hopefully you should know and have a basic understanding of what we fund. You should have an idea about whether submitting an application to the Institute of Education Sciences (IES) is appropriate for your research—if you're an individual researcher— or for researchers at your institution. We're also going to share tips on submitting an application and we're going to be talking about where you could get help. Dr. O'Donnell and I will be co-presenting today's workshop, so you will hear from both of us. We also have our colleague, Dr. Wai Chow, here with us, who is actually going to be answering questions directly. When you submit questions through the Q&A, they will come to Wai. She's going to respond to most of them, but she will also shift some of them to Carol and me, so that we might address them with the full group. Again, feel free to send your questions at any time.

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I wanted to start by giving you background on IES. IES was founded in 2002 under the Education Sciences Reform Act. We're led by John Q. Easton, who is our Director. We also have a National Board for Education Sciences (NBES), which provides guidance on our operations. If you look to the left, you'll see that also out of the Office of the Director is an office called the Standards & Review Office. They are entirely in charge of the review process, which we'll discuss a little bit later in the webinar. So again, we have the Office of the Director, an Advisory Board, and the Standards & Review Office.

If you look at the bottom of your chart, you'll see that there are four centers within IES. Two of them we're really not going to touch on today (National Center for Education Statistics [NCES] and National Center of Education Evaluation and Regional Assistance [NCEE]). NCES is essentially the data arm of the U.S. Department of Education (ED). You probably have heard about them, because they produce many of our national education data collections, like the Early Childhood Longitudinal Study (ECLS), as well as assessments like the National Assessment of Educational Progress (NAEP). Right next to it, we have listed NCEE. This office conducts unbiased large-scale evaluations of education programs. I should also mention that these are programs that are supported by federal funds. NCEE also oversees our regional labs and the *What Works Clearinghouse*.

The two centers that we're going to concentrate on today are the National Center for Education Research (NCER) and the National Center for Special Education Research (NCSER). Carol and I are both Program Officers with NCER. These two research centers are really sister centers. What I mean is that they have similar mandates and goals, just with different populations of students in mind, and I'm going to talk about them in detail.

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NCER supports rigorous research that addresses the nation's most pressing educational needs from early childhood to adult education. It's very important to note that this means we cover most of the education age range, from early childhood—which is pre-K—to adulthood. NCSER does very similar research, except their population of interest is different. At NCSER they're looking at students with or at risk of disabilities. As you can see, NCSER has a different age range. Rather than starting at early childhood, NCSER research can start with infants and toddlers who have already been identified as being at risk for disabilities or actually have disabilities and can go through high school. NCSER does not provide funding for research at the adult level. The majority of what both of the two Centers do is provide research funding. Learning about what that research funding covers is the purpose of today's webinar.

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We wanted to give you a basic idea of what kind of research IES is interested in, and we wanted to start with the end in mind. Our research always concentrates on what we refer to as our "final outcomes of interest." In the end, we want to know what helps students learn effectively. This looks a little bit different at different age levels and with different populations.

Both centers provide funding for research on school readiness. Both of them have funding for research at the preschool level. Only NCSER provides funding for research that's looking at the developmental outcomes for infants and toddlers with disabilities. Again, if you're looking at birth through pre-K, NCSER is your only funding source. Both centers also provide funding for research that's aimed at the kindergarten through Grade 12 level.

We first start with the core subject areas of education, and those are academic outcomes in reading, writing, math, and science. As we move through the presentation, you'll get an idea of what the programs in these areas look like. We also understand that learning to read and write and gaining skills in math and science does not happen in a vacuum. So, we're interested in learning about how we could improve the behaviors, interactions, and social skills for students, so that students can perform well in school and also so that they can transition to post school opportunities at the postsecondary level. We'll see in a second that there are other outcomes of interest for students with disabilities.

While we ultimately want students to learn while they're in school, we know that there are some other benchmarks. We're definitely interested in seeing how well students do individually and how schools do preparing students for high school graduation.

The first three bullets apply to both centers. The last bullet really applies to NCSER. NCSER is also interested in figuring out, "*How do we improve the day-to-day lives of students with disabilities?*" IES is interested in both the educational results and helping students with disabilities transition to employment, independent living, and also to postsecondary education.

Now, we've covered birth through Grade 12 outcomes of interest.

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NCER, but not our sister center NCSER, also provides funding at the postsecondary and adult level. At the postsecondary level, NCER's main interests are in access, that is, making it possible for students to attend college—both traditional students who attend college right after high school and adults who return to college later or go to college for the first time. NCER is also interested in students once they are in college — that is, making sure they are able to meet benchmarks in their majors toward graduation. Again, NCER is ultimately interested in students' graduation from college.

Within the last year, NCER added two other outcomes of interest at the postsecondary level. As you know, it is impossible to graduate, if you can't make it through the gateway courses. NCER is now allowing for research that looks at helping students persist and

successfully finish courses that are gateways in math and science—for example, 101 courses. Likewise, NCER is also looking at outcomes for our introductory composition or writing courses.

NCER is very much interested in adult education. If you were to go to our website, you'll see that most of our funding focuses on K-12. Then, we have a substantial investment in early childhood. (NCSEER funds grants include even earlier ages, specifically learners from birth through pre-K.) More recently, NCER added a research topic for adult education. One of the reasons why we have less grants in that area is because it is a more recent topic, but NCER is very much interested in learning how to improve the reading, writing, and numeracy outcomes for adult learners, particularly at the basic and secondary levels. We're also very interested in working with adults that are English language learners. What we are not interested in funding and is not included in our requests for applications (RFAs) is research on graduate outcomes. We currently don't provide funding for research on masters or doctoral level education.

If you have any questions about the outcomes of interest, please go ahead and send them in. We'll try to make sure that we address them either directly through the webinar or Wai will send responses.

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I'm going to move on a little bit. One of the things you might be thinking about is, "*Why are we having a webinar particular for minority serving institutions?*" We are very much interested in your institution understanding that the funding opportunities that we have are for you as well. We don't get as many applications from MSIs and over time we think it's because you might not know a lot about IES. We're addressing that problem now. You're on the webinar, so we know that you know that the funding opportunities exist. It may also be that you think you aren't qualified to receive the funding. I actually want to stop and pause and walk you through two of the major requirements for receiving funding from IES, both of which everyone on the call should meet.

The first one is: Applicants that have the ability and capacity to conduct scientifically valid research are eligible to apply. Eligible applicants include, but are not limited to, nonprofit and for profit organizations and public and private agencies and institutions. As long as your institution is able to conduct scientifically valid research, you are able to apply. Most applicants are based in the United States, but you do not have to be. We had some contact from some of our MSIs in the U.S. territories. We wanted to definitely let you know that you are able to apply and we welcome your application. While researchers do not have to be based in the United States, all research supported by IES must be relevant to education in the United States. Again, any institution that's capable of doing the work can apply. It doesn't matter whether you're located in the United

States or not, but the work that you do has to be relevant to U.S. education. If you have any questions at all about whether your organization can apply or if your work is relevant to U.S. education, please contact a Program Officer to discuss it.

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You should know that there are no target funding opportunities for MSIs. There are no special competitions aimed for you, so we encourage you to apply for our Education Research Grants program, our Special Education Research Grants program as well as all of the others.

We really want to take the time to point out that each Program Officer within NCER and NCSEER is here to help you. It is our job to provide technical assistance. If you have any question, you can send it to myself, Dr. O'Donnell, or any of our colleagues. We are definitely here to help you.

Slide 8

I wanted to very quickly walk you through what you can do as a researcher to apply for IES funding and we're also going to touch on what minority serving institutions can do to help your researchers prepare, because on the phone we have an audience that's mixed—including researchers as well as people from sponsored program offices, the Office of the Chancellor, your research offices, etc. So, we're trying to make sure that we talk to these populations.

The first thing to know is that you actually have to start the application. It takes a while to put together a successful application and you have to go through a number of steps. But you should also know that putting together an application can be a valuable part of building your program of research.

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To those of you on the phone representing MSIs at the institutional level, you should make sure that researchers at your institution know what opportunities are available. You should be regularly scanning the *Federal Register* to identify federal funding opportunities, which include those from ED and other agencies.

For us, it's very important that you understand what our funding priorities are and what grant competitions we have open each year, because we have a different set of competitions each year. Next, you want to be able to identify the people on your campus who are really capable of doing this kind of work in education research. It's obvious that you can turn to your schools or departments of education to identify people, but less obvious that you can also pull researchers from across your university.

It is very common for us to get applications from people in economics, from the science fields, from psychology, etc. So, keep in mind that researchers can come from across the campus.

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Once you know what the opportunities are, it's not enough that the information just sits on your desk. You have to find a way to distribute this information across campus and you want to make sure the researchers on your campus know that not only are you a resource, IES Program Officers are as well. They can contact any of us at any time for help; you can call or e-mail us to set up an appointment to talk by phone. We rarely do in-person meetings, but we can do teleconferences and videoconferences. We just need enough advance notice.

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Now, I want to speak directly to researchers. Don't depend on your sponsored program office to send you notices. You should sign up for the IES *Newsflash*, so that you too can be notified when new competitions open. You want to make it your own responsibility to know what kinds of funding opportunities are offered in your research area of interest. You can go to our website, <https://ies.ed.gov/funding>, at any time to see what the priorities are.

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Next, you want to look inward. You should have an idea of what we fund and are interested in. Now, you should identify what your strengths and research interests are and see how they overlap with the IES interests and priorities. To do so, you really need to sit down and read the separate request for applications (RFAs). There are a number of RFAs that describe what we're funding. Once you go through them, it's possible that you might feel a little lost. If that happens, you should contact the relevant Program Officer to discuss the application process and to discuss your ideas. We're able to give feedback on your applications from idea to draft; but it's really important that you make contact with us so that we can walk you through the process.

Slide 13

What does the process look like? If you go to <https://ies.ed.gov/funding>, you'll see our *Funding Opportunities* page. There is a lot of information here. What we're concentrating on in this webinar is the first step, which is identifying your individual funding opportunities. You've already signed up for this webinar online, but you should also go back to the website to see the full list of webinars.

Then, you want to make sure you follow the other important steps, like downloading the RFA, telling us what you intend to do your research on by submitting a Letter of Intent (LOI), and submitting your application on time.

If there are only two things that you take away from the webinar, one of them should be to contact your Program Officer for help. The other is that IES applications are due at 4:30 p.m. and zero seconds Washington, DC time on the application deadline. We don't accept late applications. You would be surprised at how many people are eliminated each year, because they've turned their applications in late.

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Again, just to recap the steps, you want to locate the RFAs online. Then, you want to figure out to which program, topic, and goal you should be submitting. If this is your first go around with IES, the terms program, topic, and goal are going to mean very little to you. We're going to walk through them in a few minutes, so don't be alarmed.

Another place to get information about what we fund is to go on our website and look at the abstracts. These are detailed descriptions of other projects that we've funded. This will give you an idea of the type of work we fund and how your work might fit into our portfolio. Lastly, again, the IES Program Officers are a resource. Our information is in every RFA, it's on the website, and Carol's and my contact information will be at the end of this webinar. So, if you need to, you can contact either of us.

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Very quickly, I want to go through the full list of the research programs for both NCER and NCSER. The Education Research Grants program, which is identified by Catalog of Federal Domestic Assistance (CFDA) number 84.305A, is our major program that we fund most of our NCER grants under. Carol is actually going to talk about it in-depth, so I'm going to skip over it. For now, I'm just going to call your attention to the four other RFAs. Please notice that each of them is represented by a CFDA number. "84.305" represents Education Research, and the letter at the end identifies which RFA it is.

The first one of the remaining four RFAs is 84.305B, the Research Training program in IES. For FY 2013, this covers funding for post-doctoral research training, research training on methodology for researchers as well as training for policymakers and practitioners. We are not funding pre-doctoral research training this year. There is a webinar specifically on these details, if you're interested in that RFA.

The next one (84.305D) is aimed at researchers that are trying to advance our knowledge of statistics and research methodology. There's no webinar on this. If you're interested in this topic, please contact Phill Gagne. His contact information is in that RFA.

Most of our research comes from the top down, meaning the researcher has an idea and then proposes a research project. These last two research programs operate a little bit differently. The Evaluation of State & Local Programs and Policies program (84.305E) was put in place for us to provide funding to evaluate programs and policies that states, districts, and other local education agencies (LEAs) already have in place or are planning to do anyway. For example, if in your state, they're going to roll out a new policy for math, like requiring all ninth-graders to take algebra, you could request funding to evaluate that program. We will not provide funding for the interventions themselves under this RFA, but we will provide funding to evaluate them. To recap, under this program, the education agency has something that they want to evaluate and they (or a researcher) can apply for funding to evaluate it.

Then, the last RFA, the Researcher-Practitioner Partnerships in Education Research program (84.305H), is a brand new program in which we're trying to provide funding for partnerships that are comprised of a research institution (so in your case, the MSI) and a state education agency (SEA) or local education agency (LEA). What we hope will happen is that the partnership will identify an area of interest to the LEA or SEA, do some preliminary data analysis around that issue, and then put together a research plan and an actual application for a future research project. For example, if you submitted this year, you would work together for a year. Then, you would come up with a proposal for the next funding cycle.

Again, we have webinars that describe all of these programs in depth, except for the one on Statistical & Research Methodology in Education. The contact for that program is Phill Gagne.

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NCSER has the parallel program to the Education Research Grants program. It is called the Special Education Research Grants program. This is their parent RFA. As you can see, the CFDA number starts differently. Instead of being 84.305, it is 84.324. Again, 84.324A is the NCSER parent RFA. NCSER also has a Research Training program (84.324B). This year NCSER is focusing on providing protected research time for early career researchers in special education. What NCSER would like for these early career researchers to be able to do is have some time to develop methodological expertise, content expertise, and gain grant writing skills. So, if you're interested in that, please attend the webinar specifically on that topic.

Lastly, NCSER has a special initiative (84.324D) this year that is called “Accelerating the Academic Achievement of Students with Learning Disabilities Research Initiative,” which we like to refer to as “A3.” The title is really long and it’s tongue twisting. The purpose of A3 is to develop and evaluate interventions. For example, instructional approaches, curricula, and technology that you believe will accelerate the academic achievement of students with or at risk for learning disabilities in Grades 3 through 8. Since the majority of the NCSER programs are meant to improve academic improvement, you might ask “*What’s different about this program?*”

First is that we really are intending for this improvement to take place quickly. We want this to be accelerated growth. Second is that, unlike NCSER’s other competitions, A3 is limited to Grades 3 through 8.

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Now, I am going to turn the presentation over to Dr. Carol O’Donnell. A few things for you to keep in mind as you’re listening is that we have two centers—the National Center for Education Research and its main program, the Education Research Grants program identified by the number 84.305A; and the National Center for Special Education Research and its main program, the Special Education Research Grants program identified by the number 84.324A. We use the titles of the programs, while we’re on the webinar. But, keep in mind, if you go onto our website and you go to <http://www.grants.gov> to apply, you’ll definitely need to know the number, not just the title of the program.

And without further ado—Carol.

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Katina just outlined our different programs, which you might actually hear described as “competitions.” The first thing you should do when you have a research idea is to decide to which program you’re going to apply; for example, 84.305A or 84.324A. That’s the first goal—decide to which program you want to apply. What I’m going to do is help you identify the appropriate topic and goal under which you should apply. To identify your topic and goal, you first need to establish your research questions and your research methods.

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The question you’re probably going to ask yourself is “*Does IES fund the kind of research that we want to do?*” To answer that question, you need to think about four different things. First of all, what education problem do you want to solve and what question do you want to answer? Next, you want to look at the underlying issue of your

problem and ask yourself if that problem or issue fits in with one of the IES topics. For example, let's say that you're interested in the relationship between high school study skills programs in math and high school graduation rates. Well, the underlying issue in this question is success in high school.

You might also want to ask yourself what content and what sample your research will address since each of our research grant topics have different content and sample requirements you should be familiar with. If we go back to our example, math is the content and high school students are the sample that we'll serve.

Finally, you want to ask yourself if the research methods that you're proposing in your research question fit in with the methodology requirements of the IES goals. When you see that word "goals," we want you to think "research methods." Let's go back to this idea about high school study skills and math. The question you might want to ask yourself in terms of deciding to which goal you should apply might be "*Do you want to explore the relationship between high school study skills and math programs and graduation rates?*" If so, you'd apply to our goal called Exploration. If the question is "*Do you want to develop an intervention or policy to improve high school students' study skills in math, so that they're more likely to do well in high school and thereby graduate?*" then you'd apply to our goal called Development.

When you take all four of these questions together, you want to consider whether your question is fundable. For it to be fundable, you have to have an education problem. You have to have a research question or questions that address the problem. You have to have an issue that fits within an open IES competition, program, or topic. You have to have content and population samples that are of interest to IES. And, finally, your research methods have to fit into one of the requirements of what we call research goals.

The next set of slides is divided into two sections. First, I'm going to describe the NCER and NCSER topics and next I'm going to address what our methodological goals are.

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Let's first talk about the 10 education research topics found in the main NCER RFA. Remember, Katina told us that was 84.305A. If you're interested in students who are on a typical learning trajectory, that means they're not in programs that serve special needs students, then you should read the RFA labeled 84.305A. As you can see, these 10 topics found in this particular RFA within NCER fall into different categories. Let's take a look at what those categories might be.

Some of those topics that you see in front of you focus specifically on a content area such as reading, writing, math, or science. Other topics focus on a particular population such as early learners, English language learners, postsecondary students, adults, and even teachers. Some topics are concerned with the optimal conditions or environments of instruction such as those that address the social, behavioral, or cognitive aspects of learning. Others focus on the idea of supporting learning such as education technology. Finally, the Improving Education Systems Program looks at improving the context in which education takes place.

Now, a couple of things to note—Wai is our Program Officer for the Effective Teachers & Effective Teaching topic. In that topic, we've included explicit language under the Exploration goal that states there are opportunities to explore some of the questions around pre-service education and how that relates to in-service performance and student outcomes. If you have any questions about that particular topic, you'd contact Wai.

We have combined the postsecondary and adult education topics together. Under adult education, we have opportunities to support research with adults who are at risk for not succeeding in the postsecondary environment or for adults who have not successfully completed high school and don't have a diploma or GED.

Going forward, this is the message that we're going to send to you in every slide—Program Officers are associated with particular research topics. After you've done your homework and you've read the RFA carefully and you've selected a topic, you should contact the Program Officer for that particular topic. For example, I currently oversee the Cognition & Student Learning topic. My contact information is included with the Cognition topic in the RFA. Each Program Officer's contact information is included at the end of the RFA.

Slide 21

Now, within the Special Education Research grants program topics, I want to draw your attention to a couple of things. One of the questions that we often get is individuals want to know whether it's appropriate for them to go into the Education Research Grants program or the Special Education Research Grants program. One of the things you need to know to answer that question is *who is your population of interest*. If your primary focus is working with students served by the special education system, then you should read the RFA labeled 84.324A and select one of the special education research topics listed on this slide.

If on the other hand, you're interested in carrying out programs with entire classrooms where you have a mix of both typically developing students and students with some developmental delays, then one of the NCER topics listed on the previous slide is more appropriate for you. Note also that the ages considered under NCSER are different from those listed under NCER. NCSER topics can target infants and toddlers, as long as those infants and toddlers are either considered to be at risk for developing a disability or they already have a disability (such as they're hard of hearing or deaf or visually impaired).

All right, now a couple of things before we leave this slide. Note that there are strong parallels between the topics on the NCER slide and those listed here by NCSER. However, there are some topics that are unique to the Special Education Research Grants program. They include the Autism Spectrum Disorder topic, Families of Children with Disabilities, and the Transition Outcomes for Secondary Students with Disabilities. The other thing to note is we do not fund work through NCSER for adults with disabilities. However, if you are interested in working with adults with disabilities, it's quite possible that there would be some possibility for you to apply to our Adult Education topic under NCER.

To summarize—the research question, content, and samples will drive the topic that you select. Next, we're going to talk about how your research methods will help you to select the right goal for your research.

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Now, we're moving from thinking about your research topic to thinking about your research methods, or what we call "Goals". NCER and NCSER have five common goals that each reflect the research methods typically found in the Education Research and Special Education Research Programs. Our first goal is called Exploration, which I'll talk about next. Our second goal is called Development & Innovation; our third, Efficacy & Replication; fourth, Effectiveness; and fifth, Measurement. I'll cover each of them separately.

While you're not required to apply for funding in this order—goals one, two, three, four, five—we do encourage you to think about how your research fits into this research trajectory. To begin, the purpose of our Exploration projects is to support research where you can explore the relationships between malleable factors and education outcomes and identify factors and conditions that may mediate or moderate those relations. These malleable factors must be under the control of the education system. In the RFA, we've included three possible methodological approaches that researchers can use to conduct an Exploration project. Please note that these are not meant to be complete; they're just examples.

Let's look at the first one; this is at the bottom of the slide. One way to conduct an Exploration study is through an analysis of secondary data. For example, NCES, which as you know is part of IES, has multiple data sets available for Exploration projects on its website. For example, there are two ECLS data systems, a Kindergarten Cohort (which we call the ECLS-K), and a Birth Cohort (which we call the ECLS-B). Let's say that you're interested in exploring whether there are early language features of a 3-year-old spoken language system that are associated with pre-literacy outcomes. You could propose to do a secondary data analysis using the ECLS-B.

A second thing you might want to think about is collecting primary data or original data. Let's say that you want to look at the ECLS-B data set, but you thought, "*You know, that information isn't sufficient for the questions that I want to ask.*" If this happens, you might want to propose to study and collect data first-hand. For example, you might want to work with a hundred or so 3- to 5-year-olds. You might propose to follow those students longitudinally over 3 years to observe and code their behaviors to determine whether those behaviors actually predict pre-literacy or emergent literacy outcomes in kindergarten. You could do this under Exploration.

Finally, another methodological approach that you might consider is to do a meta-analysis of extant literature. Keep in mind that the purpose is not to answer causal questions here. You are not trying to figure out what the burden of evidence is about whether something works. Rather, what you're trying to do is to look at the data in that literature and identify any features of it that seem to be associated with predicting student outcomes.

Please note that IES encourages a research trajectory that moves from Exploration to Development to Efficacy to Effectiveness, etc., but no individual researcher is required to start at Exploration and then move forward. You should start where it's most appropriate for you, given your research question.

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The next goal that we want to talk about is Development & Innovation. This goal is designed to support research to develop a new intervention or to revise an existing one. I want to pause here just for a second and let you know that IES uses the word "intervention" to mean something very broad. It could include a full curriculum, a curriculum unit, a particular instructional practice, a program that's implemented at the district level, or even a state-level or district-level policy.

Now, under Development & Innovation, we're providing research funding either to (a) develop a new intervention, (b) refine an existing intervention, (c) finish an intervention that's already in the early stages of development; or (d) redesign an intervention for a new context (like a new school system or a new sample).

Overall, we have an expectation that this development process is going to be iterative in nature. For example, you might start out perhaps working with a small group of students or teachers, develop some part of the intervention, test it with that small group, and then redesign it. By "testing it," we really mean that you're starting with an early prototype, gathering information about its feasibility and usability—as you see on the slide—and then redesigning it as necessary.

Finally, in that last bullet, you see that we're also interested in whether you can collect pilot data on the student outcomes. Now, when we talk about pilot data, what we're saying is that typically in the final year of a Development project you would collect information to determine whether the intervention, when it's fully developed, has any promise to be potentially efficacious in an Efficacy study. We don't expect these pilot studies to be full-blown Efficacy projects. One other thing that you want to think about is that no more than 30% of your budget can be dedicated to collecting that pilot data.

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Before we move on to Efficacy & Replication, please know we're only touching on what these goals require. There are individual webinars for each of these goals. Once you identify a goal, you might want to register for a webinar for that particular goal.

Next, let's think about Efficacy & Replication. The purpose of projects submitted under Efficacy & Replication is to simply ask, "*What works?*" The underlying purpose is to answer a causal question and evaluate whether a fully developed intervention is efficacious under limited or what we call "ideal" conditions. Before beginning an Efficacy study, you should really have three things in place. You should have a fully developed intervention; have evidence that your intervention is usable, feasible, and can be implemented with fidelity; and (if possible) some kind of evidence that shows the intervention has the promise to be efficacious when compared to similar curriculum or some business-as-usual program—unless of course the intervention's already widely used.

Now, if you look at that second bullet on this slide, note that under Efficacy & Replication we are also providing support to gather follow-up data to examine the effects of the intervention over time, even after the intervention is no longer in place. If you have an intervention that's been previously evaluated for efficacy, you can gather follow-up data examining the long-term effects of the intervention.

Finally, at the bottom of the slide, it says that you can also ask for funding to replicate an efficacious intervention under another condition. For example, you could test the intervention with a different sample or in a different setting to see, if those effects are generalizable.

Slide 25

There are really four things you should consider when applying for an Efficacy study. First, while an Efficacy study tests the effects of the intervention under ideal, controlled conditions, you should still think about what might be needed to implement the intervention in the future under routine practice.

Second, we also encourage you to reduce the appearance of a conflict of interest, especially if you are a developer or evaluator. For example, before coming to IES, I spent 11 years of my career at the Smithsonian and National Academy of Sciences developing science curriculum materials for students. Through national pilot tests, I had a very strong belief that my interventions would work and I did have preliminary data suggesting that the interventions would be associated with positive outcomes. In this situation, as a curriculum developer, the question I would ask is whether it would be appropriate for me to apply for an Efficacy & Replication study as a developer.

The one thing that we ask you to do is in your application convince the reviewers that you'll be able to get an unbiased answer to the causal question, if you (as a developer) are fully involved in the Efficacy study. Now, there are many ways to prove or convince the reviewers that you can get an unbiased answer. One way to do this might be to hire an independent evaluator.

The third thing that you should consider is whether you intend to do a mediator analysis. Please know that confirmatory mediator analyses are not required in Efficacy studies, but exploratory mediator analyses certainly are recommended.

Finally, for those of you who are interested in proposing single-case Efficacy & Replication studies, NCSER does accept single-case designs under the Efficacy & Replication goal. Please read the 84.324A RFA for the requirement to see if it's relevant to the work you're proposing.

Slide 26

Our fourth goal is the Effectiveness goal. Projects of this sort are typically seen after you've accumulated evidence from multiple Efficacy studies where you can show that the intervention has the intended effect—i.e., it's improving student outcomes—and you're ready to test the intervention under typical, routine conditions. The one distinguishing factor between an Efficacy study and an Effectiveness study is that the

Effectiveness project must be conducted independently (not by the developer). It must be an independent evaluation with the intervention implemented under typical routine conditions in which the researcher is not providing support to create ideal conditions.

We find very few applications in which they're proposing to do an Effectiveness study.

Slide 27

This particular slide gives you a basic overview of Effectiveness studies. If you're interested in this goal, we strongly encourage you to register for our Effectiveness webinar.

Slide 28

Our last goal is Measurement. First of all, I want to encourage you to look at our Measurement goal and see if you're interested in developing measures or if you have a measure that you've already developed for research purposes but you'd like to see whether it could be revised for either educational purposes or more wide-scale use.

Under Measurement, we have funding that's intended to support the development and evaluation of assessments including, but by no means limited to, item development and a range of reliability and validity analyses. Please note that the amount of funding that we have available to support Measurement projects will not be sufficient to support, say, the national norming of an instrument. That's not the intent of this particular goal. However, if you're at the beginning of a Measurement project and you're ready to do some of the initial steps, I do want to encourage you to look at the Measurement goal.

In summary, please note that IES has five goals. You should work with your Program Officer to select the right goal based on your research question.

Slide 29

The next two slides are graphics which depict under which goals most of our grants tend to be funded. As you can see, approximately half (46%) of the Education Research Grants awarded since 2004 (when we first established these goals) have been to develop and pilot test interventions. That's the majority. Twenty-six percent of the awards have been used to carry out Efficacy & Replication studies, 13% to carry out Exploration projects, and another 13% for developing and validating measures. The smallest category of funding projects, as we noted in the previous slide, are projects intended to examine the effectiveness of interventions under routine practice—which we used to call Scale-Up projects. However, I'd like to note that we have provided additional support of Scale-Up-like interventions through our program called the Evaluation of State & Local Programs & Policies since 2009.

A very quick note of caution: Please know that just because we have a higher percentage of Development grants, IES does not stress one particular goal over another. We just simply receive more Development applications than we do any other.

Slide 30

This slide, which represents the Special Education Research Grants, looks nearly identical to the previous slide. That's not unusual.

There are very strong similarities and trends between NCER's grants and NCSE's grants. Again, I just want to repeat, we don't stress any one goal over another; we just happen to get more applications under the Development goal.

Slide 31

This slide summarizes the financial availabilities and restrictions on our current goals. Let's look at all five of the goals together—Exploration, Development, Efficacy, Effectiveness, and Measurement—and think about the maximum amount awarded and the maximum number of years. The first thing that you should note on this particular slide is that we now have a funding maximum. This is the first year that we have ever had a funding maximum for each of our goals and I want to draw everyone's attention to this. In the past, we only gave funding ranges. Now, we have a maximum amount of funding per goal. Please pay attention to it. We do not want your application to be rejected simply because you went over the maximum award amount or the maximum number of years.

I also want to draw your attention to the fact that there are different years of funding that you can request under different goals. Under Exploration, you can request 2-3 years of funding. However, if your plan is to only analyze secondary data, you may only request up to 2 years' worth of funding. If you are analyzing primary data, you can only request up to 4 years of funding.

Development & Innovation projects are limited to 4 years and \$1.5 million. But those 4 years are reserved only for grants that have a year-long intervention. All other Development grants, if they're not year-long interventions, are limited to 3 years of funding (still at a maximum of \$1.5 million).

If you're doing an original Efficacy & Replication project, you can apply for up to 4 years' worth of funding. For a follow-up Efficacy study, you can only apply for up to 3 years' worth of funding.

For Effectiveness studies, please note that you can request up to 5 years' worth of funding. Effectiveness studies are much more complex projects. That is the only goal

under our main RFA for which you can request 5 years' worth of funding. However, for Effectiveness follow-up studies, you can only request up to 3 years of funding.

Finally, for a Measurement project, you can request up to 4 years' worth of funding for \$1.6 million. Please pay attention to the maximum amount. If you go over on either time allowed or money, your application will be rejected without review.

Slide 32

We just want to note one very important point. By the requirements of the RFA, any individual project must only address one goal. However, over time, these projects should align with a very solid research trajectory, and the goals are designed so that they build on one another. For example, Exploration should lead to Development of an intervention or the Efficacy of an intervention. Development should lead to an Efficacy evaluation. Efficacy should lead to Effectiveness. Please think about your project and how it could lead to future research under a different goal.

Slide 33

Now, here's probably the biggest question we get from folks: "*What if my program is between goals or topics?*" Well, Katina and I think that's easy—you just pick one. Here's how we suggest you do this. Read all of the goals in the RFA so that you understand where your work falls along the continuum. Think about what should come before your project and what should come after it. Break the project down into smaller pieces. Don't just go for the largest amount of money. Most importantly, aim for a well-crafted project that will deliver on what it promises. And of course, talk to your Program Officer who will help you make this decision.

Next, Katina's going to talk about the content of your application.

Slide 34

When you submit your application, you will have identified your topic and goal. Then, you really need to think about how you're going to structure the content of your application, the majority of which is a research narrative limited to 25 pages, single-spaced. It's important to know that the requirements for what you write in your narrative are going to differ by the topic and goal. It's also going to differ by RFA. The discussion that we're having now is just for the parent RFAs—84.305A for Education Research and 84.324A for Special Education Research. It's also important to note that we have webinars for each of the goals that go in depth about what these sections should look like. What I'm about to give you is a very brisk overview. You should really sign up for a goal-specific webinar to get the in-depth information.

Your application is going to have four sections in the narrative. Each of them is based on criteria that are detailed quite clearly in the RFA. What you read is what the reviewers read. They judge you exactly on the criteria for these four sections as listed in the RFA. Then, you're given an overall score that reflects the reviewers' feeling about your application. This is really important to know, because even though you are ranked individually on each of these sections, it is the overall score that determines whether you are eligible for funding. Keep both sets of things in mind. If you have the best research plan ever, for a project that the reviewers think is insignificant, it is unlikely that they'll give you an overall score that's strong enough to be funded.

Let's walk through this pretty quickly. The Significance section is really your opportunity to put your best foot forward—your chance to make your good first impression. This is where you really need to describe to the reviewers what you plan to do, exactly. One of the problems that we see with applications is that the Significance section is vague. You really want to have a very on-point, succinct discussion of the research questions that you want to be answered. If you're going to be submitting a Development application, you really need to tell us what it is you're developing. For Exploration, it needs to be clear what you're exploring; for Measurement, we need to know exactly what you plan to develop or validate.

Slide 35

The Significance section also is a place for you to explain why you should be doing this research, so we need a compelling rationale for the work. This can include a theoretical justification. Why do you think that your work is important and will actually improve outcomes? It is very helpful, if you provide logic models or theory of change models, either within the 25-page narrative or the Appendix, because this gives a good visual for the reviewers to see which arguments you're trying to make. Oftentimes, this picture shores up gaps in your text. But you still want to make sure your narrative actually addresses all the points that you have in your logic model.

You want to provide empirical justification, if it exists. If there are findings from previous research, you want to include them. Lastly, it's very important that you include a practical justification—why might schools find your work important? It's always good at the end of the Significance section to add a paragraph that summarizes why you think your work is important and what it will contribute to the field.

Slide 36

The next section is your Research Plan. We know you have made a really good first impression with your Significance section, but now it's important not to drop the ball here in the Research Plan. You need to provide a very clear description of the actual work that you plan to complete during the grant. For example, in the Significance

section, you told us what research question you were going to answer. Now, you actually should describe how you plan to answer that research question. Again, this is parallel for every goal. In a Development project, here's where you're going to tell us how you plan to do your original development work, how you are going to work your way through the iterations, how you're going to do your pilot, etc. The same holds true for our Exploration, Efficacy, Effectiveness, and Measurement goals.

It's crucial that your Research Plan section is aligned to the Significance section. You should have really pre-justified all the analyses that you plan to conduct in the Significance section. It throws reviewers off to read about really cool questions in the Significance section that you don't actually answer in your Research Plan or if you pose questions that are a surprise in the Research Plan because they weren't in your Significance section. Lastly, it is very, very helpful if you could include a timeline. This could be put in your narrative or in the Appendix. Including a timeline will really give your reviewers a chance to see not only what you're doing but that it's possible to complete the work during the period of your grant.

Slide 37

I want you to pause after developing your Research Plan and ask yourself, "*Do we have the people in place to do the work?*" One of the key components of a successful grant application is having a good team. The heart of your proposal is going to be the personnel.

Slide 38

The reviewers want to know that your team has the experience to actually conduct the research proposed. First you need to convince the reviewers of that. We often see applications that say they're going to do five things, but then you look at the Personnel section and they only have the personnel to do three of the five things. You want to make sure that there is someone on board who has the skills and expertise to do each portion of the research that you have proposed. If your project is heavy on data collection, you want to have someone who has the expertise to do it. We often find that people propose to do qualitative work as part of their research—especially around Goal 2—and then don't actually have any experts who know how to do focus groups or survey research, etc. Again, identify what expertise is necessary for your project and make sure there is someone to do the work.

It is possible that all of those experts are located on your campus but most of the time, when people submit applications, they're actually collaborations. Sometimes they're collaborations across the campus—so you might be pulling people from multiple departments—but oftentimes our grants really are awarded to partnerships. For example, there'll be one institution that comes in as the lead, and then they'll have

people that are coming from other universities or research organizations, and sometimes even states and districts. You also want to make sure that you demonstrate the productivity of the people on your team—*“Have they been publishing?” “Do they have other research grants?” “How many years have they been doing this work, and what has come from it?”*

Lastly, you wouldn't be surprised to know that reviewers tend to think more favorably of applications that include senior researchers who have experience getting grants.

Slide 39

I can't say this too many times, so I'm going to say it again. You want to identify the work that needs to be done, identify the person that will do the work, and show what their expertise is. Once you have done that, you absolutely must tell us how much time they're devoting to the work. We want to know what their expertise is and we want to know that they've devoted enough time to do the work.

Slide 40

Some of you are thinking now, *“Wow, I have never been a PI [principal investigator] before. How would I possibly get a grant from IES?”* We actually have a number of what we would consider to be early career researchers that have been awarded grants. We have two sets of advice. If you are a more senior researcher, you want to make sure we're clear on what your credentials are. You don't want to assume that everyone on the review panel knows that you're the national expert on “X.” You need to provide information about that and you also want to make sure that you show you have adequate time. It is not enough that you're the national expert, if you're only on the grant for 2 percent of your time.

If you're more a junior researcher, you have to make a case of why you are the best person to do this research. You can provide evidence in several ways. You could say *“I started doing this research as a graduate student, so now I've been doing it for these number of years and I'm qualified to do it.”* It's also helpful to show us what your management skills are. These are very large grants and we want to make sure that not only do you have the capacity to do the research, but also have the capacity to administer the grant.

We find that both senior researchers and junior researchers often bring on someone whose expertise is management. It is certainly allowable and actually quite common for projects to have someone called a Project Director or a Project Manager, whose expertise is making sure everything is going smoothly administrative-wise.

Reviewers are more comfortable with applications if there is at least one senior person on the project. S/he doesn't have to be the PI, though. The senior person could be a co-PI or a co-investigator. More experienced researchers could be people from another institution that you've brought on as subcontractors, and/or you could also have an advisory board. The crucial part is that any person that you propose, whether senior or junior, has to have enough time devoted to the project.

Slide 41

Under Resources, you need to show that the university has the resources to do the work. Please, no boilerplate language about how many computers you have or how many books are in the library. We really want to know what resources you have that are relevant to this work—for example, if you have access to a lab that's necessary to conduct the research. We also want to know if your institution has a background in managing grants. If you don't have that experience managing grants, you might want to consider partnering with another institution that has more experience. No matter what the reason, if you're going to be partnering, you need to make it clear that everybody involved understands what their role is in the project. This is particularly true if you're working with schools and districts. We need to know that they're onboard.

Slide 42

One of the important elements of the Resources section is describing what data you have access to and showing that you actually have access to it. Before a grant is actually awarded, we would require proof. This also applies to schools. You want to make sure that if you propose to work with a school district that they've actually agreed to work with you.

Slide 43

Carol is going to discuss the next steps.

To think about next steps and to help you prepare your application, the first thing we want you to do is to go to the *Funding Opportunities* page at <http://ies.ed.gov/funding>. This is where you're going to see this nice, beautiful clipboard that contains the steps to help you make this decision and all the documents that you'll need to download to apply.

Slide 44

In terms of next steps, after you've selected your program, topic, and goal based on your research question and you've read the RFA carefully, we encourage you to call or e-mail the IES Program Officer that's most closely aligned with your selected topic. We encourage you to do this early in the process. The IES program staff can provide

feedback on your research idea, research topic, or goal. Program officers can even read abstracts and draft proposals.

Now, this is really important. At IES, unlike other funding institutions, IES Program Officers are not involved in funding decisions. We do not convene review panels. As a result, we are strongly encouraged to work extensively with you as you prepare your application. We can read drafts of your proposal before you submit it formally, and we can provide extensive feedback to you on that draft.

Slide 45

To prepare for your application, we ask that you first download and read three things. The first is the Request for Applications or RFAs, which outline the requirements of the programs. The RFAs are currently available at the URL listed here—<http://ies.ed.gov/funding>. The second document is the *Application Submission Guide* which helps you understand the administrative requirements of submitting an application. It is available at <http://ies.ed.gov/funding>.

Finally, you need the Application Package, which is the official document that you fill out to submit your application. It can be downloaded from Grants.gov.

Note that the *Application Submission Guide* is not going to be available until April 19, 2012. That's the date your Letters of Intent are due and the Application Package is also available on that date for the June deadline.

Slide 46

Now, why should applicants submit a Letter of Intent, which we call LOIs, even though they're optional? There are two reasons. Submitting an LOI will help the Program Officer communicate directly with you about the information you provide. LOIs also help the Standards & Review Office, which convenes the panels, to select panelists who are experts in your area and know how many panelists to select. Now, if you're planning to submit an LOI, we strongly encourage you to do so. For the June deadline, the LOIs are due April 19. This is also the date, as you know, that you can get your Application Package and your *Application Submission Guide*.

For the September deadline, the LOIs are due in July. The applications for those competitions are also available in July. Please note that while LOIs are not required, they're very important. So, we encourage you to submit them. LOIs are to be submitted electronically, using the instructions provided on our website: <http://iesreview.ed.gov>. Instructions are also provided in the RFAs, which provide you with a listing of the content you should include. You can see those contents described here.

Slide 47

We also strongly encourage you to attend a Research Training Institute. IES believes that to support you in preparing for your application, and to help develop your expertise as a researcher, we should provide as many opportunities for researchers to improve and develop their research skills. So, we encourage you to attend one of our many Research Training Institutes, which are outlined on our IES website. Although the deadline is past for registering for two upcoming Training Institutes, there is one that may be of interest to you. It's outlined here.

Slide 48

In addition, as you're all aware because you're here today, IES also encourages you to register for webinars, particularly after you've identified a particular research program, topic, or goal that aligns with your research questions and your research methods. Our webinars fall into several categories and those categories are listed here.

Slide 49

Finally, to support you in preparing your application and to develop your research methods, we encourage you to check out our *Resources for Researchers* webpage [<http://ies.ed.gov/resourcesforresearchers.asp>], which includes how to prepare an application, methodological resources, video presentations, data sets and tools if you're doing a secondary data analysis, information about our peer review process, and information on data sharing and public access to research. Note the URL at the bottom of the slide, which will allow you to access these resources.

Slide 50

On this slide, we've tried to summarize the most important deadlines and dates for each of our program competitions. Note that for our Education Research, Special Education Research, and Statistics & Methods Programs the application deadline is June 21, 2012, at 4:30 p.m. and zero seconds, Washington, DC time. The LOI is due April 19, which is also the date the application package is available.

One important thing to note in that last column—the start date. When you apply, you'll have a chance to select a start date and record it on the cover page of your application. If you apply in June, your grant can start any time from March 1, 2013 to September 1, 2013.

If you decide to apply in September, the deadline for the application is September 20, 2012, the LOIs are due July 19, and you would select a start date that falls between July 1, 2013, and September 1, 2013.

Slide 51

Finally, it's important for you to also understand the peer review process. We have a document on our website, which was under the *Resources for Researchers* page [http://ies.ed.gov/director/sro/peer_review/index.asp], which outlines specifically what the peer review process looks like. Think about “*What happens to my application after I hit the submit button?*” The bullets on this particular slide summarize that process. Applications are reviewed for compliance. Then, they're reviewed for responsiveness. For example, if you do not align with the right content or the right sample for a particular program, or you apply to a Goal 3 but your research is really a Goal 2, then your application would be screened out for being nonresponsive to the RFA.

Applications that are compliant and responsive are then assigned to a peer review panel. Two or three panelists first conduct a primary review of your application. If those two to three primary reviewers score your application strongly enough, your application will go on to the full panel. If not, your application will be “triaged” at that point and will go no further. At the panel meeting, the most competitive applications are reviewed by the full panel—around approximately 15-20 people.

Slide 52

We have several tips for grant writing. We can even provide you extensive lists of tips for writing a solid grant. As Katina mentioned, reviewers focus on the significance of your work, your research methods, your personnel, and your resources. Their job is to give you scores for each of those and we can provide tips to you, as Program Officers, on how to write each of those sections. Remember, those panel reviewers, while experts, may not be experts in your particular research area. We also want you to write for a methodologist because typically a methodologist will review your application. Remember that a panel has an expert in almost every component of your study.

Slide 53

Most importantly, we would suggest that you say what you're going to say, say it, and say what you said. That's basically how your application should be organized. Please use clear descriptions of your intervention, make certain that there is consistency throughout your application, and show the reviewers that you have evidence that the work can be done.

Slide 54

All applicants will receive e-mail notification of the status of their application. An applicant will receive copies of the reviewers' comments once it's gone through the panel and that typically takes about 8 months, between the time you submit and the

time you receive those comments from the panelists or the time you receive notification that your grant has been awarded.

If you're not awarded a grant the first time, plan on resubmitting. Don't forget, talk to your Program Officer.

Slide 55

What Katina and I and the other Program Officers ask of you is "*Please help us help you.*" That's our job. Read the RFAs carefully. Call us or e-mail us early in the process. As time permits, IES program staff can review draft proposals and provide extensive feedback to you.

Our strongest message, if we could say it more than one time is "*Don't be afraid to contact us because that's our job—to help you.*"

Slide 56

Remember, you can't get funded if you don't submit an application. Revise and resubmit is the rule and not the exception. Remember, persistence pays off.

Slide 57

If you have any questions as we move forward, please do not hesitate to contact the Program Officers listed in the RFAs, or Katina and me.

I would like to reiterate that we are definitely here to help you, so feel free to call us or e-mail us. Again, if you wanted to take an opportunity for us to talk to you as a group, it is possible for us to set up conference calls or even videoconferences if we have enough advanced notice.

I'm going to pause for a second to see if we have any questions that we want to answer for the whole group.

Question: "*How are peer reviewers with appropriate expertise identified and chosen?*"

Answer: *We encourage you to go to the <http://ies.ed.gov> website and download the document that summarizes the peer review process. Remember, when you submit that LOI, the Standards & Review Office will look at the major content that you're addressing and select experts out in the field who align with that content. They want to make certain that the people on the panel have the expertise to read your application and score it fairly.*

We should also let you know that there are standing panels. The list that you see on the IES website is going to include a list of panelists, but they are not sorted so that you could see who would review your application. From year to year, for consistency, they have standing panels to make sure that at least a core of reviewers are the same people that read the year before.

Oftentimes, people want to know “*How can I become a reviewer?*” If you go to the website and click on the reference that Carol gave you, or go directly to a link under *About Us* that says *Standards & Review*, you’ll see their contact information. You could send your CV to them directly to be considered as a reviewer.

Well, it looks like we have come to an end. Again, thank you. On behalf of IES, we look forward to working with you.

This concludes today’s webinar, the Grant Writing Workshop for Minority Serving Institutions, part of the Research Funding Opportunities webinar series. Copies of the PowerPoint presentation and a transcript from today’s webinar will be available on the IES website shortly.

Thank you and have a wonderful day.