

INSTITUTE OF EDUCATION SCIENCES

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IES GRANT WRITING WORKSHOP

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WEBINAR

WITH

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Slide One:

DR. ALBRO: Good morning. This is Liz Albro. I'm going to talk with you all about preparing grants for the Institute of Education Sciences (IES). I don't know how familiar you all are with the IES process, but I hope that this session is helpful. This is our longest and most comprehensive session, so let me just tell you a little bit about how it's organized, so you'll know what information is going to come, and when.

Slides Two and Three:

I am going to start with a discussion first of our overall grant programs, so those of you on the phone can have a sense of the range of different kinds of grant opportunities that are available. Then I'm going to spend some time talking about the IES research goal structure, which is a unique part of IES plans. And then the end of the presentation is going to focus on the Ps & Qs, the rules and requirements in terms of putting together applications. That's the framework. So, for those of you who have heard some overview stuff before, you can put me on mute and do

other things, and then when I get to the details you want to hear about, you can put me back on live.

Slide Four:

So, how do you get started? You're preparing a grant for the Institute of Education Sciences: what do you need to do?

Slide Five:

The first thing that you need to do is to browse through our available Requests for Applications (RFA) and identify the appropriate research program for the type of research question that you are trying to ask. Then, once you make that determination, you need to read within each of our RFAs and determine what the appropriate topic and goal would be if that is something that's required within the particular RFA.

Then I'm going to talk about preparing the application, or the proposal, and then preparing the narrative, itself, which -- in many ways -- is the substantive content of the application. And then I'm going to talk a little bit about the review process and the types of questions that reviewers often raise.

Then I'll talk about how do you submit the proposal and again about the review process, and then I'll send you off with some reminders about what you want to do in order to make this a successful process for yourself.

To get started, what do you do? The first thing I want to encourage everyone on the phone to do is to make sure that they have at least the first two sets of information to begin with, and then, of course, you'll need the application package to submit. So, every individual who is going to put in an application to IES needs to download and read carefully the appropriate Request for Application. I believe we may have 10 or 11 Requests for Applications that are currently on the Web. You want to make sure that you have downloaded and read those.

There's also a new set of directions that are available on the website, called "The IES Grants.gov Application Submission Guide." I know folks are going to have lots of questions about specifics, about where things need to go in the application itself. The Grants.gov Submission Guide includes all of that information. That document is located on the same page as the Request for Applications on the IES website.

And, finally, in order to actually submit your application, you will need to download the application package from the Grants.gov page. So, I'll talk in more detail about what information is in each of those.

Slide Six:

For those of you who are wondering where can we find these documents, please note that the website I've given to you right here, IES.ed.gov/funding, includes both the links to the Request for Applications and links to the submission guide. It's the very first line that you get to. There is a thing that says if you want this information, click here. You click there, and you'll get access to all those PDFs.

Another thing I'd like to remind people to do is that if you are interested in learning about new Requests for Applications and learning who gets funded for competition, please do make sure you're signed up for the IES News Flash and that you check either the National Center for Education Research button, or the National Center for Special Education Research button. Okay?

If you have questions, please do use your Q&A box, and send those directly using that chat box link, and I

will pause at various points throughout the presentation and answer them. Sorry about that: that was a little out of order there.

Slide Seven:

For those of you who like visuals, here's a visual of what the website looks like. This is the main home page for IES. And if you want to learn about our funding opportunities or sign up for the News Flash, I've circled in red the physical location of those buttons on the main web page.

Slide Eight:

So, what are the opportunities that are available? We have six big categories of research and research training grant programs. The first two RFAs, the Education Research Grant program, and the Special Education Research Grant program, are our parent RFAs; that's the foundational work that we do. That's where the vast majority of the research occurs that we fund. And if you have not read either of those RFAs, that's where I would start. Even if you're planning to apply for one of the other competitions, I think it's very useful for applicants to be familiar with the General Education Research

or Special Education Research RFAs. We have lots of discussion in there. Those are the content areas of interest to the Institute, as well as the methodological requirements that are expected for each of the goals. So, like I said, I'm going to spend a lot of time talking about that this morning.

We also are competing this year the Postdoctoral Research Training Grant programs. I'll talk a little bit about that later. We also are competing in both of our centers: Research and Development Center competitions - national R&D centers. These are large \$10 million grants over 5 years. The purpose of the centers is really to encourage a team of researchers to focus on a particular problem and to devote sustained attention to that.

We also have a program focused on Statistical and Research Methodology in Education for the statisticians and other individuals on the phone who are interested in understanding -- or getting some support to develop -- tools that can be used in education research. We have a program focused on Evaluation of State and Local Education Programs and Policies, where we are encouraging researchers and school LEAs, district-level folks to partner and do some evaluation work together. And finally, our newest initiative is the

Reading for Understanding Research Initiative and this is a brand new, hot-off-the-presses initiative that I will talk a little bit about, that's a little bit different from the other programs that we've supported to date.

Slide Nine:

All right. For those of you who are planning to apply in June, I wanted to let you know that your application packages are currently available on Grants.gov, and you can go there and download those packages so you can get information and look at the forms and start to fill in that information that you already have in hand.

Please note that the October packages will not be available until August 3rd. You can certainly download the June packages, if you're interested in seeing what it looks like in terms of what the content is, but please do not use that June package to apply for an October deadline because that will make your application get booted out. It won't be the right package. So, even if you download something for June, and you decide not to apply in June, you will need to re-download the correct package in October.

Slide Ten:

All right. For those of you not familiar with the Grants.gov website, here's what it looks like. This is the place where you need to go to get the package. And this is the website where you actually apply for the award.

Slide Eleven:

So, let's talk about eligibility. The first question people always have of me is, can I apply to IES Grants? If you look at the language in our RFAs, it says that the applicants have the ability and capacity to conduct scientifically valid research. So, that's the primary requirement. There are specific and unique requirements that vary across each of the topics, each of the RFAs, and I will try to highlight and target those.

So, regarding eligibility: who are these applicants? The applicants include, but are not limited to, nonprofit and for-profit organizations, as well as public and private agencies and institutions, such as colleges and universities. I want to let folks know that within our main RFAs we do not have programs that are really designed for individuals. Most of these grants are institutionally

focused, so if you're a researcher and you're putting your application together, it will usually come officially from your university or your agency.

In terms of the postdoctoral training program: it's important to note that it is not a program where individuals apply for postdoctoral fellowships. Rather, this is a program designed for institutions that are trying to set up a postdoctoral fellowship program. So, I will talk about that in more detail as I go through the slides.

Slide Twelve:

Okay. So, the first question is, "What's the right program?" Are you seeking research or training funding? Again, are you looking for funds to support your own research work? Are you looking for funds to support the establishment of a training program? Those are the two kinds of programs that we support.

I'm going to go backwards. In terms of the appropriate grant programs, please know that the Institute of Education Sciences funds only research, and that we do not, in fact, fund what I call program dollars. We don't have program dollars. The rest of the Department does give a lot

of money for say, implementing a program at afterschool or district level, but that is not the focus of the Research Grant program.

Slide Thirteen:

Okay. So, if you are seeking to establish a training program, this year we are only competing the postdoctoral program. There is a program within the National Center for Education Research focused on training individuals to work in education, broadly. We also have a postdoctoral research training program in special education, so if you are a special education researcher and you have several folks at your institution who would be interested in establishing a program to provide postdoctoral training to individuals interested in special education, you should look at the Special Education RFA.

Slide Fourteen:

On the other hand, if you're seeking research funding, there are many opportunities for you to look at. And I'm going to go through each of these in turn.

Slide Fifteen:

So, how do you figure out what's right for what you want to do? What you do is you read the RFA. And I'm going to say this a lot, so I apologize for those of you who heard me the first time, but this is one of these things that I really like to emphasize, that it will be very beneficial for you to read the RFA. You can certainly talk with program staff, and we're here to help you. But if you read the RFA, it will really help both of us have a productive conversation. You want to check what the announced topics are, and then I think it may also be helpful for many of you who are not familiar with IES to spend some time looking at the abstract of projects funded under a research topic. I've provided the link where you can get to the list of all of our funded projects. It's organized by topic. Our older projects all have abstracts. I think that some of the newer projects have more spotty representation. We are trying to get those abstracts up to speed, but it requires time on our part, and some people have less of that than we would like.

I have a question here about the postdoc program, which is what I'm going to talk about. It says, "Is this only about postdoc funding, or can institutions apply for

education research funding?" I was talking generally about everything. And, certainly, institutions can apply for education research funding, as well. So, I think it should be appropriate to most, okay? I'm going to talk now about the primary research program. These are the foundational research programs that we have established here at IES.

Slide Sixteen:

The two programs that you are probably considering applying to include our Education Research Grant program (its CFDA number is 84.305A); and the Special Education Research Grant program (its CFDA number is 84.324A).

I'm going to talk about them together because the topic areas and the research goal structure that we have are very similar across the two programs. The primary difference between the Education Research program and the Special Education Research program has to do with populations of interest. Clearly, if you're applying under the special Education RFA, your population of interest will be students who are either at risk for being diagnosed with special education needs, or kids who are already diagnosed with some

form of a disability and who are receiving additional services.

The other big difference to note between these two programs is that Special Education is the only place where we support research for infants and toddlers, so if you do work in the 0-3 range, that is not something the National Center for Education Research can support. However, if you're working with children who have been diagnosed with special education needs or who are at risk for developing a disability, you may certainly come in under the Special Education program.

Slides Seventeen and Eighteen:

So, what are our topics? I'm going to cover these pretty quickly. I know that you all can read, and just to give you a framework: if you look at our standing research programs, you will note that we have focused programs on the primary content area. So, we have programs looking at Reading and Writing, we have programs looking at Mathematics and Science Education, we have programs looking at Teacher Quality -- particularly teacher quality to support instruction in reading and writing -- and teacher quality to

support achievement in mathematics and science education.

Please note that if you are someone who does work in social studies or history, you can certainly consider coming in under reading and writing because reading and writing are often ways in which information is presented around those sorts of content areas. You might also consider looking at the Cognition and Student Learning portfolio, again, depending upon your particular question. We encourage researchers who have research training in cognitive science or a background in cognitive psychology and who are interested in taking what they've been learning in the laboratory and bringing it into the classroom setting -- particularly the K-12 classroom setting -- to consider applying under our Cognition and Student Learning program.

Other areas: let's see -- we have a program in Social and Behavioral Context for Academic Learning. So, if you're interested in, say, classroom management questions or maybe in how teacher-child relationships relate to academic learning and academic performance (I'm just trying to think of other sorts of things that might fit under here -- things that help teachers maintain attention). I'm losing my examples here. But, anyway, we have a program focused on

social and behavioral context.

We also have a program where researchers who are interested in understanding how best to develop and support education leaders, such as assistant principals, principals, and other types of leaders within the school system; we have a program focused on that.

For individuals who are interested in questions of Policy, Finance, and Systems, we have a program specifically encouraging researchers to look at those questions, so individuals in these areas sometimes have an economics or sociological background. And we certainly have lots of need to understand best how to make our education systems work well.

Within NCER, we also have a program looking at early childhood. If you're interested in early childhood, specifically, you want to look at the early childhood program as opposed to looking at one of the content areas. All of our early childhood work is funded through the Early Childhood Programs and Policies.

For anyone on the phone interested in middle and high school, we have a program focused specifically on middle and high schools. We have a topic here where we're

encouraging researchers to think about the needs of struggling adolescent and adult readers and writers. We pulled this topic out of reading and writing because there's a special subpopulation that receives less research attention than we think the problems warrant, so we're encouraging researchers to put in under that topic.

In addition, we have a topic focused on English language learners. Again, this is a real need within our country right now. We have an increasing number of students who are English language learners, and we need to know how to prepare curriculum for those students, as well as understand better how to prepare teachers to support the learning of the students who are considered English language learning.

We also have a program in Postsecondary Education, primarily focused on students who are at risk for either not entering or not completing postsecondary education. So, we're not interested in supporting research on, say, upper level undergraduates, or students who are doing well in postsecondary, but really focusing on those kids who are at risk, who are often in, say, remedial, or bridge, or developmental programs. How do we support those students better, so that they have opportunities to succeed

in postsecondary settings?

And, finally, we have an Education Technology program that's really designed to think about how we can leverage the unique strength of technology in order to support academic achievement.

So, those are our main topics that are considered, that you could apply to under the Education Research Program in NCER.

Slides Nineteen and Twenty:

Within the Special Ed Center, the Special Ed RFA, you will notice that we have similar topics. Right? So, there's a program focused on Early intervention and Early Childhood Special Education. Again, if you do research with infants and toddlers, this is the only topic that will apply to you.

We have a program looking at Reading, Writing, and Language Development within the Special Education Center; one looking at Mathematics and Science Education; another one looking at Social and Behavioral Outcomes to Support Learning. And a topic, focused on Transition Outcomes for Special Education Secondary Students, is a unique program for the National Center for Special Ed. For those of you who work

in special education, I'm sure you know that students will transition out of the public school setting. And we often don't have good support services in place to help those students as they move out of -- I'm just going to call it the framework of the K-12 system. How do we support students with special needs as they move out of public education?

We also have a program in the Special Education Center looking at Cognition and Student Learning in Special Education. So, the idea here is really how do we take what we know about underlying cognitive processes in students who are diagnosed with a disability, or who have special needs and help them using these principles of cognitive learning? Similarly, how do we prepare teachers to work with this population of learners?

Related services: this, again, is unique to the Special Education Center.

There's also a policy, finance, and systems program within special education. And, finally, for those of you who do research with children on the autism spectrum, we have a program that is focused specifically on that disability area.

I'm going to look here. I have a question here

about, "The 0-3 (age) criterion for special education grants:, did you say that at-risk populations would fit under this grant category?" Yes, I did say that at risk populations fit under this grant category, but they need to be at risk for diagnosis of a learning disability, or some form of special education services. So, this notion of what is considered at risk: it can be understood broadly or narrowly. Within the Special Education Center, it's actually defined narrowly, as it's defined in IDEA, so I would encourage you to go back and read the RFA for more details.

Another question about what fits where: "Where do home school relationships fit under the social behavioral context?" You know, that really depends upon what you're looking for or what the target of your intervention is. So, if you're doing, say, a read-aloud program, and we have a program doing just this, where you're trying to figure out how to encourage parents or to provide parents with instruction about how to read aloud to their young children in ways that support success in school. That could come in under early childhood, if it's preschoolers. It could come in under reading and writing if it's kindergarten/first grade children. So, it really depends upon what the focus of that

home school interaction would be.

A question here says, "Will you support special education research on collaborative or consultative teaching approaches?" You know, I am not a special education person, so I actually don't know the answer to that question. I think you certainly could do that, if you're going to pose that research question. And I would encourage you to look at the special ed research RFA and see if you can identify some places where you think it might fit, say, under teacher quality or related services, and then send an email to the program officer responsible for that particular topic. And they can talk with you about your project, and help you think about where or whether it is appropriate.

Again, if you are interested in accommodations used in a content area, should you apply under NCSEER or under the content area in NCER? The general rule of thumb is that if you are proposing to develop an intervention that is designed for use with students served by the special education sector, then you should come in under the National Center for Special Education Research. Again, that's a great question to take up with your program officer or officers. Right? So, we can certainly talk across centers, and we may

arrange a joint call, where we can talk about the best home for your project.

So, this is following up on the home school, a relationship between parenting characteristics and school readiness. That would probably come in under the early childhood category. I do want to put a little bit of a caution out here, which is that the research funded by the Institute of Education Sciences is really designed to support work under the control of the school system. So, parenting research can, indeed, be supported, but you need to think about how best to frame it, so that it fits within the legislative mission of the Institute of Education Sciences. So, again, I would encourage you to talk with the early childhood program officers, both in special education, and in NCER, and they will be glad to walk you through their understanding of how your question could fit with the requirements of the RFA.

All right. I'm going to move ahead, but you keep sending the questions, and like I said, I will pause at regular intervals and answer them. So, I've just given you the big topic categories for both of the education research and special education research programs.

Slide Twenty-One:

Now, I'm going to talk a little bit about research goals. So, for those of you who like two-by-two tables, one way you can think about figuring out where you fit in the RFA is to create a two-by-two table. You have topics and goals, and you need to figure out which intersection makes sense, given the question that you're proposing to ask. So, you figured out your topic. Let's say you want to do a project where you're looking at story read-alouds in kindergartners, or you want to do it under Reading and Writing. Then you need to figure out what's the appropriate research goal, given the project you propose.

Slide Twenty-two:

So, IES has five research goals. Goal 1 is called "Exploration", and the purpose of this goal is to support research designed to explore programs, practices, and/or malleable factors associated with better student outcomes. I'm going to just list these out there, and then I'm going to talk about them in more detail.

Goal 2, the focus of Goal 2, "Development and

Innovation", is to develop new education interventions. The focus of

Goal 3, called "Efficacy and Replication," is to evaluate the efficacy of interventions. So, do they work to produce the kinds of student outcomes that they are intended to produce? Goal 4 is our "Scale-Up Evaluation" goal, and the intent here is really to answer the causal question at scale: do we see similar kinds of impacts at scale, as we did when we did our efficacy research? And, finally, we support research on the development and/or validation of measurement tools (Goal 5).

Slide Twenty-three:

So, Goal 1, "Exploration". What is our exploration goal? What we really want to do here, the overarching purpose of Goal 1, is to generate hypotheses about what characteristics in the school environment -- or in the underlying cognitive processes of kids -- are associated with improved academic performance. Now, the part that's really important to note is, we have this phrase "malleable factors," and it often causes people great consternation. They're not sure what we mean by that. Really, all that we mean here is that when you're generating these hypotheses, you want to make sure

that you're looking at factors that can, in fact, be changed. Okay? So, the whole purpose of the research that IES supports is to improve student performance and achievement. And, if you look at factors like gender, gender may relate to school performance, but you're not going to be changing gender. Right? It doesn't mean you couldn't look at gender as a factor, but you need to be really clear about what is that factor that you think you would want to change. So, maybe it's something about how teachers respond to students, to boys versus girls, or something like that. But that's an important framework for you all to keep in mind, that you need to propose things that can be changed, things that can be changed in the context of school.

What I have here in my sub-bullets are three possible methodological tools or methodological frameworks that you could use to design an exploration study. So, one could propose to do a secondary analysis of currently available longitudinal datasets, such as those available through the National Center for Education Statistics, or you could propose to do a secondary data analysis of data that you already have. Right? Maybe use data you collected for your dissertation, or for some other study that you've not

had time to explore carefully.

You may also propose to collect original data in small descriptive, perhaps longitudinal studies, as well, where you're trying to understand the processes that are occurring in classrooms, or other education settings that seem to be associated with academic performance. Again, the idea here is to figure out why some classrooms have better success than others, or some teachers have better success than others, or some kids seem to do better than others. So, what are the potential explanations for why kids are doing better?

Finally, another technique you could propose to use would be a meta analysis. The intent here would be to do a meta analysis of published research that's already out there, in order to identify potential mediators and moderators -- other potential malleable factors. So, the purpose of the meta analysis here is not to answer a causal question, but rather to identify factors that could potentially be used to create a new intervention. Okay?

I know that people are going to have lots of questions because I'm just sort of trying to hit the high notes here, and I will come back and try to answer them.

Slide Twenty-four:

In terms of general cost for exploration, you can request -- and this is a typical range, not a firm and fixed range -- \$100,000 to \$400,000 per year. That's total cost, both direct plus indirect. If you are proposing only a secondary data analysis, you may request up to 2 years of funding. If you plan to collect original data, you may request up to 4 years. And you don't have to do only one or the other. I just want folks to know that you could propose to do both a secondary data analysis and some original data collection, as well.

I have a question here about paraprofessionals: "Would paraprofessionals be included within the Related Services?" Potentially. Right? It really depends upon what kind of research you're proposing to do with those paraprofessionals. So, I've funded research in reading, looking at questions of paraprofessionals delivering supplementary reading instruction. But the test there was really of the efficacy of the reading instruction when delivered by the paraprofessional. If the researcher is proposing how do we train paraprofessionals, or how do we select paraprofessionals, then that may well go under related

services.

"Can the Special Education Research funds be used for teacher training?" We would want to train them in the intervention to be evaluated, of course. Of course, that is allowable cost.

"I am a parent of a special education student. I am a special education teacher, and I have a somewhat different approach than those typically used. When you were talking about small descriptive studies, how small are you talking?" That's actually a really good question. And one of the other differences that I did not highlight is that in special education, sample sizes are often different. Right? Particularly, if you're working with a low-incidence disability. You may not have sufficient numbers to carry out a large study. So, we do support under efficacy single case designs, which is where you are working with small numbers of children, where you're looking to see whether an intervention is, in fact, changing the behavior or the outcomes that you hope to see. Again, I want to encourage everyone on the phone to go to our request for applications. Go to the very end of those RFAs, and there is a list of program officers there. Find the program officer who is relevant for the topic area

you are interested in, and send an email to them, because they are there to help you, and they can provide you with some good advice as to what to do with your particular topic.

Slide Twenty-five:

Okay. I'm going to press on here to the next goal. Goal 2 is, "Development and Innovation." I want to let everyone on the phone know that more than half of our current research that we support fits under this category. People always ask me is this because IES has a quota system, if you will, in terms of how many grants we're going to fund per topic, per category, per goal? And the answer is no, the real reason that we funded so many Goal 2s is that this is where current research seems to be in education. So, we funded a lot of research in development and innovation. Clearly, there are areas where we need additional work in this area, where kids are not performing at the level that we think they can. So, what does Goal 2 support?

Goal 2 is really focused on this notion of development. So, it's focused on developing new interventions and/or proposing to refine interventions that are in current existence but aren't working perhaps as well as expected, or

maybe it's an intervention that was originally developed for work with middle school kids, and you'd like to revise it for work with third graders. You can propose those revisions, as well.

I should also say that I'm going to use this word "intervention" throughout the presentation today. Please know that I want you all to think about that broadly, and that we've tried to use it as a somewhat neutral word because we're covering interventions that in the cognitive science field could be understood as sort of basic training practices, that happen over a short period of time, up through full curricula, up through systemic intervention. So, it's meant to be understood broadly, and it will vary as a function of your topic area.

Under development, you are also expected to develop this work and to talk about the process that you're going to use for development. You're expected to demonstrate the feasibility of the intervention, or implementation in an authentic education delivery setting. So the idea here is it's great to develop the intervention, but we want you to gather some data that speak to whether the students and teachers for whom this intervention is designed can actually

deliver it as you intended for it to be delivered. And, finally, we hope that the researchers will propose to collect pilot data on the promise of the intervention, to achieve your intended outcome.

Slide Twenty-six:

Available costs are, again, the typical range. It's \$150,000 to \$500,000 per year, total cost. You can request one to three years' worth of funding. I see another question here that I just want to go ahead and interject right here. "Do you expect that the October RFA would be very different from the June RFA?" They are the same RFA. There is no difference. If you look on the front page of the RFA, you will see that those deadlines are there. This is for fiscal 2010. We have two deadlines, but it's for the same competition, so if you all are planning to apply in October, everything that I've said here will apply in October, as well. Okay?

Slide Twenty-seven:

Under Goal 3, we have "Efficacy and Replication". Efficacy and Replication, as I said, is really designed to test that

causal question: does, in fact, the intervention work to produce the outcomes that you intended for it to produce? So, what is the requirement, what do you need to have in order to come in for Goal 3? You must have an intervention that is fully developed. So, if you have an intervention, and it's not quite ready, you'll want to spend the first year kind of getting the bugs out. You're probably not ready to come in for a Goal 3; you want to apply for a Goal 2

If, however, you have already developed your intervention, you have some pilot data that suggest that the intervention is not having a negative impact on kids. Right? that it actually helps kids to improve their performance in school: then you're probably ready to come in for an efficacy study. The sort of technical definition of efficacy that we're using is the degree to which an intervention has a net positive impact on the outcomes of interest relevant to the program or practice to which it is being compared.

Under Goal 3, I don't have a slide about this, but under Goal 3, we encourage individuals to use experimental or quasi-experimental designs in order to test that causal question. So, you will typically have achievement and a comparison (or a control) group, or you may have two

treatments that are being compared. But, again, the general expectation here is that you will be using experimental or quasi-experimental design to answer that causal question under a Goal 3 application.

Slide Twenty-eight:

In terms of funding, you can request between \$250,000 to \$750,000 per year total cost. Again, this is a range. If we have technology folks on the phone, it may cost more to develop or to evaluate a technology intervention because you need to make sure that the technology is available. That's permissible. You simply need to provide an adequate justification in your application. Again, you can request up to 4 year's worth of funding for these projects.

Slide Twenty-nine:

Goal 4. Goal 4 is the goal for which we have funded the least amount of work. And this, I think, reflects the state of the field. In order for you to come in for a Goal 4, you really need to already have a fair amount of efficacy data already under your belt, or the field has to have it out there, which suggests that under specified conditions, and with specific

students, you get positive impact. Once you have that information, you could then propose to test the impact of interventions at scale. There is also the opportunity under scale-up to test the impact of interventions that are already in wide use. We haven't seen as many applications as one could in order to test that question.

Again, the goal here is to test it as implemented by practitioners, not under the best of all possible circumstances, but under typical circumstances. And again, as with efficacy, the studies using randomized assignment to treatment in comparison conditions are strongly preferred. I have a question, and I'm going to come back to it in just a second.

Slide Thirty:

In terms of Goal 4, "Scale-Up Evaluation", you can request, or the typical range is \$500,000 to \$1.2 million per year. You may request funds for up to 5 years to test the impact question.

Slide Thirty-one:

And our final goal is focused on measurement. If you

guys have been paying attention, there's a little bit of a linear progression here, where you generate a hypothesis, you develop an intervention, you test the hypothesis in terms of causal impact, then you test it on a larger scale. The measurement goal, in many ways, fits across all of these. And for those of you who have an interest in taking measures that you've developed for use in smaller scale studies, and you'd like to make the instrument available for use in classrooms, if you have a measure you developed that you need funding in order to get reliability and validity information on, or if you have an idea for a new measure to develop, you can come in under Goal 5.

The typical range here is \$150,000 to \$400,000 per year. Again, this is a range, not a firm boundary of total cost, and you may request funds for up to 5 years.

I had a question about the professional development, which says, "For professional development innovations, does the pilot study need to include student improvement as well as teacher change?" You do want to collect student outcome data for professional development innovation, even in that case, because you really want to get information both about teacher change, and about student

change. And in order for us to answer questions about students, we must collect that data. Right?

Slide Thirty-two:

So, what goal is right for you? Something that the program officers, and my staff, my colleagues here, we spend a lot of time working with applicants thinking through where their research questions fit within this goal structure. How do you make that choice? You read the RFA, and you think about what's the right goal, and then you go back and you read the RFA, and call a program officer, so we can help you think through it.

Slide Thirty-three:

Here's a question that we get often. "What if my program is between goals?" Your program of research probably incorporates multiple goals. However, what you're doing here is you're applying for funding to support one of those goals, so you need to pick one. Right? When you put in an application to IES, a single application may only describe work for one topic, and one goal, so you need to pick one of each. Again, read the RFA. I have in here don't just go for

the largest amount of money. I think sometimes people come in for efficacy because it's got more money available. But if you don't have a fully developed intervention, then reviewers won't take that application seriously because it doesn't fit the requirements of the RFA. So, you really need to pay good attention to those requirements.

Something that I often talk with researchers about is, you need to think about breaking your project down into smaller pieces. In order for you to do a successful efficacy study, you really need to have an intervention that has all the components in place, that you already know is feasible for your teachers and students to implement, and that you have some indication that it's moving in the right direction. So, break it down. Maybe what you want to do is propose to do an exploration study, and then you want to put in another application at the same time to develop some measures that you will use further down the road, or vice versa. So, break your project into smaller pieces. And the real thing to think about is you want to aim for a well-crafted project that will deliver what it promises. Reviewers do spend time thinking about whether projects can actually be accomplished in the time period of the grant, and not only

whether the projects can be accomplished, but also whether you can then publish your results and get what you're finding out for the public to learn about before you move to the next step.

Slide Thirty-four:

So, those are sort of our big programs. And, again, I like to start with that because I think in many ways that lays the foundation for much of the other work that we support. What about other research, the other research grants programs that I discussed earlier?

Let me talk first about the National Research and Development Centers. There are two separate RFAs, one within the National Center for Education Research (NCER), and one in the National Center for Special Education Research (NCSEER).

Slide Thirty-five:

Under NCER, we are currently competing three topics. These are for three R&D centers. The first center will be focusing on the question of scaling up effective schools. The second will be focusing on mathematics standards and assessments, and the third will be focusing on commission and mathematics

instruction. I'm going to talk about each of those in turn.

Slide Thirty-six:

The R&D Center on Scaling Up Effective Schools will be asked to do the following things. Right? So, when you're putting your application together, you need to discuss how you're going to do this work. So, first, you're going to need to describe how you will identify effective schools and practices. How will you figure out what are effective schools? Then, building on that identification process, you are going to propose to develop what we're calling here "transferable practices" and a system to support the transfer of practices. So, if you've gone back and you've done secondary data analysis looking at schools that have done really well, how are you going to take what they've done and create a package, or something that could then be used by other schools who want to copy and replicate what those effective schools have done?

Then, development is not enough. You need to implement those identified practices in the new schools and evaluate the transfer of practices and impact on achievement. These are 5-year projects. The idea here is there will be

multiple teams of researchers working together to tackle these problems. And the scope of work is much larger than what you would see under a regular research goal. So, unlike the typical education research RFA, here, we are asking teams to propose to do multiple types of projects within an umbrella center.

Slide Thirty-seven:

Our second topic that we're competing this year is the R&D Center on Mathematics Standards and Assessment. The goal of this center is twofold. The first goal is to establish a mathematics standards and assessment framework for a particular span of grades. We're looking at up to -- I'm going to probably misstate this, but my memory is -- it's up to eighth or ninth grade I think, up to algebra. And you can propose any span there. And you're going to talk about how you propose to establish this standards and assessment framework. And then you're going to propose to conduct research on assessment construction and the method to be used to set these standards.

Slide Thirty-eight:

The third topic that we're competing under the National Center for Ed Research is an R&D Center on Cognition in Mathematics Instruction. The goal here is for a team of researchers to figure out what's the math curriculum you want to revise, and you're going to describe the rationale for the redesign of this instructional approach to a chosen mathematics curriculum. Please note the goal here is not to create a new math curriculum but rather to redesign a currently existing curriculum. You're going to be proposing to use current cognitive principles. So, what do we know from how people learn that we can apply to the organization of instruction that is embedded in a mathematics curriculum?

The center should describe how it proposes to revise that curriculum, using a revised test, redesigned test process, and iterative development process. We talk about that in our main RFA as part of development. I would expect to see similar attention to those questions in a description of proposed work for this center. And, finally, we also are asking the center team to propose to evaluate the effect of the revised curriculum.

Slide Thirty-nine:

Within the Special Education Center, we're currently competing two topics. The first topic is focused on the question of assessment and accountability, and the second is focused on improving mathematics instruction for students with mathematics difficulties.

Slide Forty:

The R&D Center on Assessment and Accountability is designed to spend some focused attention trying to understand the natural developmental progress in achievements by students with disabilities. For those of you familiar with assessments, you know that assessments are notoriously bad at capturing developmental change at the low end of the distribution or at the high end of the distribution. Within the Special Education Center, with this new R&D Center, we're asking researchers to propose to figure out how to measure that developmental progress of kids who are really struggling to learn and then to develop and test approaches for measuring growth for students with disabilities that is intended to meet the needs of schools that need to capture growth in students with disabilities for accountability.

Slide Forty-one:

The Special Ed Center is also requesting applications for an R&D center focused on improving mathematics instruction for students with mathematics difficulties. The goal here, again, is really to pull out the underlying cognitive processes that are impeding mathematics performance in students with mathematics difficulties, for the purpose of identifying possible targets for intervention. If there's anyone on the phone who does this kind of work, you'll know that understanding or defining what a mathematics difficulty is, is not well understood. So, that is the purpose of this center.

And then, as well as exploring what those cognitive processes are, the team is also asked to develop and test innovative instructional approaches to help students who have been identified as having a mathematical difficulty, to succeed -- again, based on those underlying cognitive principles.

Slide Forty-two:

Okay? Money. Like I said earlier, you can request up to \$10 million total, total cost. Right? One to two million

dollars per year for up to 5 years.

Slide Forty-three:

Okay. Other topics. We have an RFA focused on statistical and research methodology and education. I'd like to say that this is for folks who are interested in developing new tools that are fundamental to research in education. So, if you're a methodologist or a statistician on the phone, and if you're seeking funding to support the work on developing these tools, we do have funds available for that type of work. You can request between \$75,000 and \$400,000 per year for up to 3 years. Again, this is a typical range. It's not a cap.

Slide Forty-four:

We also have a relatively new program for us -- this is just our second year that we've competed this topic -- on the "Evaluation of State and Local Education Programs and Policies." The purpose here is to provide research support to evaluate new policies, programs, and practices that schools and districts are implementing, but where they don't have sufficient resources, either financial or personnel resources, to carry out an evaluation of the effects or

impacts of those revisions at that level. So, this is a program that really requires a partnership. You need to have a state or an LEA, or a district that is interested in having some innovations that they're implementing evaluated. So, the researchers are the ones who put the application in, but the states or LEAs will pay for the implementation of the new program.

All right? And these can be projects that are up to 5 years in length, and the typical awards are up to \$1.2 million per year.

Slide Forty-five:

All right. And, finally, we have our brand new "Reading for Understanding" research initiative that, for those of you on the phone who haven't heard about this, this is new. I haven't talked about this before. The goal here is that we are asking applicants to come in to propose research really designed to jumpstart the improvement of reading comprehension across the nation.

Slide Forty-six: I'm going to jump forward. We're really trying to build an R&D network, so we are requesting

applicants to come in either proposing work -- proposing to be a core team, or an assessment team. The Institute intends to fund probably up to about five, four to five core teams in the first round of competition. And we intend to fund researchers who will cover the pre-kindergarten to 12th grade span. So, research teams will propose to cover multiple years, but one of the things the Institute will consider when making award decisions is the way in which we can have a comprehensive network. The idea here is that we need to work on supporting "Reading for Understanding" across the age span, so from pre-kindergarten to grade 12.

There is a focus not only on covering the age range, but each team is also focused on -- there are probably teams within teams. Right? So, within each core team, there may be three teams of researchers, one focused on looking at understanding underlying cognitive processes, another focused on developing interventions, building upon those cognitive processes, and another focused on evaluating efficacy.

Within the network, we are also hoping or intending to fund at least one, and maybe two assessment teams that will be focused on developing assessments to measure students' progress in acquiring reading comprehension

skills across that pre-kindergarten to 12th grade spectrum.

I'm going to go back to the content piece here. I think I already discussed this a little bit, but we're really looking at supporting research that focuses on those underlying processes, developing and evaluating interventions focused on reading comprehension outcomes, and then developing and validating assessments of reading comprehension.

Slide Forty-seven:

So, anyway, this is a new initiative, and the real idea behind here is to build this integrated network across these peaks. There's a large investment in this. We are hoping to award between \$2 million to \$4 million per team for each of these core teams per year for a maximum of 5 years. The assessment team, \$2 million to \$3 million per year for a maximum of 5 years.

I'm always trying to be mindful of time here. So, that took our first hour, and that paints the landscape of the type of research that IES funds. I have one content question here that says, "In terms of the mathematics instruction, you stated it can include up to the eighth

grade. Will this also include pre-kindergarten and kindergarten?" This is for the cognition and mathematics instruction R&D Center. I'm going to have to say I can't remember the answer to that question right now, and I don't have the RFA in front of me, so I would encourage you to look in the R&D Center Requests for Applications. And if you have other questions, I would be happy to talk to you about that later off-line.

Slide Forty-eight:

Okay. So, now that everyone's brains are spinning, and they're trying to figure out which RFA is appropriate, which topic, which goal, let's shift our focus a little bit to think about what do you need to have in place before you start to write your research application?

I think some of the critical pieces that you need to consider are your research questions, right? What is it that you really want to focus on in this particular application? You want to think about who needs to be on your team. I think that it's really important for you to think about who needs to be on your team at the outset, in part because when you think about the personnel involved in your

project early, then they can be part of the writing and preparation of the application. If you're doing, say, an evaluation study, an efficacy study, and you only bring in your statistician or methodologist towards the end of the writing process, that that can be a real problem in terms of preparing a convincing application.

The other thing to consider at the outset is, what resources do you need to have in order to complete the proposed study? For the vast majority of our projects, or our RFAs, you are required to have a letter of agreement from a school or a district, wherever you're planning to do your research, and that letter needs to be included with the application, so you need to think about that early on in the process.

Slide Forty-nine:

Okay. Personnel considerations. So, whom do we want to think about? Think about the type of expertise that is needed to carry out the project.

Slide Fifty:

So, one of the critical questions to consider is whom do you

need for the project? First you want to think about what is the research goal, and/or the RFA requirement. So, whom do you need? Who are the appropriate team persons? You want to think about the training and expertise that each member of your team brings. Certainly, what a good team looks like depends in many ways upon who you are. Right? So, are you a relatively junior researcher, are you an experienced researcher, are you methodologically sophisticated, are you someone who brings strong content? And how do you build that framework out in terms of developing an appropriate team?

You also need to think about the time that individuals need in order to competently implement the proposed research. So, how much time do the individuals you are proposing as part of your team have available in order to competently implement that work?

If you're a junior researcher, or for those who've had a track record of large projects and grants, you need to think about some additional considerations that other applicants don't. So, how do you provide information in your application that demonstrates that you have sufficient expertise to adequately carry out this research? Use your personnel section wisely, use your CV. Okay?

Slide Fifty-one:

So, this is a challenge for everyone, not only for junior or younger researchers. You really need to convince the reviewers that you and your team have the skills and experience to implement well what you have proposed. So, that is something that you need to think about. Right? And how do you provide evidence of that in your application, that you have what you need to move forward? You want to think about developing a team. I think the other thing that I want to encourage everyone to realize is that the vast majority of the research that IES supports is team-oriented. We really have multiple individuals that we are supporting in this research. It is possible, if you're proposing, say, a Goal 1 study, where the main focus is to do a secondary data analysis, there may only be one principal investigator, one researcher, and maybe a grad student, or an undergrad working with you, but the vast majority of our projects require multiple kinds of teams.

The other thing that you need to include information about in your application, again using your personnel section in the narrative and in the CV, is to

demonstrate productivity. So, if you're a junior researcher, and you've just recently completed your dissertation, you want to demonstrate that you're taking what you've learned and you're putting in applications coming out of that. Again, things that will demonstrate to the reviewers that if they support this project, that knowledge will then be sent out to the wider research community.

Slide Fifty-two:

What's the next step? So, you've got your personnel, you've got your team. You should have a topic and a goal and some ideas of who you want to have on your project. So, you need to go back again and re-read the RFA, and confirm that your idea fits the requirements for a specific topic, and a goal. Then, I want you to contact your appropriate program officer, and discuss your project with him or her.

For those of you on the phone who put in Letters of Intent on April 27th for this June 25th deadline, you should have heard from your program officers, and I hope that you are talking already with them. If you do not put in a Letter of Intent, and you're really thinking about applying

in October, you should feel free to reach out to the named program officer now. You don't have to wait until you put in your Letter of Intent.

Slide Fifty-three:

Okay. So, what's the recap? Decide what the right RFA is. If it's one of the big ed research or special ed research ones, pick your topic, pick your goal, begin to think about who the rights persons are to be on your project, and then contact the appropriate NCER or NCSEER program officers.

If you think your idea might be appropriate for multiple topics, you should feel free to send a joint email to the program officers who you think might be relevant. We all work closely together, and we are happy to coordinate our contacts with you, so that everyone's time can be most efficiently used.

So, I have a question here that says, "How do you identify and get contact information for a program officer?" If you go to the request for applications, the IES.ed.gov/funding page and then click on the very first opportunity to click on that page, that will bring you to the RFA. At the end of each of the requests for applications,

there is a program contact who is identified for each of the topics, and/or for the centers, whatever the particular RFA is that you want.

I have here, "By combination of teams, do you mean larger numbers on one team for the grant, or several teams, such as across departments or universities (i.e., can there be one team with many persons from the same department?)" Absolutely. You can have one team with many persons from the same department. It really depends upon the scope of work that you're proposing. So, for the sort of our typical education research awards, you'll often see applications that come in with individuals from a single university for an R&D Center, or for the new "Reading for Understanding" initiative, we anticipate, or expect, that many of those applications will involve teams of researchers from multiple universities.

All right. I have another question here that asks about the model of the simple view of reading that was put out for reading comprehension. I'm happy to have this conversation off-line with those of you who might be interested, and I think that that, in many ways, was trying to reflect some of the research that has been done with the

idea towards pushing some new areas of innovation. But, that's another conversation that we should talk later.

So, "Is it correct that everyone who submitted a Letter of Intent for IES grants should have heard from program officers?" If you submitted your Letter of Intent by the April 27th deadline, you should have heard, or if you haven't heard, you will be hearing very soon from the program officers. If you have not heard, you should feel free to email that program officer. We got some information that came later for people who submitted after the 27th, who sent LOIs in, so I don't know where you fit in that category. And sometimes emails go astray, so if you haven't gotten an email from a program officer, feel free to follow up with them, and they will be in touch with you.

Slide Fifty-four:

So, in terms of preparing the application: I have in here parentheses, (Complete all components.) You guys may think, why is she writing that? I want everyone to know now that if you don't have all of the parts of your application, it is possible that your application will be returned to you without review. So, you absolutely want to take the time to

make sure that you have everything in the research narrative, as well as in the full application. Okay? Sort of a buyer-beware, as it were.

Slide Fifty-five:

So, what goes into an application? The application package will include the standard Form 424 R&R, Research and Related. It's the cover sheet, Research and Related Activities. This includes who's the principal investigator, who are other key personnel, what's your sponsored project contact at the university, your DUNS number, all kinds of stuff. Okay? So, the cover sheet is important. You'll also complete an R&R budget form, which includes the federal (and, if you have any, nonfederal) budgetary contributions: you'll include that, as well. It will include a 1-page project summary or abstract. It will include the contents of the applications, so that includes the research narrative and the appendices.

Slide Fifty-six:

Here we go. I was just going to elaborate on what are the contents of the application. The application contents are

the project narrative, the bibliography and references cited, the biographic sketches or short curriculum vitae of key project personnel, the narrative budget justification, and any subaward budgets, and subaward budget justifications.

Slide Fifty-seven:

The application will also include appendix A, which includes Letters of Agreement, tables and figures to support the text in the narrative, and appendix B, which can include things like curriculum material, or measures. It's sort of example-oriented to help reviewers get their heads around what you're proposing to develop or evaluate. And then if you are recommended for funding, you will be asked to complete additional forms. Okay?

I'm going to go through the content of each of these in turn. For those of you who are thinking about coming in in October, I want you to know that you can certainly prepare the contents of the application now. There's no reason to wait until August to do this part. Right? You can write your research narrative, start to develop your appendix. These are all uploaded as PDFs, so there's no reason to wait until the application package is available on

Grants.gov.

Slide Fifty-eight:

So, preparing the application. I started with creating a budget. You're laughing, I'm sure, at me. Why do we have to start there? Well, you've already got your question, and your topic, and you started to think about your research design. But one of the other important things to do, and something that you want to do earlier as opposed to later, is thinking about creating a budget that appropriately maps onto the activities that you're proposing.

In the budget, you'll include things like personnel -- so, what are your salaries and wages, fringe benefits that your university or institution regularly gives to hired employees. You can request travel, if you need to travel for conferences, if you need to travel for data collection, any equipment that you're going to need to complete the research, any supplies you're going to need, any contracts or subawards that you're going to need to get the work done. We have this wonderful category called "Other", which is where everything else goes. And then, "Indirect Costs" of your institution.

For those of you who are looking at this, going,

"Oh my goodness, I don't know what to do!", I want to encourage you to go to the IES Grants.gov application submission guide. There is a tremendous amount of information in that guide about what goes in which category, and what's allowable and not allowable.

Slide Fifty-nine:

So, how do you prepare the project narrative? What do you need to do? The first thing to know is that the project narrative includes four sections. Wait. I have a budget question that I'm going to go ahead and answer really quick. And then I have a couple of other questions that I see are there, and I'm going to come back to them.

"Does the Department of Education pay for tuition remission for graduate students?" If the graduate students are participating in a research project, and that is part of their payment, that is allowable, so you can certainly talk about that in your application. Okay?

Slide Sixty:

So, the project narrative. The project narrative is 25 pages single-spaced. Each project narrative should include a

significance section, a section describing the research plan. In some of the RFAs, that's described as the methodological requirements, and so you can certainly use methodological requirements as the frame, but the idea is the research plan, the personnel, and the resources. You want to have sections in that 25-page, single-spaced document that address each of these four categories.

Slide Sixty-one:

How do you know what goes in them? You want to go to back to the RFA and read the description of the goal. Okay? So, if you're putting in a Goal 1, or a Goal 2, Goal 3, Goal 4, Goal 5, each of them has a section that describes what the reviewers are asked to attend to for evaluating the significance of your project, your RFA. So, go back and read the RFA, because it varies somewhat, depending upon what the goal is. Okay?

Slide Sixty-two:

Similarly, for the research plan: the information is going to vary as a function of the goal. And we've talked a little bit about that. And for those of you who have not been on our

other RFAs, I mean, I'm sorry, guys. My brain is starting to fry here. We've done webinars on Goal 2, and webinars on Goal 3. And if you pull up those slides, which, if they're not available, but they will be soon, there is a discussion of what goes under each of these categories. It's in the RFA, but it's also on the slide. And if you guys have trouble finding that information, just let me know, and I'll be happy to send you the link.

Slide Sixty-three:

So, what's the research plan?

Slide Sixty-four:

For an exploration project, if you're proposing to do secondary data analysis, you need to make sure you include the following information in your application. You need to describe what the characteristics are of the dataset that you're proposing to use. You need to define that existing dataset. You need to explain to the reviewers where you're going to get it, and what is it, where does it come from? So, if you're using an NCES dataset, say, the Early Childhood Longitudinal Study, ECLS-K, for example, you can assume that

reviewers know more about that, as opposed to if it's a dataset that you collected for your own dissertation. So, make sure that reviewers understand what information is available in the dataset.

You also need to make sure that you provide sufficient detail as to the statistical and analytic plans that you propose to use in order to draw conclusions or to generate hypotheses about how things are related. And, again, if you're proposing to do a secondary data analysis, you may also propose to collect additional data.

Slide Sixty-five:

If under "Exploration" you're proposing to collect primary data, you need to clearly describe the sample. You need to explain the measures and how the data are coded in sufficient detail so that the relationship between measures and hypotheses is clear. And again, you need to provide, detailed statistical and analytic plans.

I want to reinforce here that if you're doing primary data collection, and you're planning to collect process data, maybe you want to gather observational data from instructional practices of teachers in classrooms. Say

you're going to collect these data: you need to provide sufficient information about how you plan to code that data. Do you already have a coding scheme that's set out? How are you going to use the information that you gather from that research in order to draw conclusions about how things are related to each other? So, basically, the reviewers need to know what you're planning to do. All right.

Slide Sixty-six:

Similarly, for meta analysis, you need to clearly describe what are the criteria you're proposing to use to include and exclude studies, what's your rationale for that decision, how you're going to search databases in order to do this, again, the coding scheme, about how you're going to extract the data, how do you insure reliability of coding? If you're proposing to do a meta analysis, you need to at least do a first run before you put in the application, so that you can demonstrate to the reviewers that there are enough studies so that you could actually carry out the work that is proposed. Again, please provide detailed statistical and analytic plans, including defining how you're going to calculate effect sizes during the meta analysis process.

Okay?

Slide Sixty-seven:

For development and innovation

Slide Sixty-eight:

For fiscal 2010, I'm going to just remind you that the end product is a fully developed intervention. You want to propose to collect pilot data on the feasibility of implementing the intervention in schools, and you want to propose pilot data on the promise of the intervention for generating desired outcomes.

You need to make sure that in your research plan you talk about how you're going to develop the intervention. You should be proposing an integrative development process: how are you going to collect data on feasibility, what instruments are you going to use, and what type of pilot data are you going to collect?

Slide Sixty-nine:

In the context of the development and innovation project: you are also going to want to provide some information about why you want to develop this intervention.

Okay? And people will argue whether this goes in under significance, as opposed to research plan. In some ways, it doesn't matter, but you do need to answer this question. So, one of the things reviewers are going to want to know is, what's the context for the proposed intervention? So, you need to make sure you spend time describing what current practice looks like, what shortcomings you've identified of current practice, and what's the problem that your intervention will address.

Slide Seventy:

Then you need to make sure you describe the proposed intervention. So, this is one of the hardest things, I think, for a development project: you don't know what all the features, necessarily, are going to look like for your proposed intervention, but I think it's very important that you spend time sketching out where you think you're going to end up, and talk about the process by which you're going to get there. Okay? So think about what are the components or features, who's going to implement or use it, and how it will be used.

You also need to discuss the practical importance

of this intervention. Okay? Sometimes we have great ideas that when we talk with teachers about them, they're not entirely sure why they're important. So, you need to provide a framework for that, so that we understand why it's important to do in schools.

Slide Seventy-one:

Development projects also include a discussion of the theory of change, which addresses the causal chain of events that lead from implementing the intervention to the desired outcome. You need to describe the rationale for the theory of change, including theoretical and empirical justifications. Right? So, sometimes there may be a strong tradition of empirical research that leads to your proposed intervention. Other times, you may have a primarily theoretical framework, and there's not a lot of prior data that have been collected, so you can provide a theoretical justification to provide the rationale for your new intervention. And, again, please articulate in your application how what you're proposing to do addresses the shortcomings of current practice.

Slide Seventy-two:

So, for the development research plan, what will be developed, how will it be developed, and how will they be tested to see if it operates as intended? These are pieces you want to make sure you describe in the research narrative itself. You need to define "operating as intended," so you need to make sure that you've specified what are the criteria you're going to use to determine if the intervention is, in fact, operating as you hoped it would be. Right? And you need to spend some time in your application mapping your notion of operating as intended, what the intervention is going to look like with your theory of change.

Here I have a question: "If an intervention or curriculum is currently being developed and piloted with a specific population or region, and further development is needed, can this be under Goal 2?" Absolutely. And, so, for in this case, your sort of background section, your significance section in your research plan will need to talk about what's already been done, and what remains to be done. Right? Why is it important for you to move forward in terms of doing it for the different populations?

As to the question about is there a Goal 1 webinar scheduled, it is my belief that there will be one,

but I don't know exactly when yet. Okay? So, if you're not signed up for the News Flash, please do sign up for the News Flash, because that's how you'll get that information.

Slide Seventy-four:

Okay. In terms of operating as intended, you need to make sure you describe what data will be collected to determine how the intervention is operating. It often involves, like I said earlier, the collection of process data, say, you're observing teachers implementing the lesson. It may involve getting feedback from the users, whether that's the students or the teachers. And you need to specify and spend the time describing how you're going to code the data. Okay? So, what are you looking for in your data? What characteristics of the data are you paying attention to? Are you going to be looking at things like "how often," how often something occurs in the classroom, or are you going to be looking at particular characteristics of a classroom environment? So, talk about that in your application.

Okay. As you guys can probably tell, operating as intended is an important category, and you need to make sure the reviewers understand what operating as intended means for

your particular intervention. Talk about what data you're planning to collect.

The other part that reviewers often struggle with because it's not articulated in the application, is how are the data going to be used to revise the intervention, if needed? So, it's not enough to simply say we're going to collect these data, and we're going to code them, but you also need to talk about how the data are then going to feed back into a revision of the intervention. So, for the individual who asked about whether it is okay to come in for a Goal Two to do additional development work? Absolutely, but you really need to talk about how the data that you have already gathered tell you that you need to go back and do additional revision, so talk about that process.

Slide Seventy-six:

People often ask how many iterations do I need to do, and how many times do I need to do this develop, test, revise cycle: that's really going to depend upon your own work that you're doing. It's going to depend upon the length of the intervention you're proposing to develop. Remember, development goals are only 3 years in length, so if you're

proposing to develop a full year curriculum, you have fewer opportunities to iterate. Whereas, if you're developing, say, a 9-week intervention, you have multiple opportunities to do iterations.

"If there isn't any intervention research available, and you want to test the relationships between variables that are correlated, should you apply for Goal 2?" You know, that may be a Goal 1 project. In some ways, it depends upon the specific components that you're looking for or looking at. And I would encourage you to talk with the appropriate program officer about your particular project. They can help you with that.

Slide Seventy-seven:

Okay. Let's see. Feasibility is also something that you will need to discuss in a Goal 2. All right? So, in the feasibility of intervention, you need to demonstrate that this intervention can be implemented with fidelity. I think besides the iterative process, this is another really critical aspect of Goal 2 projects. So, simply because we can develop curriculum materials, or we can develop a set of guidelines for teachers to use, that doesn't tell us whether

teachers can effectively implement them, or appropriately implement them, given the constraints that they must operate under in their classrooms. So, the intent of feasibility of intervention is really to say, okay, I wanted you to do this particular story read-aloud. I said it was going to take 20 minutes. Does it actually take 20 minutes? Does it take 40 minutes? Does it take 5 minutes? You need to gather information that tells us that it's feasible to implement your intervention as you intended.

A critical thing to also pay attention to is, what are the settings where you're going to test this feasibility question? So, often we will use a sample of convenience, we'll use the neighborhood school that's down the street. If we're in a university, maybe we have access to a laboratory school. And I think that that is certainly fine for use for the initial development work, but in order to test feasibility, I think you want to cast your net a bit wider and make sure that you've included teachers and children who have the characteristics of the population that you really hope this intervention will be used with. Okay?

Slide Seventy-eight:

All right. How do you gather data about the promise of the intervention under development? For us here, we really only require that you provide evidence that performance on outcome measures is progressing in the appropriate direction. A pre-post design may be appropriate in this case. You could look at, say, historical comparison data. There are many options here, but it's really intended to be pilot data. It's not efficacy data. It's really just information that indicates the promise of the intervention. Okay?

You probably also want to make sure that you get some data around when you're getting these implementation data, that they're data you can use to analytically relate them to outcomes. Right? So, are we seeing the changes in activities and behaviors that you posited would change in your original theory? Okay. So, again, go back to that framework that you set out at the beginning of your application, and make sure that it maps onto what you're discussing in your research plan and in your data analysis.

Slide Seventy-nine:

Okay. What if you're doing efficacy and

replication? Again, for those of you who heard earlier webinars, I apologize if this is a bit redundant. For designing efficacy and replication projects, the goal here of a Goal 3 study is to determine whether or not fully developed interventions, programs, practices, and policies are effective. Efficacy studies are almost always smaller than scale-up projects. The characteristic of efficacy studies is that you really know what the conditions are of the population that you're proposing to work with. Right? So, you specify the conditions, and you specify the types of students that you're proposing to work with. The efficacy studies often don't have large degrees of generalizability. That's really not the intent of efficacy. It's really to test that causal question: does this intervention work to improve student outcomes or student achievement under specified conditions with specific students?

Slide Eighty:

In an efficacy and replication project, you need to spend time in the research plan describing what the components of the intervention are, describing how the intervention differs from what is typically offered in education settings. Again,

why do you think this is going to make a difference, right? You also need to make sure you define your sample, so this should include looking at Ns -- what are the numbers of kids, schools, teachers who are participating, and what are those characteristics of the students. Depending upon which topics you're coming in under, the relevant characteristics may vary, but spend the time to define the participating sample well.

Slide Eighty-one:

Under efficacy and replication, we prefer the use of random assignment, because that is the best way to test the causal question. Right? We certainly recognize that random assignment is not always possible, and you may propose to use a quasi-experimental design. You need to provide an explanation as to why random assignment is not possible. When you're going to do random assignment, you need to decide what your level of randomization is, whether you're randomly assigning students to conditions, whether you're randomly assigning teachers to conditions, or schools to conditions. You could probably even move up further, but these are the most typical designs that we see. And something you want to

be careful about for an efficacy project is to make sure that the level of randomization proposed matches the level of analysis. Okay? So, don't propose a teacher-level random assignment and then do your power analysis based on the number of students in your study. Okay? So, you want to really make sure that you're consistent across each of the components.

This is one of the reasons why I start with thinking about the personnel that you need on your team. If you're going to be designing an efficacy study, you want your methodologist to be part of the planning process from the get-go, and not bring them in at the end of a proposal preparation process.

Slide Eighty-two:

You are expected in an efficacy and replication study to use a power analysis to determine the number of students, teachers, or schools that you need to draw conclusions about impact. You are required to include standardized measures of student achievement. That doesn't mean that those are the only measures you should include, and I would probably encourage you to include additional measures

that might allow you to measure change over the course of the intervention. You also need to describe how you plan to gather data about fidelity of implementation. Are the teachers, in fact, implementing what you expected or intended for them to implement?

I have one other thing I wanted to mention here. I don't have a bullet for it, but when you're designing your efficacy and replication project, and you're thinking about your research plan, do make sure you spend some time describing what students in the control or comparison condition will be receiving. If it's a treatment-to-treatment comparison, that's pretty straightforward. If it's a control group, business as usual, you still need to describe what your understanding is of "business as usual", so that reviewers can understand what the comparison is that will be occurring during your study.

Slide Eighty-three:

For scale-up evaluations, if you're planning on putting in a Goal 4 project, you need to answer this question. This is the driving question that underlies all scale-ups. Does this intervention produce a net positive

increase in student learning and achievement relative to the variety of products or practices currently available and utilized by schools? And you're looking at this at scale as delivered by typical teachers under sort of typical professional development circumstances, -- what they would get if they were to simply buy this from the publisher.

Slide Eighty-four:

All of the methodological requirements that I just discussed for efficacy and replication studies are also important for designing scale-up evaluations. And again, as I said, it's the test of this intervention being implemented at scale, and under typical conditions.

Slide Eighty-five:

Things to think about when designing scale-up evaluations, and I actually think this probably generalizes across all of the projects that I've described so far, the types of projects: you need to spend time thinking about your outcome measures. The first, most basic question that I'm sure everyone on the phone has already thought about is, do these outcome measures map well onto your theoretical

questions? You need to make sure that you're including standardized achievement tests for scale-up evaluations. I think it's probably a good idea for efficacy studies, as well.

You also want to think about whether you've included proximal measures. When you're doing these kinds of large-scale evaluations, you probably want to gather more information about student progress than just end-of-year tests, just because then you have additional opportunities to explore other important research questions in the context of scale-up.

You want to think about practical things, like who's going to give the test? Is it going to be the teachers in the classroom? Is it going to be your grad assistant? Is it going to be individuals whom you hire specifically for this task? And then, think about the money that's required both to purchase any standardized achievement measures that you're going to be using, and the funds that you need in order to have the personnel on hand to administer the tests.

I have a question here that says, "Is the main difference between efficacy and scale-up the size of the study?" That is one of the differences, size. The second

difference is how the intervention is being implemented. So, in scale-up, you're having typical classroom teachers delivering the intervention with the typical amount of support that they would receive if they were buying, say, a curriculum from a publisher.

On the other hand, under efficacy and replication studies, the size is smaller, but it's also a test of your intervention under the best of all possible circumstances. So, typically you might have the developer of the intervention being the one providing professional development. You may have graduate students who are providing additional support in the classroom, all of those sorts of things. So, it's both smaller, and -- I was going to say more intensive. I don't know that that's fair, but the efficacy is really a test of the intervention under the best of all possible circumstances, and a scale-up evaluation is a test of the intervention under typical circumstances. So, I hope that answered the question.

Slide Eight-six:

Okay. Finally, designing a measurement project. Oh, wait, hang on, before I move to that. "By proximal measures, do you

mean formative assessments that are ongoing to monitor student progress and growth, such as quarterly benchmark tests related to curriculum and/or standards?" That is certainly one form of proximal measure. I don't think that that is the only type of proximal measure that could exist. Again, what a proximal measure is going to be is really going to depend upon the research project that you're proposing. So, if you're coming in under Cognition and Student Learning, a proximal measure will look different from if you're coming in, say, under Reading and Writing, or under Math and Science. Okay? But, certainly, forming of assessments would be one form of measurement that you could gather.

Slide Eighty-six:

All right. For putting together a proposal for a Goal 5 measurement study, you need to ensure that your application includes a strong theoretical rationale for the development of this new measurement tool. You will need to justify the need for this new tool, or this revision if you're proposing to do a revision. Why do we need another measurement tool, right? Sometimes that's easy to justify, other times not so.

You need to describe in detail the proposed

procedures for developing the assessment instrument. Again, what exactly you put into a measurement application is really going to depend upon what work needs to be done for measurement. But if you're planning to develop an assessment instrument from scratch, you need to talk about how you're going to develop your items, how you're going to develop alternate responses, who are the people who are going to do it, who's going to make the final decisions, what analytic procedures are you going to use for making the final determination of what items are going to go into the assessment. And then you will also need to describe your research plans for determining the validity and reliability of the instrument. All right?

Slide Eight-seven:

I was going to say that's all, but, no, there's one more here. You want to describe the characteristics and size of samples to be used in each study. You want to explain what are your procedures for collecting data, describe additional measures to be used to determine the validity of the new tool, and describe data-analytic strategies.

I think that for those of you who are on the

phone, you get the idea here that in the research narrative, in that 25-page single-spaced application, what you're really trying to do is describe the scientific foundation of whatever work you're proposing to do. You want to describe what you hope to end up with at the end of the study, and then you want to provide sufficient detail about what you're proposing to do to answer your research question so that a reviewer can make a determination as to whether the proposed plan of research is appropriate for the questions that you are posing. And those will, of course, vary.

Slide Eighty-eight:

So, personnel and resources, I want to reiterate the importance of these two sections. You need to go back and look at the RFA and see if there are specific recommendations for the types of individuals who might be involved in different projects, and make sure you have individuals who are participating on your team who meet those requirements.

You must include a section addressing personnel and a section addressing resources in that 25-page single-spaced narrative. If you do not include that, your application will be returned without review, so don't think

that it's adequate to address personnel and resources in the budget discussion or in the CVs that are attached. Okay? You must include that information in the actual narrative, itself. Okay?

Slide Eight-nine:

In the personnel section in the narrative, you want to specify all the key personnel. You want to summarize their relevant experience. You want to make sure you describe what their role is on this particular project, and you want to include information on the percentage of effort that each individual will be devoting to this particular project. You want to use the biographical sketches to further document expertise and productivity.

I had a question earlier about what is the page length of biographical sketches. These are short biographical sketches. They can be no longer than four pages in length, with a fifth page devoted to describing current and pending support, so you want to work with your key personnel to make sure that the information that is included in the short CVs is relevant to the project that's currently being proposed. Okay? So, use those CVs wisely.

Slide Ninety:

In the resources section: you want to include this section, again, in the narrative. And here you want to describe the resources available to support completion of the project. This section can be only one or two paragraphs long. But it can be longer. In some ways, it's really going to depend upon the type of institution that you're coming from. So, for research universities, you may already have information that describes the resources that are available at your university. If you're coming from a small college, or if you're coming from a small business or a for-profit research agency, you may need to elaborate the kind of resources that are available. So, do you have a research library available? Do you have computers and offices available for everyone working on the project? Where are you going to store the data that you collect? These are things that we often don't necessarily think about, but you are required to describe those resources.

The other critical resource for most of the projects that we support includes some form of access to schools or datasets. And you need to reference those schools

and datasets that you will be working with in the resource section, and in appendix A provide a document, a letter of agreement, or a letter of support from the schools, or some form of permission to have access to the data in appendix A.

Okay. I have another question about proximal measures here, wanting additional examples besides formative assessments. You know, proximal measures, quarterly benchmark tests, it could be -- I'm just trying to generate off the top of my head. Sorry, this is somewhat difficult to do. If you're a cognitive scientist, maybe you've developed something like a measure of metacomprehension that's a researcher-developed measure, that you want to see whether kids are aware of what they've learned, and what they haven't learned. It could be something like that. It could be something, maybe a quiz. I mean, it really just depends upon what the particular project is that you're developing.

I want to encourage you to reach out and talk to the program officer who is named for the topic you're interested in, and they can help you think through what would be appropriate for your particular research question.

Slides Ninety-one and Ninety-two:

All right. Again, you need to build relationships with schools, so I want to encourage everyone to start now. If you're planning to put in an application for June, I certainly hope that you're already in the middle of conversations with schools. If you're planning to come in in October, I want you to think about talking with schools now, too. Sometimes people will think, oh, we'll wait. September is a really hard time to get letters of agreement from schools because it's the beginning of their school year. Things are often busy, so if you know that you're planning to put in an application in October, I'd recommend that you reach out now to the schools or the district that you're hoping to be able to work with.

Letters of agreement: again, you need to include those. Please know that reviewers will look for them, and they read them carefully. The letters need to include detailed information that demonstrates that your partners understand what participation in this study will entail. Often, researchers will create form letters that they ask individual schools to sign off on, or individual districts to sign off on. That is fine, but you need to be attentive to details, because sometimes reviewers will look at those and

go well, how do I know that the school actually read this, because each letter is exactly the same. So, make sure that it's clear that the principal or the district has, in fact, read the letter of agreement and, in fact, understands what participation is going to mean for their particular school.

I often am asked from whom should I get these letters? I think that really depends upon the study that you're proposing, and it also depends upon the rules and regulations of the school system within which you're working. For large school systems, you often need to have district approval. For smaller schools or smaller school systems, or places where you have longstanding relationships, you may be able to get letters directly from the schools themselves, or maybe even from the teachers with whom you're planning to work. So, use your best judgment, and get letters from the persons or systems that make sense given what you're proposing to do.

Slide Ninety-three:

All right. Getting to the fun part of this. Right? The formatting requirements. So, what are the page lengths? Here's just a quick summary page. Your abstract is one page

single-spaced. The research narrative is no longer than 25 pages, single-spaced. The bibliography has no page limit. Each biographical sketch is limited to four pages. The budget justification has no page limit. Appendix A can be no longer than 15 pages, and appendix B can be no longer than 10 pages.

Please know that these page limits are adhered to strictly. If you include pages that go over these lengths (and these apply to the PDFs that you upload, not the word narrative that's on your desktop), then those pages will simply be chopped off and not sent forward to review.

Let's see. I did just say that the biographical sketches are limited to four pages. There is also that additional fifth page that is reserved for describing current and pending support. I'm going to go backwards here. I have a couple of questions about who's participating.

A question here says, "Private versus public schools would not affect eligibility, to my understanding. Is this correct?" That is, indeed, correct. However, I will encourage you, if you're planning to work with private schools to talk about the sample characteristics of the school, of the teachers in the school, of how this looks like other opportunities for education for kids. So, the idea here

is that you want to think about how generalizable your results would be. So, if you're planning to do work in a private school, that's completely fine, but you need to explain how the students and teachers within that school setting look like other possible places where your intervention could be implemented.

A question here says, "If the state works with community center boards, with early childhood services, will relationships with CCBs be accepted instead of schools?" You know, that is such a specific question that I'm going to have to ask that you talk with the early childhood folks about that, because I do not know the answer.

We have a question here, "Where should a Table of Contents be included?" Now, I actually recommend that people don't include a Table of Contents, simply because you don't want people to count that as part of your pages with your search narrative. So, you can go ahead and number your pages, and please, please do number the pages in the PDF file as you upload it, but I think that a Table of Contents, we don't have a requirement for it, and I think that it can sometimes backfire.

Slide Ninety-four:

Okay. Other reminders. Please do pay attention to what is and is not permissible in the appendix. You may not include narrative text in the appendix. If you include narrative text that belongs in the research narrative, that will be pulled. You may not include things like elaborating descriptions of pilot studies, or prior published works. None of that can go in the appendices. Appendix A is limited to letters of agreement from schools, and tables and figures that support the narrative. And if you are putting in a resubmission, you may include up to three pages of responses to reviewers.

Appendix B is curriculum materials and measures. I want to encourage you to reach out to colleagues who are not participating in this project and have them read a draft. I think it's extremely helpful for you to have someone who can function like a reviewer for you. So, reviewers are experts in their field, but their field is not going to map directly onto your field. They are going to have substantive knowledge. They're going to have statistical knowledge. Again, it's not going to be the same as yours, so you want to make sure that an educated reader can read your application and understand what you're planning to do.

Program officers here at IES can read drafts and provide you with feedback. Because we are not part of the review, that's something we can do. Everyone here is doctoral-level staff. We've all had our own research projects in the past, and so we can be a great resource. Having said that, I also want to remind you that we have many applicants that we work with, and the closer it gets to an application deadline, the less time we have to help to review drafts comprehensively. So, please recognize that while we are absolutely willing to help, and I hope folks out there have already reached out and worked with us, just recognize that you shouldn't only rely on program officers to review your application. I think that's the big point here. Get others, reach out to others who can provide you with additional feedback.

Slide Ninety-five:

Okay. From the reviewer's point of view now. Perspective taking is something I was interested in when I had my own research career. I want to encourage each of you as you're putting your application together to put the reviewer hat on, and think about -- if you were a reviewer and you were asked

to review 10 to 15 applications, and each of these application packages is often close to 100 pages long --about what would help you do your job better? The first is to pay attention to your writing. Please write as clearly and concisely as you can, and remember that you're writing to highly educated people, but not necessarily experts in your particular field. Okay? So, be kind to your reader.

Make sure you address points described in the RFA. Our reviewers do not have a specific rubric. However, what they are asked to do is to use the Requests for Applications to guide their evaluation of the applications. So, make sure that you use the RFA. If you look at the RFA, you'll see that under each of the goal sections we identify clearly which components you should talk about, and what sort of characteristics of your design you need to articulate clearly -- about your theory, personnel, and resources. So, use that RFA to guide your application preparation.

Please organize your information in a logical sequence. While the RFA can provide you with good organizational structure, sometimes you'll find that it's not working in terms of your particular application. So, feel free to reorder things so it makes better sense from how

you're writing. Label the sections, and number the pages. Okay? Label within the research narrative significance, research plan, personnel, and resources. Right? Those are four categories reviewers are asked to evaluate: provide those sections with labels.

Number your pages. So, number your research narrative from 1-25. You can then number your bibliography separately. You can use sort of A-1 as your numerical header for appendix A, B-1 for appendix B. Just make it as easy as you can for reviewers to find and understand the information.

There's a two-step review process that I'm going to describe in a minute, but if your application makes it through the triage process, and you're discussed by the full panel, you want to make sure that Reviewer A can talk to the panel and say on this page of this application you can find the information that addresses this particular question. And to the degree that you provide that information, it makes it much easier for the reviewers to do their job well.

Oh, I have someone here who is providing some advice for folks in terms of getting letters from schools. "You may need board approval even if you are working with only one to two schools. So, you want to also talk with your

district about the board dates, when they meet, for getting onto the board agenda, so you don't run into the proposal due date." Again, thank you for that. I think it's really important for applicants to begin to build relationships with schools and with school districts early in the process, and not to wait until the end.

We have a question about Letters of Intent. For October, again, that's on the front page of the Request for Applications, so I want to remind everyone that there is that information on the RFA. The date is August 3rd, 2009 for Letters of Intent, but if you forget that date, it is on that cover sheet.

Slide Ninety-six:

Okay? Let's see. What else do we have? All right. My other reminder here, to submit the proposal: all of our proposals must be submitted electronically to Grants.gov. We are using that portal, notwithstanding stories about the difficulty with stimulus funds. We are still using Grants.gov, and that will not change. So, for those of you who are not familiar with Grants.gov, you want to talk with your sponsor projects office at your institution. You want to make sure that your

institution is registered. That's another thing you don't want to wait to do until the last minute. It takes about a week to get your institution's registration information taken care of, so you just want to make sure that's all in place before you go to upload your application.

The other thing that I want everyone out there to be aware of is that deadlines must be received on the date listed in the RFA for the competition to which you are submitting by 4:30 and zero seconds p.m., Washington, D.C. time. You need to understand that seconds count, that the time is the time stamp on the Grants.gov computer, not the time stamp on your computer. You must have everything uploaded by 4:30 p.m. Okay? So, if you start uploading at 4:29 and it's not done by 4:30, then your application will be considered late and will not go forward to review.

What I would recommend is that you start early. Do this about a week early, upload your application. That's great, because it gives you the time to go back into the electronic system to review the materials that were uploaded, to make sure that there wasn't an oversight, that the right research narrative was uploaded. I've certainly had cases where people sent the wrong file forward, and they got the

wrong file uploaded, and they wonder why reviewers didn't see that information. Well, it's because it wasn't in the documents that were sent forward. Early is better for this.

Our application dates are not on here. June 25th is our first application date, and our second is October 1st this year. For the applications for June, include applications to our main research competition, so, the Education Research RFA, and the Special Education Research RFA. It also includes the postdoctoral training grants. It includes the stats and research methodology, and evaluation of state and local. Applications to all of those RFAs are accepted in June.

In October, we are accepting applications for the two main research RFAs: all of the R&D Center applications are due in October, not in June, but in October. State and local districts applications are due also in October. We're accepting applications in October, as well. And the "Reading for Understanding" initiative.

If you are planning to put in an application for establishing a postdoctoral training program, or for establishing or for doing a statistics and methodology proposal, we are accepting applications only in June for

those two RFAs.

I have a question about registration. It says, "Can you register now with Grants.gov for the October submission?" Yes, of course you may. You can register now and just keep your log-in information so you have that handy. "Where do we find information on the Letters of Intent?" Again, that information is available in the Requests for Applications. If you look in the Table of Contents for each of the RFAs, there is information about the Letters of Intent specified there. So, if you've not read the RFA, I do want to encourage you to do that. There's a ton of information in there, and it will support you in preparing an appropriate and complete proposal.

Slide Ninety-seven:

Okay. For the final proposal submission, what's your checklist? Right? You want to make sure that all of your online forms are complete. You want to make sure that the PDFs of all of your proposal contents have been uploaded. Generally, you're going to have multiple PDFs, so you want to make sure you have a list to make sure you've included them all. You want to make sure that whoever the authorized

representative is at your institution has completed the final step of the electronic process. So, please know that they are the ones who have to push the final button. It's not the principal investigator: it's whoever your authorized representative is at your institution. And make sure that you've received an email acknowledging receipt of your application. I believe you will get two separate emails from the Grants.gov website, so you want to make sure that you have that.

Slide Ninety-eight:

Okay. What happens next? No other questions, right? Okay. So, now you've pushed the button. The application has gone into the great electronic mystery. Right? It's gone, it's out there. It's in Grants.gov. Then what happens, because this is when applicants often get a little nervous. They don't know what's happened to it. So, here's what happens.

Slide Ninety-nine:

The applications are delivered electronically to our Standards and Review office. And the Standards and Review

office takes over the responsibility for the applicants from the receipt time forward. Okay? So, the two program offices: we work with you closely up until the application is submitted, and then we are not part of this review process. But what does Standards and Review do?

The first thing that they're going to do is they're going to look through all of the applications for questions of compliance and responsiveness. So, compliance means things like, are all four (or five, if it's a center) of the sections included? Do they have all the required components in their application? This is also where people look at things like font size, page numbers, and margin width. Anything that does not meet the specifications in the RFA or in the submission guide is either returned without review, or pages are cut off, whatever needs to be done, it's done in order to make it compliant, if possible.

Please know that if you didn't include a section, and it was an oversight, there is no opportunity to fix that for the application cycle that you've submitted to. So, if you do this in June and you get something that says it's not compliant, you can't make a change and re-upload it for that June deadline. You could certainly put it in for the October

deadline, but just know that there's not an opportunity to add information that has been left out.

Like I said, we will cut off pages so that it'll fit page length requirements. You will be contacted if that happens, and you will have an opportunity to say whether you want it to go forward in that less-than-complete state or not.

Regarding proposals that meet compliance and responsiveness, the Standards and Review office will also look for responsiveness to the RFA, so if, for whatever reason, we get applications that don't propose to do any research, those are not responsive to the requirements of the RFA, and those will be returned without review. So, it's important to read the RFA and make sure you understand what the intent of the program is.

Compliant and responsive applications are assigned to a review panel. We have standing review panels that are organized by content area, and applications are assigned two or three reviewers, depending on two things: on the number of applications that we receive, and on the type of application that you are putting in. So, Goal 3 and Goal 4 applications almost always have three panel members because

we have two content experts and a methodologist. Development projects may only have two content specialists review the application.

Then there's a two-step process. So, we've got this primary review. Every application is read by two or three reviewers. They are scored along the criteria we talked about before: significance, research plan, personnel, and resources for the main RFAs. There are additional requirements, I think, just for centers. And then there is a triage process. So, only the most competitive applications are reviewed by the full panel. That sort of decision, in terms of the most competitive applications, generally works out to the top third of applications that are received. It varies as a function, again, of the number of applications we get in, but the Standards and Review Office makes that determination. Okay?

Then, applications are discussed by the full panel, and the full panel then provides scores for those four criteria, plus the overall quality of the application, and that information is what is used for making funding recommendations.

"Is the principal investigator ever the

authorized representative?" Sometimes, but not often. If you're a small business, and you're planning to come in, you may see that the principal investigator and the authorized representative are the same individual. Typically, the principal investigator is the research head, and then you have a separate individual, or a separate office, that's responsible for the financial management of the award.

"Who, specifically, should individual teachers and education researchers talk with if their institutional patrons are not yet certain; that is, can I ask granting agencies for individual teachers and educators who are outside of IES?" I think you are asking, can we serve as a sort of matchmaking agency? We don't typically do that, but we can certainly talk with you about particular agencies that might be geographically relevant, or appropriate, given where you're proposing to carry out the work.

What causes pages to be cut off? Should proposals be submitted as a doc, rtf, or PDF? I believe the requirement is that everything is uploaded as a PDF. Again, that information is included in the application submission guide. Pages will be cut off if they're more than 25. Right? So, that if you go over the 25-page limit, that 26th page will be

removed from the application, and will not go forward to review for the research narrative length.

I'm sorry. I have a follow-up question to the other one before. It says, "Can I just recommend granting agencies for individual teachers and educators who can seek funding from outside of IES?" You know, I would recommend that perhaps you email me your question directly, and we can talk about this offline, because I'm not quite sure I'm understanding the question. My email will be at the end of this presentation. We're almost at the end. I know people are getting tired. I'm amazed my voice is still operating.

Slide One Hundred:

People often want to know who the peer reviewers are, and more information about the peer review process. This particular link will take you directly to the site, which describes our board-approved peer review procedures. There is also a list of reviewers who have reviewed for fiscal 2008, 2007, and 2006. We are still in the middle of completing our fiscal 2009 awards, so we do not have a list of the 2009 reviewers available yet, but it will be up there.

Slide One Hundred One:

Okay. How do you find out if you received an award or what the status of your application is? All of our communications around this will occur via email. I do want to let people know that our contractor is usually the one who sends the email notifications that include the reviews with them, since the contractor is responsible for compiling the reviews. Sometimes that information goes to spam boxes, so I want to encourage people to check their spam boxes, because capital letters are used for IES, and depending upon how stringent your spam requirements, or your spam rules are, it can dump it to spam. This is something that people often ask me. So, please know it will come via email, but make sure you check all of the places where email can come.

The other thing to remember is that it's really important to make sure that your email address is correct on that cover sheet, because that's the email address that we're going to use to be in touch with you. So, double check the spelling of it, make sure you haven't mistakenly alternated letters, that your periods are in the right place.

Everybody who applies receives copies of reviewer comments, whether you're recommended for funding or not. So,

this is something that I want to encourage -- this is a good part of the process. Reviewers take their responsibilities very seriously and provide you generally with useful feedback. Please know this a very competitive program: I think our funding rate is around 12% to 13% of applications that we fund. So, it is likely that you will not be funded the first time you submit. That does not mean you should turn around and walk away. I would encourage you to plan on putting in a resubmission, and, again, contacting your program officer. They can help you think about the review comments, think about which of the review comments are the most critical for attending to during a revision and then putting your application in for review a second time.

Slides One Hundred Two, One Hundred Three, and One Hundred Four:

Okay? So, final reminders here. Start early, read the RFA, talk with a program officer, and don't only start your work early but also start that online submission process early. And, last but not least, I promised you my email address. I'm Liz Albro. I oversee the Teaching and Learning Division of the National Center for Education Research, so if you have a

question, please send it to me. I can direct you to appropriate individuals within one of our two centers, if I'm not the right person to answer that question. I'm sure everyone is starving and wants to go eat lunch, so I'm going to thank everyone. I'm going to answer whatever questions I have remaining, but for those of you who are ready to move to the next part of your day, I want to thank you for staying with us, and hope that I'll hear from you all soon.

We have here the link for the peer review process, which needs an underscore to work. Yes, I know the underline. Sorry about that. If you just cut and paste, or actually if you download these slides directly to your hard disk, I'm losing my words, and just click on that link, it should take you directly there. Or you can just cut and paste, and put it into your browser window.

Okay. "Even though I carefully read the RFA regarding resubmitting proposals, is there a stigma associated with re-submissions?" No, absolutely not. And, in fact, I would say that the resubmissions are often more likely to get funded, that reviewers typically provide suggestions for resubmissions, and if they're really excited about your proposal but think that there are things that need

to be done in order to improve it before they're willing to recommend it for funding, they will indicate that. So, resubmissions are fine.

"How long before you know if your application has been accepted?" The typical process is that if you put an application in June 25th, your application will be reviewed typically in late October, and then we do our best to start talking to let applicants know the status of their applications by end of December, early January. I do want to let you know that that's just a rough guess. The official language is that you will be notified of the decision about your application by March 1st (which is the earliest possible start date). Okay? We certainly recognize that individuals often need to know sooner so that they can either make decisions about preparing a revision or submitting it to another agency or beginning the work that they do. We do our best to let applicants know as soon as we can about the process, but it's about a 9-month cycle, if you look at it.

Similarly, if you apply in October for the October 1st deadline, those applications are not reviewed until February, and the earliest possible start date for those is July 1. So, notification will often occur in April

or May, but the actual dates really vary quite tremendously, so it's a fairly long process.

I have a question here, which says, "Are there any limits on the number of resubmissions, such as with NIH?" So far, we do not have any limits on resubmissions. That's not to say that that might not change in the future, but at this point, we do not.

All right. So, those are all the questions I see. If anyone else has other questions, I will wait a couple of more minutes and see if anything comes forward. And, again, if not, I just want to thank everyone. I know that this is a long session. I usually do this workshop face-to-face where we can have breaks and walk around. I have to use my good teacher wait time.

All right. I think everyone is ready for lunch. So, I want to thank everyone, again, for their attention. Please do feel free to email me directly if you have any other additional questions, and I'll be glad to help you find the information. Okay? Have a great afternoon.