

INSTITUTE OF EDUCATION SCIENCES

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GRANT WRITING WORKSHOP  
FOR  
DEVELOPMENT & INNOVATION PROJECTS  
(GOAL 2)

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WEBINAR  
WITH  
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## W-E-B-I-N-A-R

### **Slide One:**

DR. ALBRO: Good afternoon, everyone. I hope everyone is doing well this afternoon. This is Liz Albro.

For those of you who have not been on the webinar before, I'll go through the procedure here. I'm going to walk through the slides, and if you all have questions that occur to you, please feel free to send using your Q and A box. Just type them in: they will come to me. I will pause at sensible places and try to answer your questions.

I have a colleague, Kristen Lauer, from the National Center for Special Education Research, who is helping me here today. And she will let me know if there are questions that I need to answer right away.

So we're scheduled for 2 hours. I'm not sure we'll take the full 2 hours, but like I said we'll give it a go and see how it works.

### **Slide Two:**

For those of you on the phone, I'm assuming that you're familiar with the IES goal structure and that you are

interested in preparing a Goal 2 grant application for the Institute of Education Sciences. IES funds solution-driven research. Our goal here is to fund research that is intended to contribute to the solution of practical education problems.

For those of you out there who are very familiar with the Request for Applications (RFA), you will notice that there are lots of conversations about how do we use our research base, how do we create a research base that can be used to help improve the education and achievement of students in the United States.

We have five goals currently.

Goal 1 focuses on exploration. Goal 2 is focused on the development and innovation of new programs, practices, and interventions. Goal 3 is focused on efficacy and replication, where you take a fully developed intervention and you evaluate the causal question to determine if, in fact, that intervention is causing improvements in student achievement. Our Goal 4 is scale-up, where you then continue to examine that efficacy question, but at a larger scale across an entire district -- perhaps across the state. And we also support research under Goal 5, around the development

validation of measurement and assessment tools.

**Slide Three:**

This afternoon, I'm going to focus only on development and innovation. We figured we would put some pictures in: it's Friday afternoon.

We're going to break out of the old shell. So one of the things about development and innovation is thinking about how we take what we know and create something that is new and has potential for changing what happens in school.

**Slide Four:**

What kinds of projects do we support under document and innovation? Again, as we get going here, I want to let you all know that we support the development and innovation in education interventions, and we understand interventions to be broadly understood, so it can be something as small as an instructional approach -- working on how you deliver instruction, to a curriculum that is an elementary curriculum designed for 5 or 6 weeks' worth of use all the way through a full-year curriculum. We can do supplemental or add-on programs. You could propose to develop new professional

development. You could propose schoolwide interventions, or you could propose to develop interventions designed for implementation at the district level.

Okay, I'm going to keep going. I know some people are having some audio challenges. I will try to talk louder and we'll and get this right so everyone can hear.

**Slide Five:**

To set the framework, I'm going to talk both about the National Center for Education Research (NCER) as well as the National Center for Special Education Research (NCSER). And when we look at the projects that we have funded to date, more than half across both of the centers that we have funded to date have been development projects. People sometimes ask me if that means that we have some sort of a quota or a limitation or a number we are supposed to fund, and the answer is no. What this really reflects is, I think, both the state of the research community and the research field, and it also reflects the applications that we receive. More than half of the applications that we receive are Goal 2 projects and more than half of the ones that we fund are also in that category.

**Slide Six:**

What are some of the challenges in putting together a successful development and innovation project? One of the main challenges that both researchers and reviewers face is that there is no widely accepted, systematic process for developing interventions. There are disciplinary differences, so developing an intervention in a psychological laboratory may look very different from what a mathematician would do -- may look very different from what an education technology kind of project would look like.

Given that, one of the challenges that we face here at the Institute is in thinking about what parameters we want to set around the Goal 2 requirements. What we have tried to do -- and what I'm going to try and walk you through here -- are some of the big pieces of the development project that you really need to attend to when you're preparing your application.

**Slide Seven:**

So the key question, and I think the question that you need to think long and hard about and that you need to convince

the reviewers that you have a good answer to, is why is what you're proposing to develop likely to produce better student outcomes relative to current education practices? Why is it worth investing in this? How is your reading curriculum any different from what students are currently exposed to?

**Slide Eight:**

So what do you do in terms of elaborating your answer to that "why" question? Before you get to the why question, however - - before you can start to answer that, you stop to think, sort of step back and think, do I have a good understanding of the problem? So, one of the things that my staff and my colleagues and I will do when we talk with grantees is ask them can they explain the underlying processes that lead to the answer to that why question.

Do you understand well what is happening in the development of reading or in the difficulties that students are facing with reading? This is important so that you can then know what are those malleable factors in the environment that might be targets for intervention. Does it have to do with exposure to different kinds of text? Does it have to do with exposure to the letter sounds? What are the pieces that

your intervention is going to target?

**Slide Nine:**

You also need to think about what your own research tells you about what distinguishes effective and less effective practices. If you don't think that you can do that, then you probably want to step back and go and propose a Goal 1 project or an exploration project that examines these underlying processes so that you can be well informed and provide a convincing rationale for the development of this new intervention.

I have a question here that says, "Can more than one intervention be applied in a project?" Because we're talking about developing interventions, it depends. Certainly if the two interventions are linked, you could propose to develop two interventions. However, you'd want to talk to your program officer about the details of that. But generally, there is sort of a core intervention that an individual is proposing to develop and there may be related components to it, but it's rare that you would see multiple interventions being proposed in a single development project.

So here's a question, and I think I'm going to

talk through the next two slides and I'm going to see if I answer this question. I will come back to it.

So the question is whether we have the frame, what happens if the underlying processes are well known. If there's a theory of conceptual framework, is that enough for a Goal 2 project? I think the short answer is probably it is.

Slide Ten:

So what do you need to have for a Fiscal 2010 development and innovation project? You needed to be able to describe a well-specified theory of change for the intervention, so that could come from either prior empirical work that you yourself have conducted or from theoretical work that others have conducted, that you can draw on.

At the end of your development project, you will have a fully developed intervention. At the end of the project you will also have collected pilot data on the feasibility of implementing the intervention, and you will also have pilot data on the promise of the intervention for generating desired outcomes.

I'm going to talk some more about the theory of change, so it's important for you to start out with the theory of change. I do want to say that part of what you're

doing through this development process is gathering data that will inform your understanding of that theory of change. So it's possible that what you originally propose may not be borne out in terms of the actual data you collect over time.

**Slide Eleven:**

All right, so I'm going to talk through how in an application you would then propose to meet each of these expectations. Within all IES research applications -- so anything that comes in, whether it's a Goal 1, 2, 3, 4, or 5 -- each of these applications will have four separate sections that the review panel will be reviewing and scoring your application on. There is a section devoted to explaining the significance of the work you propose to carry out.

There is a section that describes your research plan and the accompanying methodological requirements of the project. There's a section describing the personnel who are part of your research team, and a section describing the resources that you at your institution have available to support the research you intend to carry out.

**Slide Twelve:**

I'm going to go through each of these sections in turn.

**Slide Thirteen:**

So I'm going to talk first about significance: what are the components that reviewers are expecting or the questions reviewers are expecting to have answered in the significance section and so on.

Under significance is where you address the why question. And as I said at the outset, I think this is, in many ways, one of the most important parts of the application. You need to think long and hard about what the justification is for that.

In answering the question for the reviewers, "why develop this intervention?" you need to provide information about three categories of information. First, you need to spend some time describing the context for the proposed intervention. Second, you need to describe what you think this intervention will look like -- what is it that you are proposing to develop. You need to articulate what your theory of change is, and you need to provide information about the theoretical and empirical rationale for this intervention you are proposing to develop. And finally, you must also address

the practical importance of an intervention.

One could imagine an intervention that one might propose to develop that is quite small and perhaps does not have a large impact on student achievement. You need to think about whether that intervention would have a sufficiently large scope of work to justify federal funding.

**Slide Fourteen:**

So, first in this significance section you should set the stage. You need to describe the context for why you think it's important to develop this new intervention. First you need to describe attributes of existing practice. I think it's really important for applicants to remember that the reviewers don't share your experiences, and they have greater or lesser knowledge about the context that you're going to be working in.

So I am responsible for the Interventions for Struggling Adolescent and Adult Readers and Writers competition, and when I talk with individuals who do research in community college settings, I remind them that this is an area where many reviewers may have less familiarity than you would expect. So, they need to spend some time saying, "Here

are the kinds of students that participate in courses at community college. Here are their characteristics. Here are what the faculty look like.”

Similarly for work in the K-12 setting, spend the time to describe what current instruction looks like.

In so doing, you should also talk about what are the shortcomings of existing practice, the idea being that these new projects or these new interventions you're proposing to develop and innovate in are going to overcome those shortcomings in some way.

Clarify the problem. What is the problem that you're trying to address? Is it reading achievement? Is it students' ability to solve fraction equations? Is it students' mastery of the force concept in physics? What is the problem that you're trying to address with this intervention?

And then you should also be clear about how much of a change you expect to achieve with the proposed intervention: this should now bond to the sort of size and scope of the intervention that one is proposing to develop. So if you're going to develop a curriculum that's only going to cover 5 weeks of instruction, make sure that the change

that you're proposing is reasonable, given that limited instructional time.

**Slide Fifteen:**

In addition, in the significance section, you need to spend time describing what this intervention is going to look like. So, what are the components or the features of the proposed intervention? Even though you may not know what the final product is going to look like, I'm sure that you have an idea about where you think it's going to go. Paint a picture for the reviewers so they have something that they can hang the rest of the proposal on. What is it going to look like?

Make sure you think about and describe in your application how these features relate to each other. Describe who is going to use it. Is it something for the children to do independently? Is it something that a reading specialist is going to implement? Is it something the classroom teacher will implement? Is it something the principals will use? Who is the end user of this intervention?

And how will it be used? Is it a replacement for current core curriculum? Is it a supplement? Is it something that can support student homework? Is it designed for use in

summer camp? How do you envision its being used?

**Slide Sixteen:**

So for example, if you are proposing to develop some new teacher professional development materials that are to be used for teachers who are going to be working in pre-kindergarten with English language learners and you want to help them improve their vocabulary instruction for that population, you need to make sure -- or you should probably include in your description of the intervention the content -- what the words are that you plan to have the teachers teaching to these young children. And, what is the rationale for that decision? So why do teachers need to be teaching these words as opposed to other words? And why do teachers need professional development around those words?

What are the strategies, the techniques, that you're going to be helping these teachers learn how to do? Describe that. How are the teachers going to get this information? Is it going to happen over the Web? Are they going to have to do a webinar like what we're doing? Is it going to be in a classroom? What materials will the teachers have? Describe that component.

And then make sure you specify the objective of the intervention. So, what do you expect that this new professional development will enable the teachers to do after they've gone through it? And what should their students be able to do, as well.

Just to go back: so, the first thing is you're going to describe the intervention. What are the components of it?

**Slide Seventeen:**

After you've done that, you should also describe the theory of change. So, what is the causal chain of events that leads from the implementation of the intervention to the desired outcome? There's clearly a causal chain. This is why you proposed this particular intervention. Take the time to articulate that for your reviewers.

A theory of change can be either simple or complex. Depending upon what you're proposing to do, you may want to make it relatively simple to begin with.

**Slides Eighteen and Nineteen:**

So, in the intervention that I was just starting to

articulate before, you have a professional development intervention that is supposed to cause change in vocabulary instruction that the teachers are delivering, and that is supposed to have an impact on students.

When you're describing these interventions, you need to talk about what data you're going to collect to support this. Now, this doesn't necessarily have to happen in this area of change section, but you want to think about how the theory of change can be used to structure the presentation of your ideas across the entire grant application. So, you're going to think about resources for the PD intervention.

You're going to think about what are the outcomes and measures that you need to have in place in order to measure what happens during that intervention. Similarly, for the instruction that's carried out in the classroom, what are the teachers going to be doing in the classroom, and how are you going to measure fidelity and changes in teacher instruction? What are you going to use to inform the decisions you're making?

And finally, what are the student outcomes and teacher outcomes that you're going to be collecting? One of

the things about our teacher quality programs is that we require that you gather student information as well as teacher information. You need to specify what those measures look like.

**Slide Twenty:**

You've described your theory of change. You've filled it out and then you should also spend time in that significance section elaborating the theoretical and empirical justifications for the design and sequencing of the intervention components. Again, this would be the place where you would do a somewhat compressed literature review of the critical prior literature. Know that the reviewers are scholars in the area, but maybe in a tangential area. Walk them through the main areas of research that are relevant to the development that you're carrying out. This is also an important place for you to describe any prior published or published work completed by the members of your team that support your development effort. Very often, people will walk into a development project and they've already done some prior work to support the development of this intervention. Make sure you include a description of that in your

significance section.

**Slide Twenty-one:**

The third component of the significance section is the practical importance. This has two components. The first is that you should describe why the fully developed intervention - that's what you get to at the end of the 3 years of the project -- why that intervention will have the potential to improve student outcomes in educationally meaningful increments.

What those educationally meaningful increments are will depend upon the types of intervention that you're proposing to develop, but you need to convince the reviewers that what you are proposing to do will have enough bang for the buck, right? So it's really going to make a difference.

Secondly, you should also describe why the proposed intervention is affordable and easily implemented by staff in authentic education delivery settings. All right? So, one of the challenges that researchers are often confronted with is they develop these very elaborate, very sophisticated interventions that are too expensive for implementation at scale. You need to consider this when

you're thinking about what the scope of the intervention will look like.

All right, I have a question here that says, "Can you clarify the content area for me? If I plan to teach 500 words to kindergartners, then I should include those words in my application and why?" I don't know that I would include all 500 words in your application. However, you should certainly provide some information about the types of words that you plan to instruct to kindergartners.

And anyone who does vocabulary instruction on the phone knows there's a fair amount of conversation about what are the most appropriate words to teach children at that age. And so the reviewers will ask well, okay, so he's going to teach 500 words, but what are those words and why are they important to be taught? So you need to provide sufficient information to the reviewers so they can understand why the project that you're proposing is sufficiently different from what kids are currently exposed to, and map onto the current literature to suggest that it would actually make a change in students' vocabulary.

"Are you assuming that these will be developed for typical schools?" I am going to say I am in my

presentation, but then I'll go ahead and ask the next part of it.

"We are writing a proposal to be used in jails with adolescents. This would be a new context for a curriculum, not necessarily a new curriculum itself." That particular question, that's actually kind of interesting. I think that I would really recommend you talk with the appropriate program officer. I don't see any problem in doing that. However, the vast majority of the work that we support is for use within the U.S. education system. And so you would need to build an argument in that application as to why you're reviving that curriculum for use in that particular context and why that's something that is important to do. So I think it's certainly possible, but it would be something you'd want to talk with your program officer about.

Okay, that's significance. In development applications, development and innovation applications, the significance section is particularly important. It's particularly important because you're really laying the foundation for the answer to that "why" question. So I want to encourage everyone to spend time thinking about their significance section and how they can use that to build a

convincing argument for the reviewers as to why what you're proposing to do is of particular importance. Okay?

**Slide Twenty-two:**

The next section is also very, very important. I think that you want to make sure that you don't spend so much time on the significance section that you don't leave enough space to fully and adequately address the methodological requirements. These are both very, very important, and reviewers will spend a lot of time thinking about the degree to which you've elaborated your proposal around these areas.

In the RFA, you all will notice that under methodological requirements it states that you should specify who your sample is, what your sample will consist of. You should describe the iterative development process that you propose to undergo during development. You will describe how you will capture information that describes the feasibility of implementation. You will describe a pilot study and you will specify what measures you plan to use.

All right, I'm going to walk through each of these in turn, and I'm sure people will have questions as I go along. The other thing I wanted to remind people is that

the methodological requirements are what reviewers are looking to when they're evaluating the research plan of the project.

"About theory of change: in development of materials, will the theory of change have to do with the way the materials change and develop, or is it more about how the materials will change the students?" That's actually a really good question. Certainly for me, I think it's more about that second, so it's really more about the underlying change in the learning of the students when I think about theory of change. So I would spend a lot of time thinking about how the materials will change the students under theory of change.

However, in this notion of the iterative development process, which I'm going to talk about now, you will definitely want to talk about how you think the materials might well change and develop over the course of the project.

"How many pages do you think should be devoted to significance versus methodological requirements?" You know, we do not specify page numbers, and that's intentional. I think that we fund projects that are quite different, that come from different disciplinary traditions, and we are often

funding projects where the degree of elaboration required for the significance section can be quite different. So, it can be relatively small or it can be quite large. I'm not going to break it apart for you. I do think that the majority of the application should be the significance and the methodological requirements. And personnel and resources, while critically important, are a smaller part of that full research narrative.

And then I have a question here that says, "For the U.S. education system, what types of prekindergarten can or does that include?" We don't actually specify what type of prekindergarten it is. I believe it starts at 3 years old within the National Center for Education Research. Within the National Center for Special Education Research, you can actually propose to develop interventions for infants and toddlers with disabilities as well. So we do fund a fair amount of research in preschool that occurs outside of the public pre-K system.

I have a couple of other questions and I'm going to just hold those for right now and I'm going to talk a little bit about the methodological requirements and I will come back to the questions that I have, the other question.

**Slide Twenty-three:**

So let's talk first about the sample. One of the questions I had was "what's an appropriate N?" And again, this is a question where you would need to describe what the appropriate N here is. We don't have a set answer because it really depends upon what you're developing. In the methodological or the research plan section, you need to spend time describing the samples and settings that will be used to assess the feasibility of implementation and the pilot data for assessing the promise of the intervention.

Typically, what you will see in a Goal 2 project is that the first year or two when you're really working closely with teachers and students to develop the content of the materials that you're developing, and you're trying to figure out feasibility and usability, you're working with a small group of teachers and students. You may have a group of students or a group of teachers that you're working with to develop those materials and then to look at questions of feasibility and usability. You're working with a different group of teachers who haven't developed the interventions to see if they can actually implement it in the way that you

intended, and then for the pilot data, again, you probably want to work with a different sample of teachers and students to assess the promise of the intervention.

Throughout Goal 2 studies, development studies, you are not expected to gather efficacy data. That is not the intent of a development project. The focus should really be on getting whatever you need to have in place so that you have a fully developed intervention at the end of a 3-year funding cycle. If you already have a fully developed intervention, then you should apply to Goal 3 and come in under efficacy so you can test the causal effects of that curriculum on student outcomes or that intervention.

We have another question here that says, "In the absence of similar projects and any related efficacy studies, how do the estimations of size and change occur?" I think that that's an argument you're going to have to build from your own prior knowledge. They don't have any good guidance for that. That's a tough one when you're starting out. I think it may be something that you can state straight out that you don't know, that this is new, it has never been done before. You think it's important and here are the reasons why, and you're going to develop an intervention to address

this problem that you've described.

**Slide Twenty-four:**

Okay, now this is another part of the application process where I know that my colleagues and I have many, many phone calls about what is this iterative development process. The idea here is that you need to provide the reviewers with sufficient information so that they understand what is going to be developed with this funding, how the development process is going to take place, and when development takes place. Is it going to happen in Year 1, Year 2, when? And then how are you planning to test whether the intervention or its components are operating as intended? I'm going to talk a little bit about each of these steps.

**Slide Twenty-five:**

So first, it's really important that the reviewers understand what components or features of the intervention have already been developed. You're presenting a picture to them about here's what this intervention is going to look like. And sometimes reviewers can think, oh, well, it's already done.

Clearly, if you're putting in for a development

project, it's not already done. So you need to be really clear in your application about here's what's done. Here's what remains to be done.

I think a table like this can often be helpful in appendix A or even in the narrative itself, which makes it clear what components are done and which remain to be developed.

**Slide Twenty-six through Twenty-eight:**

Then you also need to spend some time in the section where you define what "operating as intended" means. You know, we've left it relatively open again because the Request for Applications covers a wide range of topics: what operating as intended means is going to vary across different projects. So you need to spend some time explaining to your readers what you think operating as intended means for this particular intervention.

You also need to specify what data you plan to collect in order to determine how the intervention or the components are operating. So for example, if you're doing something that's on a computer that's technological, are you going to get computer log data? Are you going to get error

data?

If you're in a classroom, are you going to be gathering observational data that say that these components were done in the correct order and they took the appropriate amount of time? What is it going to look like? And it can really range as a function of what you're actually developing.

And then what you need to do is you need to map the data to be collected back onto your definition. So, how are you going to use those data to determine if the intervention operates as intended? Again, this is something where you want to go back to your theory of change and say there needs to be a relationship between what the intervention looks like, what kind of change in teacher behavior and student outcomes you are expecting to see and if you don't see it mapping on in the way you expect, then that might suggest that either the intervention is not doing what you think it's doing or it could suggest that your theory of change is incorrect. And where you can't specify ahead of time what the right explanation is, you should make it clear to the reviewers that you can consider that, and you're planning to consider that.

Again, please specify what data you're planning to collect to determine how the intervention is operating. This would typically involve the collection of some form of process data, so you're going to be observing a teacher implementing a lesson or a student interacting with a computer software program. You're going to perhaps have feedback from users when you're trying to figure out whether it's feasible and useable, so a teacher will deliver the intervention and then you'll talk with him or her the day after or the week after and say okay, how did it go? And teachers are generally very willing to provide you with information about what things went smoothly and what things were difficult. Students can also be part of this process.

Many applicants don't have any trouble describing what data they're going to collect. But where applicants are often not clear is specifying how the data are going to be coded. So, a reviewer is going to want to know not only what are you going to collect, but what are you going to do with it once you have it, right? So please make sure to include a description of how you plan to analyze that data, how you're going to code them and then how you're going to use them to make changes to the intervention, if required, given what the

data say.

I have just a little note here on the use of experiments. Depending upon what kind of research you're proposing to do or intervention you're proposing to develop, you might want to propose doing some small-scale experiments to determine if one way of configuring the intervention is more effective or leads to better results than another way of configuring the intervention.

That is appropriate so long as it's clear that the reason you are doing this is to compare pieces of the intervention against one another, right? -- in order to make a choice about which component or which aspect of the intervention you want to put into the final version.

We see this most frequently in cognition proposals or education technology proposals. But it is not a requirement in either of those, and it is also possible for you to use these types of experimental comparisons across other topics.

I have a question here that says, "Can you provide suggestions related to the coding of process data? What would an acceptable plan look like?"

This is one of those questions I'm always

wondering what the right answer is. I don't know that there's a single answer. But let's take, for example, that you're doing some observational coding, right. So let's think about the kind of data you could get. If you're going to observe a teacher implementing an intervention, you could propose to gather a simple checklist, right? You could propose to say, does the teacher introduce the word? Does the teacher spell the word out? Does the teacher provide the definition? Does the teacher provide opportunities for students to use the word in a sentence? So you could do something really, really simple like that. And then you could propose to quantify that and say that the teacher implemented X proportion of the components successfully and you could look across that you had a couple of teachers doing it. They all struggled with this particular component. So you could talk about that.

On the other hand, maybe you want to do something that is more qualitative -- that involves doing something like a running record or a fieldwork entry where you're actually describing in a narrative fashion what's actually happening in the classroom. If you're going to propose to do something like that or maybe you want to do some sort of discourse capturing, you're going to do videotape or

audiotape, that is certainly possible and maybe highly appropriate, but you need to explain how you're going to determine the codes. Are they going to be *a priori* codes that you're going to use to code that information? Are they going to be codes that emerge from the data as you're looking at them? And how can you then and how are you going to use those data to reflect back on revisions of the intervention itself? I hope that addressed your question. I think there are many ways that one can do it. What's really important is that you make it clear exactly what you intend to do with those data. And don't leave it up to the reviewers' imaginations, because they're probably going to imagine something you didn't intend.

I have a practical question here that says, "Why should the table be in appendix A?" The table doesn't need to be in appendix A, but if you look in the request for application, appendix A is described as the place where tables and figures can be placed that support the research narrative itself. So this is meant to give you some additional space. You have 25 single-spaced pages for the research narrative and you are welcome to put tables in there. However, appendix A is another place that you can put

tables, and you refer the reviewers to the appendix. The appendix is part of the application, and reviewers are expected to read both of the appendices as well as the research narrative.

We have a question here, "Should qualitative data normally be quantified in some way through coding versus identifying and summarizing themes?"

I think that it may depend upon what you want to do with the qualitative data. I think that when you're thinking about, say, for example, relating feasibility of implementation to student outcomes, you may want to do some form of quantification in order to relate those two components.

If you're using it early on, where you're trying to get descriptive information about how it's working, I think you could probably only have themes. But again, you need to really provide a compelling argument as to why you are making the methodological decisions that you're making in order to support the development effort.

I have a question here that says, "If the intervention requires a teacher with specific training, for example, a bachelor's degree in mathematics that the district

does not have, can the grant pay the salary of an instructor to supplement teacher content expertise?" Absolutely. However, what a reviewer may well ask is how is this going to then generalize your scale-up in the future? So, one of the concerns might be if it's really rare to have teachers with the expertise that is required in order to develop this intervention, what are the implications for its being used in the future in multiple settings?

I have another question here: "Is appendix A part of the 25 pages?" No, appendix A is an additional, up to 15 pages that you can use.

Okay, I have a question about the pilot study and I'm going to hold on that one because we're not there yet.

**Slide Twenty-nine:**

All right. I talked about that. I have here an example of a possible study. Imagine you're doing teacher professional development and you're going to be developing video clips that are going to become part of this teacher professional development.

So here's one particular process, one example of a process one might propose. You could say that during the

first year you're going to select possible examples from videotapes of master teachers implementing strategies. Let's say it's about reading instruction. You're going to implement those strategies. You're going to pick those videotapes.

Then, perhaps it will be you, perhaps an expert master teacher: you're going to write the accompanying text for the clips so that there will be not only a videotape, but the professional teachers will see that there will also be a written text that accompanies the videotape that provides some structure for the teachers who are learning, about what to attend to.

Then, you would propose to have teachers who were similar to the target audience and who would be participating in this form of PD review these prototype clips and text. So again, notice here the idea is you don't develop everything and then get feedback. You develop a few things and then you get feedback from the teachers.

Are the clips sensible? Does the text map well onto the text? And you probably would want to develop some sort of a semi-structured interview for teacher reaction in key areas -- things that you are particularly concerned about, given your understanding of how this is going to be

used. This is the part where you're trying to elaborate whether it's operating as intended.

So, ask teachers to think about the clarity of the main message. Ask them to think about the length of the clip in the text. Is it too long? Is it too short? How is the text organized, and how does it relate to the clip? So, you need to think about what that interview should look like. How do you frame that so that you can get the information you need in order to make appropriate revisions to your new intervention?

You could then also propose to do a content analysis of the interview data to identify what needs refining. That can be a purely qualitative sample, qualitative process, but you need to explain how you would do it.

Then this iterative process: you continue to follow this model until you get consistent responses for identifying the main message and maybe a perception of user-friendly clips and text.

You can identify and you should identify *a priori* what are the critical pieces that you need to have agreement on before you can say that the clips are at a place where

they're ready to move into the fully developed phase.

I have a question here that says, "Do these kinds of structured interviews need to be developed ahead of time and included in the application?"

I don't think that they're required to be fully developed before the application. I think it's really helpful if you can provide some examples of the types of questions that you're planning to ask so that reviewers have a sense that you're going in the right direction, because again, you don't want the reviewers to think that you're not already thinking about these questions.

All right, I'm going to continue on here.

**Slides Thirty and Thirty-one:**

We have another example here, another thing around special development. So maybe one of your goals here is to understand what are the factors that facilitate teacher use of hypermedia resources in the context of coaching.

So again, you guys will see a similar process here, right, where you're going to gather data on the factors that facilitate teacher use. So this is sort of moving to the next step, right? You've got the video clips, and the next

set of information you're going to need is how do teachers use these clips during PD.

So, once you have the clips ready to go, then you're going to want to do some sort of a small field test. It can be you're working with a couple of teachers in the context of this professional development program, and what you want to look at is how these video clips or how these hypermedia are actually being used.

This is where you're starting to look at this question of feasibility and usability. So, you'll track the teachers' use of the hypermedia with the software: what parts of the video clip are they attending to? How long are they looking at each page? How often do they go back and revisit certain pages?

You may do something like a think-aloud, where you're interviewing as teachers are using this material to identify what's helping or impeding their ability to reference a hypermedia resource.

So, the idea is that there are these steps that one can follow and what we really want to encourage applicants to think through are what are all the steps that you need to go through in order to have an intervention that

is fully developed at the very end.

I have a question here: "When you have a complex intervention with a development of multiple components, can you begin the iterative process with one component simultaneously with the development of other components?" Absolutely.

I think that in fact that's probably the only way that you can do it, given that you have a 3-year time period. You will need to think about whether simultaneous development of components will have implications for how these things will map together -- if there's a scope and sequence. So, if these things have any components that are contingent upon one another, you'll have to think through the implications for that in terms of doing simultaneous development.

I'm going to go ahead and walk through the rest of the slides and then I have some more general questions that are starting to come through here that require understanding the whole process.

**Slide Thirty-two:**

So, one of the questions is iterations, right, how many iterations should one propose to do. I think that as you see

here on this slide, the answer is that it really depends. It's going to depend on how complex the intervention is you're proposing to develop. It's going to depend upon the complexity of the implementation itself. It may also depend upon whether this is a revision of an intervention that you've already developed in part or whether you're starting out without a lot of prior information about how this works. So, what you need to do again when you're putting your application in is provide a justification or an explanation for the number of iterations that you are proposing to carry out over the course of the 3-year award.

We have a question here that says, "Do professional development projects need to look at student learning or only at impact on instruction?" I believe that the requirements state that professional development projects need to include student outcome data, so I would refer you back to the Request for Applications, but I am pretty sure they've got to include something about the student learning as well.

So, we talked about the sample in terms of the methodological requirement and the research plan. We've talked about describing the sample. We talked about the

iterative development process.

**Slide Thirty-three:**

You also need to describe how you will determine the feasibility of intervention. I talked a little bit about that already in the examples here, and I think part of this iterative development process can bleed into feasibility and that you're going to be gathering information that's relevant sometimes in both contexts, particularly as you're moving toward the end of that iterative process.

The goal here is to demonstrate that the intervention can be implemented with fidelity. For those of you out there who are professors, who have the benefit of many graduate students working with us, we sometimes can develop interventions that are wonderful but are actually quite complex to actually implement in the classroom, and we need to make sure or you need to explain how you're going to make sure that the intervention that you've developed in your laboratory is, in fact, going to be something that teachers will be able to implement, given the complexity of the classroom situation within which it's going to be implemented. So you have your intervention, but that's only

one of many things that teachers are going to be expected to do in the classroom.

You can gather data that show the teachers have the time, have the willingness, have the support necessary to implement this intervention in the way that you intended it for it to be implemented. Just as a little caveat here: I've laid out this model where there's this researcher who is working separate from classrooms and teachers. I hope that for most of you on the phone, this is, in fact, not the way that you're proposing; that you're, in fact, working together with teachers and educators and the appropriate audience from the very beginning. I think that will help ensure that you are developing interventions that can be implemented with fidelity. So, describe how you're going to test that, okay?

One of the other important components of this is that you want to make sure that your feasibility testing is going to occur in settings that represent the type of settings for which the intervention is intended. Maybe you're at an institution where you have a lab school and you can do some early testing of the intervention in the lab school setting, but if your goal is for it to be used in a wide variety of different settings, it makes sense for you to

propose to test that in settings that represent that range.

And then I say here, presumably for struggling adolescent and adult learners, this could be a non-K-12 kind of venue like a community-based organization. Yes, that is correct. There are particular requirements that vary. So for example, in NCSEER, there is a program on transition services for students who are moving out of the school system and clearly, the settings that would be appropriate there will include community organizations that could serve as bridges. Similarly, if you're working with a struggling adult population, it may well be occurring in a community setting.

But you need to be clear and make it clear to the reviewers that this is something that you are attending to.

**Slide Thirty-four:**

In the final year or maybe the final semester of the project, there is also an expectation under development and innovation that you will collect pilot data where you are trying to establish the promise of the intervention. How is the purpose of the pilot study different from all the other data that you've collected here? The goal here is that this is a test of the fully developed intervention. So the idea here is that

you're pretty confident that what you're testing now is pretty close to the final product, and what you want to do now is gather some information that will support your moving into an efficacy study.

So, what you are trying to demonstrate is that performance on outcome measures is going in the right direction. If you're doing a social and behavioral intervention and your goal is to reduce aggressive behavior, you want to show that the kids who are exposed to the intervention show a reduction in aggressive behavior. If you're trying to improve academic achievement, you want to make sure that you see growth over the time of the intervention and that these kids are not showing a leveling or a decrease in learning over their exposure to the intervention.

You also want to think about how you can capture the degree to which implementation of the intervention is associated with changes in activities and behaviors that are consistent with the theory of change. So, if you're looking at a behavioral study where you're trying to reduce behaviors and you have particular tasks that you ask the kids to do -- maybe they have to sit down and they have to complete a

worksheet -- you want to gather data to make sure that those worksheets are, in fact, being distributed and that kids are filling them out and that then filling them out is leading to -- is related to, I should say, because you don't have the sort of control group here, but that's it's related to the reduction in behavior. You need to think about both of those pieces.

I'm just going to say this here. It says it in the RFA, but the research in that final project is not intended to be an efficacy study. At the very end of Goal 2, you should have a fully developed intervention. You should have data that demonstrate that teachers are the intended users and can, in fact, use the intervention as you intended and that you have some preliminary data that indicate the students exposed to the intervention are moving in the direction that you intended for them to move in.

I have here a question, "Do you need to include control groups in the design or can you just prove gains using experimental groups?" I don't know that you can prove gains, but you can certainly demonstrate gains. You can show that kids are going in the right direction, so there's not a requirement for an experimental study in the context of a

pilot study for Goal 2.

I have a question here that says, "Should the study be early in the third year so that we can use findings to apply for an efficacy study?" I think you can certainly propose to do that, but it will really depend upon your convincing the reviewers that you will have an intervention ready to be tested at that time. So I think certainly it's important for you, if you're planning to propose an efficacy study, to have that information available.

Did I just say no control group is required in the pilot study? I did, in fact, say that. All right.

Okay, I'm going to continue on. And keep sending the questions.

**Slide Thirty-five:**

Okay, the last component that you must specify in the research plan and methodological requirement section of your research narrative is the measures. I think this is really important. Sometimes folks will just list out: they'll say we're going to use questions, we're going to use an interview, we're going to do some observational coding, but they don't provide adequate details in terms of what are the

coding criteria, what's the observational sheet going to look like, what are the questions you're going to ask. And I know I had a question about this earlier. To the degree that you can specify what techniques you're going to use for collecting data and what kinds of questions you intend to ask, I think it's better for the reviewers.

A lot of that information can actually go into appendix B, which is our other appendix where you can put sample curriculum materials or some sample measures, if you're using researcher-developed measures or questionnaires. That information can be included in appendix B.

"So, if you have a multi-year intervention, does the pilot study have to be done in the third year?" You know, that's actually an interesting question. You only have 3 years to develop the intervention, and if the intervention is a multi-year intervention, I'm not entirely sure what the right way to answer that question is. I think it really kind of depends upon how far along you are at the outset. If you have not identified the program officer for the topic area that you're planning to apply under, I'd recommend that you do that and go ahead and reach out to that person because they would be able to provide you with better guidance.

I have here, "If we choose a start-up date of March, which would make sense for tests prior to the beginning of the school year? The third year will be incomplete and will not constitute a good intervention." That is true and that is something that you are going to need to take into consideration. You can ask for only three years' worth of funding and you will need to think long and hard about how the duration of the intervention is going to affect both the design of the development process and the types of pilot data that you're going to be able to collect.

You cannot put in a proposal for 3.5 or 4 years. You can only request up to 3 years of funding for a development study. And I just want to say that not everyone is proposing to develop interventions that are a full year in length, and so for individuals who are developing shorter curricula or intervention pieces, then the 3-year time period has a different set of implications for you as opposed to developing a full year curriculum.

So here's the question -- sort of a follow-on. You meant to ask whether a pilot could take place in the second year, but collecting data through the third year. I think that if you believe you have sufficient time to do the

intervention work, you could certainly propose to do that, so you get the development work done. So propose what makes sense, given what you are proposing to do.

Again, I just want to remind everyone that our program staff here can really help you think through some of these detailed questions that are specific to your own projects and can help you brainstorm about ways to respond to potential questions or concerns that would be read by reviewers.

There's a question here, "Do we put in a start date of funding so it could overlap with school years?" It's really up to you to make that decision. For Fiscal 2010 funding, if you put in for June 25th, you can request a start date beginning as early as March 1st of 2010, sorry, I'm forgetting what year I'm in here, 2010, all the way through September 1 of 2010. If you plan to apply for the October deadline, the earliest possible start date you can request is July 1 of 2010, but the last date continues to be September 1, 2010. Your institution may have particular requirements or expectations about what those dates will be.

We have a request here that says, "Can you apply for a no-cost extension, this is assuming you get funded?"

Certainly, the Department permits that. You could certainly apply for a no-cost extension, but you do not want to write an application where what you are doing is proposing to apply for a no-cost extension prior to having done the work. So I would write a proposal that could be reasonably completed during the 3 years or however many years you're asking for funding.

All right, I'm going to press on here, but I will certainly come back and answer more questions.

**Slide Thirty-six:**

Okay, so talk about the two big sections. I talked about significance and I talked about methodological requirements. While I have said here that those two sections are really important, that does not mean that you should ignore the personnel and resources section. These two sections are also required, and if they are not included, you run the risk that your application will be sent back to you without being reviewed. So make sure that you include a section that describes the personnel who will be on the project.

When you're thinking about who is going to be on your team, I will tell you that the vast majority of work

that we fund, particularly under Goal 2, is very much team-driven. You need to have individuals on the team who have the relevant content expertise. So if you're developing some sort of a reading curriculum, make sure you have a reading expert on the team and someone who has appropriate reading expertise. If you're doing a math curriculum, similarly; or if you're doing a science curriculum, similarly. So make sure you have a person on the team who can help you develop the content component.

You also need to make sure that you have methodological expertise that is required for conducting this study. So the question earlier about can you do a qualitative study where, say, you're, gathering some fieldwork and you're doing that to get information that would feed back into the iterative development process, if you're going to do that, make sure you have someone on the team who has appropriate qualitative expertise. Similarly, if you're proposing to collect quantitative data, you're going to take observational sheets and quantify those, create percentages, and if you're going to plan to correlate that with teacher behavior maybe, or with student outcomes, please make sure you have an appropriate individual or set of individuals on the team who

can carry out those types of analyses.

And finally (I think it's true for everything, but particularly when you're developing interventions where you're trying to make sure that they're feasible for use with students and teachers or other education agencies -- whether that be sort of the jail context that was referred to earlier or the community context that another individual asked about) -- make sure you have individuals on the team who have appropriate expertise with those agencies.

In the personnel section, you want to describe not only who the individuals are and what their areas of expertise are but you also want to describe what their role will be on the project: so, what do you expect that they will be doing and what percentage of effort of their time will they be devoting to this particular project?

**Slide Thirty-seven:**

And finally, you want to make sure you include a section focused on resources. Resources again are a critical piece of information, and this is where you need to describe what is the support that you have at your institution, at the research institution, the university, wherever you're coming

from: what kind of support do you have? Do you have offices? How are you going to store all these data you're going to collect? Do you have the support to copy and print materials that you're going to need for the curriculum? Do you have computer support?

**Slide Thirty-eight:**

And then you should also reference letters of agreement from schools and/or teachers that have agreed to participate in this development process. Those letters of agreement should be included in appendix A. There is an expectation that you do have a formal letter that says the schools understand or the teachers understand that they're going to be part of this project. Please do make sure to include those in appendix A. As I referred to earlier, appendix A also includes supporting tables and figures, as well as any responses to reviewer comments if this is a resubmission.

**Slide Thirty-nine:**

Finally, I'm going to talk about appendix B, and then I will answer several questions here.

In appendix B, as I stated before, you have the

option to include any examples of curriculum materials of your proposed scope and sequence of how you plan to measure fidelity, or any other observation tools that you might use to support the gathering of feasibility and implementation data.

All right, I have a question here that says, "Is the grant length 3 or 5 years?" For development -- and again, if you have not read the Request for Applications, you need to read that carefully -- for Goal 2 proposals, you may only ask for up to 3 years' worth of funding. In fact, the only grant where you can ask for 5 years of funding is Scale-Up Evaluation (Goal 4), and in order to come in for a scale-up you need to already have gathered or have efficacy data that would support you moving to a scale-up goal. And there are different lengths for each of the different goals in terms of the amount of time you can request.

There's a question here that says, "Are private research entities eligible to apply for funding?" The answer is yes. I believe the language in the RFA says that the only criterion is that individuals or institutions that apply need to demonstrate relevant research expertise, that they can carry out the proposed work.

I have a question here for education technology: "Is it usual to have a content person and a technology person who is not familiar with the content?" You know, I don't oversee the Education Technology program and it's a relatively new program, so I hate to generalize. I think it would make sense that you would have someone who has content knowledge and someone who has technology knowledge. And a content person may not know about technology and a technology person may not know about content. What you would need to do in describing the personnel is how the project director or the PI would coordinate that work so that the work of the content person and the technology person would be in line with each other.

I have a question, "Please repeat when is the earliest and latest startup for a June submission?" The earliest possible date would be March 1, 2010. The latest startup would be September 1st, 2010.

"For resubmission of an application, is it necessary to secure new letters of agreement from the school district, or is the original letter okay?" I realize that this is often a burden, but I would highly recommend that you contact the school district again and ask for a new letter.

Reviewers recognize and understand that leadership changes in school districts and they are often concerned or wary about letters that are a year and a half old, because they worry that those letters do not reflect the current status of leadership in the school.

"For the resources section, for a subcontract, what amount of detail is needed for a subcontract for a university or college that is performing a smaller portion of the work?"

I think that you should certainly spend an appropriate balance on your resources section. If they're only doing a small portion of the work, then you don't need to describe a huge amount of what they're doing. Also, for a subcontractor, you will be including a budget justification and a budget for them and you can certainly include additional information about the tasks that the subcontractor is performing in that budget justification. But do make sure that you mention them in the narrative resources section so that the reviewers are aware of your understanding of their role.

"Is there a page limit for appendix B?" Yes. It is 10 pages in length. I don't know when you downloaded your

Request for Applications, but if you have not been on the IES RFA page recently, there is a new document there that you need to download, and I want to encourage all of you to read it carefully prior to putting in your application through grants.gov. It is called the IES grants.gov Application Submission Guide, and that submission guide includes all of the page and formatting requirements as well as all of the information you need in terms of uploading appropriate information to appropriate spaces and places on the grants.gov form. So, if you go to the funding page, go to IES.ed.gov/funding: click on that page and you'll notice at the very top a line that says, "For Fiscal 2010 RFAs and submission guide, click here." If you click there, you'll get that information.

We have a question here. I think this must be someone who does technology work. "Can an application reference online materials for the reviewers to review? For example, sample video clips." You may put in those links for reviewers to review, but you must understand that the reviewers are not obligated to look at anything that is not included in the full application package itself. There is no guarantee that including an online link will ensure that the

reviewers see that material. So, if there are sample curricular materials or screen shots that you could include, I'd recommend that you do that.

"What information is needed from participating schools and organizations about their willingness to participate in letters of agreement?" I think that it will vary. There needs to be sufficient information in there so it's clear that you've talked with those folks and they understand the time commitment from the teachers, the space commitment from the school itself, and if there's any technological involvement, but it will really depend upon the work that you're proposing to do.

A question here, "Will all the questions and answers be posted for review?" It is my understanding that the full transcripts will go up. I'm not sure when exactly that will occur, because we're doing a lot of these webinars right now and everything has to be reviewed prior to going up. But it will be there.

"Are participants' stipends an acceptable expense? Is it an IES expectation?" The answer is yes and no. So yes, you may certainly provide stipends to support teachers if they are going to be working with you in

developing this material. It is not an expectation and it's not a requirement in the Request for Applications.

Another question: "Is the funding request flat across the 3 years, or can the budget request vary, lower in the first year and higher in the last two?" Absolutely. And in fact, we often expect to see budget requests that vary over time because the scope of work being completed in Year 1 will look quite different from the scope of work being completed in Years 2 and 3. So, you should ask for the funding that you require in order to complete the work that you propose in each of the years.

The next question is, "Where do CVs go?" If you've not downloaded the submission guide, all of the answers to these questions are in there, and I want to encourage you to look it. There is a section for biographical sketches that comes at the end, after sort of all the appendices. There's a general grant writing workshop -- I believe it's next Wednesday -- where I will go over each of these things in turn. But there was a place where you upload four-page CVs. They're only four pages for each CV, so you need to get shortened CVs from the participants.

I have a question here that says, "Do you know

whether institutional review boards (IRBs) generally want consents signed when piloting? Should this be addressed in proposals?" I think that you should consult with your IRBs in terms of what their rules are. I think that the rules vary across different agencies and it's really going to depend upon your institution. So talk with them about that.

"Are there specific aspects of fidelity that you're looking for?" Again, this is a question that I really can't answer because it really depends upon what your intervention is. Remember, we support work that goes all the way from looking at a basic instructional process that a teacher is following, through a full-year curriculum, through teacher professional development, through an intervention that's designed to be implemented at the systems level. So, the type of fidelity information or feasibility information that you're gathering is really going to depend upon this type of project that you're proposing to put forward.

Okay, I have a question about reviews. I'm going to wait on that.

Okay, there is no funding cap. I have a question here that says, "Isn't the funding cap for any one year \$500,000? Can you "save up" and ask for less in Years 1 and 2

and exceed the \$500,000 cap in Year 3?" Please note, I don't have my funding amounts here, but it is not a cap. We have a suggested range from \$150,000 to \$500,000 total costs, indirect, plus direct costs for Goal 2 studies, but that is just a range. If you require additional funds in a particular year, you simply need to provide a justification for the reason for that request and it will be considered.

Reviewers are not asked to review the budget amounts. That is something that comes back to our office, and what we do is if we believe that a request is not justified, we will be in touch with an applicant, if they're recommended for funding, to ask for additional information. I will encourage you to ask for an amount that is appropriate, given the scope of work that you do, so if you ask for \$500,000 each year, that does sometimes raise eyebrows. If you ask for three times that amount for each year, that will also raise eyebrows. So please try to do your best and figure out what you actually need in order to carry out the project.

Sorry, I hope I just answered this question, but it says, "Does the suggested \$150,000 to \$500,000 range include or not include indirect costs?" It does include indirect costs.

Again, I know there's a question about review out there and I will get to that.

**Slides Forty and Forty-one:**

I want to put in some additional considerations. If there are those of you on the phone who are considering coming in for a second development award and you have already received a development award from IES, and you need additional time to further develop or extend an intervention, you have an added set of requirements that the reviewers will look for. The first is that you need to justify the need for a second development award. Sometimes that can be really straight forward. So, if your ultimate goal is to develop a year-long chemistry curriculum and you were only able to develop the first three units of that with the original funding and you're seeking funding to support the development of the next three units, that's pretty straightforward.

It could also be something like the first development process uncovered problems with the original conceptualization of what the intervention would look like, and you weren't able to get as far as you had originally hoped. But you have good ideas about where to go next. You

can certainly do that as well. You are expected to describe what you learned from your other development efforts, so describe what you found, if you have any publications that came out of that work; please describe that. And whatever pilot data that you collected in your initial development efforts, that data should also be reported in this request for additional funds.

We also have here, "Describe any efficacy evaluations and data if available. So this is not a requirement, right?" This is really going to depend what you're proposing to do. But maybe what happened is that you developed an intervention, you then actually went forward and did an efficacy study, but the efficacy study suggested maybe you didn't get the kinds of strong effects you expected to see. So then what you'd want to do is draw on those data to provide a rationale for why you need to come back and do additional development work in order to make the intervention stronger.

Another thing to note: if you are proposing a second development award that is a new intervention (this is not related to the first intervention), but you are someone who has previously received IES funding to develop an

intervention, you should indicate what happened to that other work. So, one of the things that the reviewers are going to want to know is whether there was, if you will, good payoff - - good return for that initial investment. So, describe whether that first intervention has moved forward and it's being evaluated for efficacy. And again, describe those results if they are available.

You should also provide information that describes whether that previous intervention improves or shows promise for improving education outcomes. I talked about earlier that pilot or preliminary data would not lead directly into this intervention, but the idea here is you're providing the reviewers with additional information that you and your team are able to do this sort of work and that you've been successful in doing it in the past.

"Where should one describe the outcome of the other intervention?" I sort of answered that. Again, I think it really depends, right? I'm going to pause on that one because I think it just depends upon what the other intervention was and how it fits in with this new work. So again, please contact your program officer and they can provide you with some guidance about where the appropriate

place in the application would be, but do know that there is an expectation that you will discuss that work.

The review. Please note that when reviewers are reviewing these applications, they are evaluating the four criteria. So they're evaluating the significance of the project, the appropriateness of the research plan, the appropriateness and expertise of the personnel on the project, and the sufficiency of the resources that are available to support this work.

They will also look to make sure that the pilot data are not requiring the use of more than 30 percent of funds. The idea here is that the pilot data are truly pilot data. It's not an efficacy study. It should not be a huge study. There will again be attention to the methodological requirements, that we've gone through in perhaps excruciating detail. And finally, to restate: the pilot data are not intended to be a test of the efficacy of the intervention.

**Slide Forty-two:**

I had a question about the review process and I want to go over that at this time. The IES review process is that applications are assigned to two or three peer reviews. Those

applications are then scored using those four criteria that I just described to you. Applications are also given an overall quality score, and then there is a triage process, so only the most competitive proposals go forward to full panel review. We have standing review panels who serve multi-year terms, and each of them will present the applications that they were responsible for that went through the triage process. Then there will be a discussion about each application, and then all of the panel members in the room at the time will score that application.

It is the scores that are received after the full panel review that are then used for making funding recommendations here.

All right, I hope I answered the review question. Please let me know if I did not.

Sorry, there was a question before about the outcome of the other intervention: "What if it's unrelated or on another topic entirely?" I think that might be something you would want to discuss in the personnel section, right? This would be talking about the qualifications of the individuals on the team to actually carry out a successful development project.

I have another question: "If this is a new intervention, should we start with an exploration grant, then move to the development grant, and then on to the efficacy grant? I know it depends on what has already been done, but just starting out, should we work in this sequence?"

There's clearly a sequence there, as you've picked up. If you already know what the variables are that you're proposing or the components are that you're proposing to put into the intervention, and you have some previous data or some strong theoretical expectations that the components of the intervention that you're specifying are related to student outcome, then it may not be necessary for you to do a Goal 1.

If you look at the RFA, we talk about Goal 1 work as really more hypothesis generation. So you think you know what might be relevant, but you're not really sure. Maybe you've just noted differences in classrooms or students and you really want to figure out what those differences are. So again, it really just depends where you are.

"How do you determine what percentage is being used for collection of pilot data?" You know, in many ways it's our best guess; that, I think, would be the most fair

way to say this. But generally, we would look at the budgetary amount proposed in that final year, how the funds are actually being expended. Reviewers can look to see whether those funds are being directed toward the gathering and analysis of the pilot data.

I have a question: "Is the list of people who serve on the standing review panels publicly available information?" It is, and if that is information that you'd like, I can certainly send you a link, so my email will be at the end here. Please do email me and I will be glad to send you the link. It's on our website. It's just not really easy to describe how to get to.

"Is there a cutoff score for funding?" We do not have a cut score for funding. I will tell you that the general policy is to fund applications that are considered to be of outstanding or excellent quality, but there is not a single cut score that is predetermined in terms of making funding decisions or recommendations.

All right, let me just go through my last slides here and if we have other questions I will be happy to answer them.

**Slide Forty-three:**

Okay, for those of you who have not looked for the RFA yet, this is the website that I alluded to or I spoke of earlier. It's [ies.ed.gov/funding](http://ies.ed.gov/funding). For the funding page, again you get both the request for applications and the IES [grants.gov](http://grants.gov) application submission guide. I would recommend that you download them both and read them carefully. There's lots of information in there and there's lots of support, right, to help you go through that application submission process.

I assume that most everyone on the phone is actually already signed up for the Newsflash because that's generally how the word gets out about the webinar. If you are not, I would recommend that you do so. It's a great way for you to get notification when RFAs are released, when announcements of awards are made, when new webinars are coming up, so please do sign up for that.

**Slide Forty-four:**

And last but not least, I need to remind everyone what our deadlines are for the education and special education research competitions. There are two deadlines this year,

June 25th and October 1st. You will notice that I have also included a time. Applications must be received by grants.gov at 4:30 p.m., Washington, D.C. time. Please note that it is 4:30 p.m. on the clock on the grants.gov computer. You really don't want to wait until the very last day to upload your application. There's a high volume of applications, and if your application is received late -- if it's received 4:30 and 5 seconds p.m., it's late. And "received" means that the full uploading has occurred, so you can't start the upload process at 4:29 and think that it's going to be received in time.

I would highly recommend that everyone attempt to put in their application several days early. This allows you to go back into the system to review what was uploaded, to make sure that there's not been an oversight and that someone's CV wasn't uploaded, or you're not missing a budget justification. It just allows you to send forward your best possible application.

So, that's what I urge and encourage everyone to do. And I know the grants and contracts folks on the phone are going yes, yes.

All right, let me see. Some other questions. "How

much detail of the logic model theory of change should be included in the request?" Again, this is a question that's really going to depend upon what you're proposing to do. You certainly want to include enough detail so that a sophisticated reviewer, but not someone who is an expert in your field, can read and understand what you're proposing to do and how you believe that that these pieces all link together.

You're clearly limited by the 25 single-space page limit, so you want to make sure that you appropriately address all of the components of the application in that space limit.

"So, the 30% of the pilot funds refers to the year that the pilot is run and not the total amount?" No, I'm sorry: it's 30% of the total amount for the 3 years, not just for the third year.

"Is there a model Goal 2 proposal that we could see?" We don't have a single model Goal 2 proposal and there are many reasons for that. In part, it's because -- like I've been saying throughout -- depending upon the type of Goal 2 that you're proposing, what a good Goal 2 looks like is going to vary tremendously. You are certainly free to request to

see a copy of the proposal of a particular proposal. That will then be treated as a Freedom of Information Act request.

I will tell you that IES program staff can review drafts and provide you with feedback, and I believe that in many ways that may be a more effective way to get information that will help you develop a proposal that is competitive.

Okay, I'll try this again. "Is the 30% of the funds for the pilot the whole budget for the three years or 30% of the budget for the last year?" It is 30% of the budget for the three years of the project.

"Is the RFA the same for the June and October submission?" Yes, the Request for Applications will not change for June and October. However, what will change is the grants.gov application package. Now I've not focused on that because this webinar was really focused on Goal 2 requirements. However, if you are planning to apply in October, not in June, you do not want to use the forms that are up on the grants.gov website right now. You can certainly pull them down and use them so that you can get a sense of what they look like, but you cannot use those forms to apply for October 1. And if you do, it will cause you great problems and your proposal might be returned without review.

Application forms on grants.gov for the October deadline will be available in early August.

Another question: "Last year, a PDF file about the theory of change was provided, perhaps from the researcher who described the component of it. Can you post the info for that PDF file somewhere again?" I will look into that. I'm not entirely sure what you're referring to, but I will certainly talk with my colleagues and see what was made available.

"With the grants.gov overload problems due to stimulus money, will there be any last-minute surprise to use no submission assistants? The grants.gov is a definite. That's not changing, so don't worry about that.

"I work at a community college that does not do education research. My intervention idea has potential. I am assembling a research team to prepare the Goal 2 grant. Do you help align potential research centers (e.g., universities) with potential grant ideas?" We, in fact, do not do that just in part because of our role, but certainly we are happy to talk with you about your idea and provide you with some suggestions. But we do not provide any formal assistance in aligning researchers at different institutions.

Will there be webinars for the other goals, specifically Goal 5 measurements?" We actually did have a webinar for Goal 3 (efficacy) which was earlier this week, I think. I can't remember. We do not yet know what our other goals were. We've certainly talked about a Goal 5 measurement webinar, but I don't have any specific information about whether there will be one. But if you sign up for that Newsflash, if there is one, you will certainly hear about it right away.

"When will the October 1 application package be available?" It will be available in early August. I believe the date is August 3rd, but I don't have the Request for Applications right here in front of me. That information is in the Request for Applications. I believe it's right on the cover page. If you just pull up the RFA, it will tell you right there.

I have a question here of someone who was on the webinar last week. It says, "I asked last week what the advantages were in filing in June versus October. I should have asked the question differently: why are there two application dates?" There are two application dates in part for distribution of labor. We receive many, many, many

applications, and in order for us to make sure that we have enough reviewers and enough staff, we provide two opportunities to submit.

"Thank you for the information about the theory of change file. I will try to see what I can find out. When will we be notified?" If you are recommended for an award, you will be notified no later than the first possible start date, okay? So that would mean if you applied to the June 25th deadline, and you were recommended for an award, you would hear no later than March 1st. You know, we don't have specific dates by which we let people know because there are a lot of things that happen, other than the March 1st date. It's usually earlier than that, but there is a range in terms of when it occurs, because there are many things on our end that we have to do. So I know that's perhaps not the answer that people wanted to hear.

"Is there any stimulus money in this competition?" The answer is no.

"Any possibility of increased awards due to stimulus money?" And since the answer to the first was no, the answer to the second is also no.

"On resubmission, may we request the original

reviewers for the resubmission?" You may not make that request. The staff responsible for the review process does its best to assign resubmissions to the same reviewers. However, there is no guarantee that the same reviewers are going to be on the panel. I mean there are standing panels and they do continue from review cycle to review cycle, but not all of the reviewers are on the same review cycle. So, to the degree that we can, we certainly do assign resubmissions to the same reviewers who reviewed them originally.

"To the best of my knowledge, will there be similar RFAs next year?" Certainly, to the best of my knowledge, but we don't have our new Director yet. Our Director has been nominated, but not confirmed. And so I would be truly remiss if I were to make any proclamations about what would be happening for Fiscal 2011. I just don't know.

"Which of the two due dates has the greater number of applications percentagewise?" I'm not entirely sure what that question is. Generally, we see more applications in October because what happens is that people have many intentions of applying on June 25 and then for whatever reason they'll miss that deadline and they will apply in

October.

In terms of percentages of funding, if that was the question, the percentages of funding are actually quite similar across the two time periods.

**Slide Forty-five:**

I'm pausing because I don't see any other questions. I'm going to put my email address up here and I want to encourage anyone who has questions to please feel free to email me. I will do my best to get back to you as soon as I can with answers. Or I will forward your email to the appropriate staff member who can help you.

I have here, "I see that there isn't time to get reviewer comments on the June proposal in time to revise and resubmit for October. Do you recommend submitting the same or very similar proposals for both June and October? No, and in fact, you are prohibited from submitting the same application to the June and October deadline. This is one competition. I know it's confusing because we have two deadlines, but this is the Fiscal 2010 Request for Applications, whether you submit in June or October. You may submit only one proposal to the June deadline or the October deadline if they are the

same. You can certainly put in more than one proposal, but they need to be different. Okay? I hope that was clear.

"Please elaborate on what the term "authentic educational delivery settings" means? You need to provide an explanation if you're working in a setting that is somewhat unexpected as to -- you know, authentic is sort of a funny word and I'm not quite sure how to -- I don't have a good answer to that question! I think the idea is that we want to support research that has the likelihood to be used in a wide range of settings, particularly in the public education setting, the populations that the U.S. Department of Education serves.

I think if you're wondering what that might be, I'd recommend you go to the ed.gov website and get a sense of the kinds of settings where the Department of Education provides support.

"How many applications are submitted per funding period?" You know, the numbers vary, but there are hundreds, in the hundreds. And those numbers have been increasing. Just so you know, I've been here since 2002 and every year those numbers have increased. I don't have the numbers off the top of my head. But I'm trying to think where they might be

available. If you want to email me, I can see if there's a document that describes those for you.

"Is the criterion for expertise (e.g., content) methodological, or history of scholarship alone, or scholarship plus external funding?" I think in part that the answer to that question will depend upon what the role of the person is on the project. So, if the person who is developing content expertise is someone who has a strong theoretical foundation, you may find that they have a well-elaborated publication record but don't have a strong history of external funding. I think there's going to be a balance. I do believe that it is important that the person named as principal investigator is someone who has a demonstrated record of managing external grants. These are large grants, and clearly one of the criteria that reviewers are looking at is whether the named PI has expertise in managing grants of this size.

We'll go back to the date question. "What is the range for project start dates for October submissions?" July 1st to September 1st.

"Can a grant application go in from a corporation using researchers from a university, but not have the funds

go to a university?" Absolutely. And this is really something that a corporation and the university would need to work out. We don't have requirements about who the primary agency is. What you will need to demonstrate, however, is that whoever that prime agency is that they -- the person, the personnel -- have requisite expertise in managing research grants. That needs to be part of your budget justification.

I'm pausing to see if anyone is typing really quickly with additional questions.

It's looking kind of quiet over there. I don't know if it's quiet.

Well, I hope that I answered everybody's questions and I didn't forget anyone. I have folks here helping me make sure I keep tabs on all the questions that come through.

I have one more question here. It says, "Is it required to submit letters of support from consultants?" That is not stated as a requirement. I think it is often helpful to do that because then you have an opportunity for the consultants to explain their understanding of their role. This is particularly important if the consultant has a relatively important role in the project. So, it's not a

requirement but it's certainly something I would consider doing.

A question here says, "Is there a yearly review process for the grants? And if so, how do we handle departure from our initial theory of change that arises from the iterative design process that requires we substantially change our design?" I'm sorry, I did see that question earlier and I didn't go back to it.

If you are funded, you then move into a whole different category. That means that you're treated as a grantee, and yes, there is an annual report that is due from grantees, and if your theory of change changes over time, you certainly would have an opportunity to discuss that with your assigned program officer. However, the review process does not have implications typically for the funding of your project. So, your project will continue, and clearly the way science advances is that knowledge changes over time and we certainly reflect it, expect that science would support. So that answers that question.

"Is it possible that a given project might be split between more than one goal, Goal 1 and Goal 2 in particular?" Of course. It's certainly possible that a

project can be split into more than one goal. However, what you need to think about in terms of putting your proposal or your multiple applications together, is whether you need to complete Goal 1 before Goal 2, because that will have implications in terms of which applications you put in at which time. Just to be clear: you put in only one application for one goal. So you can't put in an application that includes both Goal 1 and Goal 2. You can only put in an application that meets the requirements of Goal 1 or a separate proposal for Goal 2.

“What is the typical time line expectation within IES for full-cycle product development? I ask because the understood time to market in the private sector for educational products is 10 years.” You know, I don't know that we actually have an explicit statement of that cycle, and I don't know the market side of this well enough, but if you look at exploration, development, and efficacy studies, you will have it 4 years, plus 3 years, plus 4 years, which looks to be pretty close to that time line that you're laying there. And again, like I said, some projects are complicated enough that you would need more than one development goal.

All right, I want to thank everyone for their

time here and again, please don't hesitate to send me an email if you have other questions. I hope this has been useful for you, and we are certainly looking forward to receiving your applications.

Have a great afternoon and a great weekend. Take care.

(Whereupon, the webinar was concluded.)