IES Basic Overview of Research Grants

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Transcript

Transcription is provided in order to facilitate communication accessibility and may not be a totally verbatim record of the proceedings.

(Slide 1)

BUCKLEY: Welcome to the IES Basic Overview of Research Process Webinar. My name is Jackie Buckley and I am a program officer at the National Center for Special Education Research, one of the two research centers at IES.

ALBRO: And I am Liz Albro, the Commissioner of Education Research at IES. In the webinar today, we will provide an overview of IES, we will discuss current fiscal year 2020 funding opportunities, and talk briefly about our grant application and peer review process.

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IES is the independent research arm of the US Department of Education, authorized by the Education Sciences Reform Act in 2002. We are nonpartisan, we are charged with providing rigorous evidence to inform education practice and policy, and sharing this information with educators, parents, policy makers, researchers, and the public. The overall mission of IES is to describe the condition and progress of education in the United States, to identify education practices that improve academic achievement and access to education opportunities, and evaluate the effectiveness of federal and other education programs.

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This graphic represents the organizational structure of IES. We are led by a Director who receives advice and consultation from the National Board for Education Sciences. The Board consists of fifteen voting members who are appointed by the President and confirmed by the Senate. Our Science Office oversees the scientific peer review processes for IES grant applications and IES peer reviewed reports.

We also have four centers within IES. The National Center for Education Statistics is the primary federal entity for collecting and analyzing data related to education. Within NCES, you may be familiar with the National Assessment of Educational Progress, or the NAEP assessment. Within NCES, you will also find many large, national longitudinal data sets, including, for example, the early childhood longitudinal study.

The National Center for Education Evaluation and Regional Assistance conducts unbiased, large-scale evaluations of education programs supported by federal funds, provides technical assistance, and supports the development and use of research and evaluation throughout the United States. In NCEE, you will find the What Works Clearinghouse, WWC, and the Regional Educational Laboratories, or RELs.

The two centers that award grants are highlighted here in blue. The National Center for Education Research, referred to as NCER, and the National Center for Special Education Research, or NCSER. The grant opportunities that we will be talking about today are managed through these two research centers. You will also notice here that the research centers are separate from the Science Office and Standards and Review staff, meaning that we, the program officers, are not involved in the peer review process. This allows us to work closely with you,

provide technical assistance to you on your applications. We will discuss more about that later in this webinar.

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This bridge graphic represents how we think about the infrastructure at IES, to support our overall mission. We intend for our work to form a bridge from research to practice and back again, recognizing the critical linkage and interplay between research and practice. So how do we do this?

We provide data that describes how well the United States is educating its students. We conduct surveys and sponsor research projects to understand where education needs improvement, and how these improvements might be made. We fund development, and rigorous testing of new approaches for improving education outcomes for all students. We conduct large-scale evaluations of federal education programs and policies. We provide resources to increase use of data and research in education decision making, and we support advancements of statistics and research through specialized training and development of methods and measures.

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BUCKLEY: Why would you apply to IES? You would apply to IES if you are interested in working in education settings, you are interested in improving student education outcomes, you are committed to sharing your research findings with education practitioners.

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What makes us different from other funding programs within the Department of Education? Grant funds are used to cover research, not program support or service provision. A good application is a good application. We don't have priorities or competitive preferences that result in extra points for applicants, and reviewers have flexibility to assign points based upon overall scientific merit. We don't ask reviewers to use a rubric as they score.

For example, other programs may assign a maximum number of points that you can obtain for your significance section. We allow reviewers flexibility to weight each section as they see fit, on determining the overall scientific merit of your application. IES is unique, because it supports rigorous research at all stages of the project, including basic research, iterative research to inform research and development of interventions and measures, pilot studies, and larger studies to determine efficacy of interventions.

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How does IES compare to other agencies? Similar to other federal funding agencies, IES supports rigorous research at all stages, including basic research, iterative research to inform research and development of new interventions or refine existing interventions, pilot studies, and larger rigorous studies to determine efficacy or effectiveness of interventions, programs, policies, or practices.

This chart lists the three major federal funders of education research: IES, the National Science Foundation, and the National Institutes of Health. IES and NIH are similar in that we have independent scientific review offices that are separate from the program offices. At NSF, the program officers manage the review process, so this limits the amount of technical assistance that they can give applicants, since they are directly involved in the review process. IES is as competitive or even more competitive than the other federal funding agencies.

In terms of the types of things we fund, there is some overlap and certainly complementary research happening among agencies, but there are key differences. For example, NSF is more STEM focused than IES, though we both fund science, technology, engineering, and math grants. NIH, specifically the National Institute of Child Health and Human Development, and the National Institute of Mental Health, support more foundational research, such as brain related research and genetics research that we don't fund at IES. Results from this work, however, could certainly inform the work that we do at IES, and could guide researchers to develop a grant to IES.

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So that was a quick overview of IES, and now we will turn to talking about our current funding opportunities.

Let's move into the nuts and bolts of getting started with an IES application. First you need to identify which competitions are open for the fiscal year 2020.

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To identify open funding opportunities, we have a suggested set of steps to follow. If you aren't already signed up, you should sign up for the IES Newsflash. The Newsflash is an email-based alert service designed to inform you about all new content posted to the IES website, including new funding opportunities when they become available.

All of our funding opportunities are announced in The Federal Register. The Federal Register is the official journal of the federal government of the United States that contains government agency rules, proposed rules, and public notices, including agency funding announcements. And IES maintains a funding opportunities page on the IES website. Once you are on the IES funding page, navigate to the Requests for Applications page and review current requests for applications, which is our notice that grant funding is available. Most importantly of all, but only after you have read the relevant RFAs, contact the relevant Program Officers for the topic or topics of interest in the relevant Center.

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As you are reading through the RFAs, make sure you review the current list of research topics, and any methodological requirements. If you still need help narrowing down your list of possible topics, or RFAs, it can often help to review the abstracts of previously funded projects.

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IES is holding eight separate research and training competitions in FY 2020. We are going to describe the focus of each competition at a high level in the remainder of this presentation.

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ALBRO: So why should you read the RFAs carefully? First, the RFA is your guide to preparing high quality applications. We provide a great amount of detail in our RFAs about the requirements you must meet, as well as recommendations for how to write a high quality application. Second, reviewers use RFAs to evaluate your application for its scientific merit. RFAs have sections to walk you through what you need to know and include in your application. The sections include overview and general requirements, which includes a summary of changes to the RFA from the previous competition, topics, project type requirements and recommendations, appendices, and other narrative content, competition regulations and review criteria, compliance and responsiveness checklists.

In fiscal 2020, IES has developed a separate submission guide which contains important information about submission procedures, and IES-specific guidance and recommendations to help you ensure your application is complete and received on time without errors through grants.gov.

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Our primary grant programs are CFDA numbers 84.305A and 84.324A, our Education Research Grants and our Special Education Research Grants. We recommend that all applicants be familiar with either 305A or 324A, even if you don't intend to apply under that competition. With the A RFA's, you will need to apply under one topic and one project type combination. Over the next few minutes, we will provide a high level summary of the topics and project types being completed in fiscal year 2020.

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The Education Research Grants program has eleven standing topics, and Special Education Research Grants program has eleven standing topics, some of which mirror each other. You must select one that identifies your field of research. In addition, NCSER is competing special topics in fiscal 2020. The special topics are intended to encourage research in understudied areas that appear promising for improving student education outcomes, and that are of interest to policymakers and practitioners.

BUCKLEY: So NCSER this year is competing three special topics: Career and Technical Education for Students with Disabilities, English Learners with Disabilities, and Systems Involved Students with Disabilities.

ALBRO: Certain topics may have special requirements. For instance, the grade range varies

by topic in a few instances. In addition, there are descriptions of needed research under each topic.

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IES encourages focused research along a continuum of research development and evaluation activities necessary for building a scientific research enterprise. For all applications, in addition to identifying one research topic, you must also identify your project type. The four project types being competed in fiscal 2020, which are the same across the research centers, are: Exploration, Development and Innovation, Initial Efficacy and Follow-Up, and Measurement.

For those of you who are familiar with the IES project types, you will notice that IES is not accepting projects to carry out replication studies under the A RFAs. Rather, applicants interested in carrying out a replication study should consult the Research Grants Focused on Systematic Replications program, discussed later in this webinar, for funding for replication studies of IES-identified reading and math interventions.

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Exploration supports projects that identify relationships between individual-, educator-, school-, and policy-level characteristics, and education outcomes and factors that may influence or guide those relationships. Findings from exploration projects point out potentially fruitful areas for further attention from researchers, policymakers, and practitioners, rather than providing strong evidence for adopting specific interventions or assessment tools. As this slide shows, a variety of methodological approaches may be used.

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Development and innovation supports the development and pilot testing of new or modified education interventions that are intended to produce beneficial impacts on learner outcomes. A development and innovation project will result in a fully developed intervention, evidence of the intervention's theory of change, and data that speaks to the intervention's feasibility, fidelity of implementation, and promise for improving learner outcomes.

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BUCKLEY: Initial efficacy and follow-up supports initial efficacy studies of education interventions, and longer-term follow-up studies of rigorously evaluated interventions. Initial efficacy projects test interventions that have not been rigorously evaluated previously to examine the intervention's beneficial impact on education outcomes in comparison to alternative practice, program, or policy. Follow-up projects test the longer-term impact of an intervention that has been shown to have beneficial impacts on education outcomes in a previous or an ongoing evaluation study. Initial efficacy and follow-up projects should provide practical information about the benefits and costs of specific interventions to inform the intervention's theory of change, its implementation, its usefulness for education personnel, and future research.

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Measurement supports the development and validation of new assessments, or refinement in validation of existing assessments for specific purposes, contexts, and populations. A measurement project will result in a valid assessment that can be used by education personnel or researchers to measure learner outcomes for specific population and contexts. Measurement projects can also address purposes, such as measuring educator knowledge, skills, and abilities, guiding instruction, improving educator practice, evaluating educator job performance, or assessing the effectiveness of schools or school systems.

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Each year, there are changes made to the RFAs. Part one of the RFA will include a summary of those changes. We urge you to pay careful attention to these changes, particularly if you have applied to IES in the past, and you may be resubmitting an application. One change that we do want to make sure you are aware of is that there is a separate IES submission guide that lays out the full submission process and provides information about how to apply via grants.gov. Every applicant will need to review that document in addition to the requests for applications under which they are applying.

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Dissemination of federally funded research is important to IES. We want to emphasize dissemination as something to think about at the time of the application, not after you have completed your study. To ensure that findings from the research grants program are available to all interested audiences, IES requires all applicants to present a plan to disseminate project findings in Appendix A, or dissemination plan of the application.

In addition, all applicants must adhere to the IES Public Access Requirements. All awardees will be required to submit their accepted peer reviewed manuscripts to ERIC, the Department of Education's online library, in order to ensure that the findings of federally funded research are available to the public. And, all applicants who are seeking funding to test the causal impact of an intervention, under initial efficacy and follow-up, must include a Data Management Plan, which specifies how the data collected with federal funds will be made available at the conclusion of the study, to allow independent replication of findings, and/or to explore other research questions.

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The award parameters, including the maximum duration and the maximum award, vary across project types. Be sure to refer to the RFA for other information about how the funds requested should be allocated.

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This slide includes important dates for 84.305A and 84.324A. Applications must be received at

grants.gov no later than August 29th, 2019, at 11:59 and 59 seconds p.m. Eastern Time. Letters of intent are due on July 11th, and the application package will be posted on grants.gov on July 11th as well. The possible start dates for the award are between July 1st, 2020 and September 1st, 2020.

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ALBRO: In fiscal 2020, IES will not accept replication project applications under the primary grant programs. Instead, IES is initiating a more targeted strategy for supporting replication: a research competition focused on systematic replications. Under this competition, IES will support replication studies of IES-identified reading and math interventions that have produced beneficial effects on education outcomes in one or more prior IES-funded impact studies.

Proposed replication studies will systematically vary at least one aspect of the prior impact study, and also investigate factors that may lead to and sustain successful implementation. The goal is for these projects to provide information on what is likely to work for whom, and under what conditions. IES will support replication studies that involve the independent evaluation of an intervention when implemented under routine conditions, effectiveness replications, as well as replications that provide more support than is typically provided under routine conditions, and may or may not include an independent evaluator, efficacy replications.

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These are the award parameters for the systematic replication program. For efficacy replications, the maximum duration is five years, and the maximum award is \$3.5 million. For effectiveness replications, the maximum duration is five years, and the maximum award is \$4 million.

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This slide includes important dates for 84.305R and 84.324R. Applications must be received at grants.gov no later than August 29th, 2019, at 11:59 and 59 seconds p.m., DC or Eastern Time. Letters of intent are due on July 11th, 2019, and the application packages will be posted on grants.gov on July 11th as well. The possible start dates for the award are between July 1, 2020, and September 1, 2020.

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IES is competing two Research Training Grant Programs in fiscal 2020. For the research for the NCER, we are competing our 84.305B competition, Research Training Programs in the Education Sciences, and NCSER is competing their Research Training Programs in Special Education.

For NCER, we are competing three types of programs within our research training program RFA. The first is we are competing our Predoctoral Interdisciplinary Research Training Program in the Education Sciences. For this program, we intend to award five new programs, and the

programs should involve focus on the project types and topics that we just previously discussed in our discussion of the Education Research Grants program. We are also competing our Postdoctoral Research Training Program in the Education Sciences. For our Postdoc program, there is a requirement that applicants apply to train students or fellows in one of four areas. Please see the RFA for more information about that requirement. And finally, we're inviting applications for our Methods Training Program for Education Researchers, where we are seeking individuals and institutions who would be willing to provide training across a range of different areas, in particular methods training related to implementing the SEER Principles, would be welcome.

BUCKLEY: In the Research Training Programs in Special Education include the Postdoctoral Research Training, which, similar to NCER, funds programs to prepare researchers with a doctoral degree to conduct high-quality, independent special education or early intervention research. Early Career Development and Mentoring is intended to support researchers to conduct rigorous and relevant early intervention and special education research. "Early career" is defined as an investigator within three years of receiving their PhD, or completing a postdoctoral program at the time of applying. And finally, Methods Training Using Single-Case Designs. And this program intends to help current education researchers maintain and enhance their research and data analysis skills related to single-case designs for use in research focused on children with or at risk for disabilities.

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These are the award parameters for the Research Training Programs, including the maximum durations and the maximum award amounts.

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This slide includes important dates for 84.305B and 84.324B. Applications must be received at grants.gov no later than August 29th, 2019, at 11:59 p.m. DC Time or Eastern Time. Letters of intent are due July 11th, and the application package will also be posted on grants.gov on July 11th as well. Possible start dates for the awards are between July 1st, 2020, and September 1st, 2020.

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ALBRO: For fiscal 2020, the Institute is competing three new research and development centers through the Education Research and Development Center Program. We're inviting applications under three topics, which are listed here.

The first topic, Improving Opportunities and Achievement for English Learners in Secondary School Settings, seeks to both identify and describe the policies and system level practices that are associated with secondary school English learners' access to the general curriculum, and how those policies are related to education outcomes, and to examine at least one approach to improve secondary school English learners' ability to learn from instruction in general education courses where English is the language of instruction.

For our second topic, Improving Teaching and Learning in Postsecondary Institutions, our goal here is for the center to examine instructional innovations for improving postsecondary student outcomes. We are particularly interested in supporting research that's looking at how open and broad access institutions of postsecondary education are leveraging technologies to personalize instruction in credit-bearing courses, and to simultaneously build the capacity of administrators, instructors, developers, and researchers to create, implement, and evaluate the instructional interventions they have chosen.

Finally, our third center is focused on Improving Access, Instruction and Outcomes in Gifted Education. Here, we are hoping to build on previous knowledge, which indicates that overall gifted education under-serves disadvantaged students, including English learners, those from lower income families, and Black and Hispanic students. The gifted center will be expected to examine how state, district, and school leaders as well as educators can implement policies and practices to better identify and serve gifted learners from all demographic backgrounds, and improve student outcomes through gifted education.

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This slide includes the award parameters for the Research and Development Centers, including the maximum duration of five years, and the maximum award amount of \$10 million for the secondary schools and teaching and learning in postsecondary settings, and five years and \$5 million for the gifted education center.

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Please note that the dates for receipt of applications for the Center RFA is different than the previous dates we've discussed. For Center applications, the deadline for receipt is September 26th, 2019, not later than 11:59:59 p.m. Eastern Time. Letters of intent, however, are also due on July 11th, 2019, and the applications themselves, well, the package, will be posted on July 11th, 2019. Start dates are July 1, 2020, to September 1, 2020.

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The next program we will discuss is the Statistical and Research Methodology in Education Program. The goal of this research program is to provide a wide range of methodological and statistical products -- the Institute defines "products" to include new or improved methods, guidelines, or other methodological resources as well as software and other tools -- that will better enable applied education scientists to conduct rigorous education research. The Institute is interested in the development of practical statistical and methodological projects that can be used by most education researchers, rather than only by statisticians and researchers with highly sophisticated statistical skills, to improve the designs of their studies, analysis of their data, and interpretations of their findings.

Some current identified methodological needs include understanding variabilities and effects, determining methods and procedures to increase the generalizability of findings, improving

methods used to support single-case designs, analyzing big data, improving ways to reduce selection bias effects in quasi-experimental designs, generating tools that help policymakers and practitioners interpret impacts reported from evaluation studies, increasing our ability to address sources of missing data, especially to the degree that the data is not missing at random, and continuing to examine methodological approaches to improve our abilities to assess and analyze cost benefit and cost effectiveness.

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These are the award parameters for the Statistical and Research Methodology in Education grants. For regular grants, there is a maximum duration of three years, and a maximum award amount of \$900 thousand. For early career grants, there is a maximum duration of two years, and a maximum award amount of \$225 thousand. Applicants to the early career grants topics must have received their doctorate on or after April 1st, 2015.

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This slide includes important dates for 84.305D. Applications must be received at grants.gov no later than August 29th, 2019, at 11:59:59 p.m. DC Time, or Eastern Time. Letters of intent are due on July 11th, 2019, and the application package will be posted on grants.gov on July 11th as well. The possible start dates for the award are between July 1st, 2020, to September 1, 2020.

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BUCKLEY: All applications must be submitted electronically through the grants.gov website. The IES submission guide, which I referenced earlier, provides additional guidance for you to submit your application to grants.gov.

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IES uses a peer review process for the review of grant applications. First, applications are reviewed for compliance and responsiveness to the RFA. Applications that are compliant and responsive are assigned to a review panel, two or three panel members conduct a primary review of each application, and there is a triage process so that only the most competitive applications are reviewed by a full panel.

ALBRO: Please note that we have included at the end of every RFA a checklist that is intended to capture on a single page or two issues around compliance and responsiveness, factors that you must include in your application. So please use those checklists as you're preparing your application.

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BUCKLEY: Who are our peer reviewers? You can find out more about our peer reviewers by going on our IES website, where you can find information on the Office of Science's standards and review page that includes a list of prior peer reviewers.

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All applicants will receive email notification that the following information is available via the Applicant Notification System: the status of your award, and reviewer summary statements. If you are not granted an award the first time, plan on resubmitting and talk to your Program Officer.

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ALBRO: There are a few things we want to leave you with before we finish this webinar. First, read the Request for Applications. There is a lot of detail and important detail in the RFA. IES has spent a great deal of time over the years making the RFA a user-friendly guide to developing a high-quality application, so be sure you know those requirements and recommendations for the topic and project type under which you are submitting. Browse through the posted abstracts of our funded grants on our website. Our abstracts are fairly detailed, so they will give you a good sense of the quality and type of grant that may typically get funded by IES.

IES will also post on-demand webinars, including this one; webinars that you can access at your convenience covering a wide range of topics, including a grant writing workshop, or webinars about specific funding competitions. There will be additional webinars about many of the RFAs that we have described at a very surface level this morning. Those will be posted in the coming weeks.

We also have a Resources for Researchers page on our website with grant information for you, including methodological resources to assist in preparing an IES research grant application, videos from past IES training institutes, information about available data sets and tools, among other things.

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Despite all of the great resources that are available on our website that I just described, Program Officers really are your best resource. So please, contact us. Discuss your research idea with a Program Officer, email them a synopsis and schedule a time for a call, email short questions. You will hear from the Program Officers if you submit a letter of intent. Program Officers will review draft applications, given we receive drafts with sufficient time prior to the submission date, and we are available for discussion after you receive your reviews. We want to hear from you. It is always a great idea to reach out to us.

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So here is the contact information for myself, Liz Albro, and Jackie Buckley. I encourage you to follow us on -- follow us, that is, IES -- on Twitter and Facebook. Each request for applications includes contact information for the relevant Program Officers. Please contact them for more information. I encourage you to reach out to the Program Officer listed in the RFA for the grant

competition you are interested in. Our links to our Twitter and Facebook page are available on this slide, so we hope to see you online.

Thanks very much!