How to Write a Research Grant Proposal to the Institute of Education Sciences: 
Bringing Prevention Science Ideas to Education Research

Organizers and Presenters

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Purpose of the workshop, including specific learning objectives:

The Institute of Education Sciences (IES) has multiple funding opportunities for researchers from the multidisciplinary prevention research community to bring their knowledge of prevention science to bear on education practice. A number of SPR members are involved in prevention efforts in schools that promote the well-being of students and help to prevent and reduce problem behaviors and poor educational outcomes. This preconference workshop is designed to raise awareness of funding support for prevention scientists whose research questions are relevant to education research and to provide instruction on how to develop competitive grant applications for IES. A version of this workshop was delivered at the 2011 SPR conference in Washington DC on May 31, 2011 and at the AERA (American Education Research Association) conference in 2010 (and as a webinar presentation to AERA attendees in 2011).

Although many of IES’s topic areas will appeal to prevention scientists, two may be of particular interest to the SPR membership. Through its Social and Behavioral Context for Academic Learning research program, IES supports research on interventions designed to improve social skills, dispositions, and behaviors that support academic and other important school-related outcomes (e.g. attendance, high school graduation rates) in typically developing students from kindergarten through high school. Emily Doolittle, one of the two workshop presenters, is the program officer for this program. Through its Social and Behavioral Outcomes to Support Learning research grant program IES supports research that addresses the prevention or amelioration of behavior problems in students with or at-risk for disabilities and concomitantly, improve their developmental and academic outcomes. Jackie Buckley, one of the two workshop presenters, is the program officer for this program.

Considerable work focusing on interventions that are aimed at preventing or ameliorating behavior disorders in children and youth has been conducted in the areas of developmental psychopathology, prevention research, and children’s mental health services. Much of this work

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focuses on improving social and behavioral functioning in schools and other community settings, yet there has been relatively little systematic effort to bridge these efforts with prevention and intervention research in education and special education. This preconference workshop will both introduce researchers interested in school-based prevention and intervention programs to pertinent funding opportunities available through IES, and provide specific instruction and guidance on preparing a successful grant application to IES.

The 2012 SPR workshop will provide instruction and advice on writing a successful application to the Institute of Education Sciences’ Education Research Grants Program (84.305A) and Special Education Research Grants Program (84.324A). The workshop will focus on 1) the topics of interest in these two grant programs, highlighting particular topic areas that may be most relevant to prevention scientists; 2) the types of research questions that are supported by the IES goal structure; and 3) the four sections of the Research Narrative (Significance, Research Plan, Personnel, and Resources) that comprise the most important part of the grant application. We will use the structured abstract template for IES-funded research projects (see http://ies.ed.gov/funding/grantsearch/index.asp for examples posted on the IES website) to guide our instruction on these topics. We will also review examples and explore the relevance of the IES research grant programs to each participant’s own work. Workshop participants will be asked to work through some exercises prior to the workshop, including a review of the structured abstracts on the IES website and examples of Logic Models and Gantt charts, to facilitate discussion during the workshop.

Applicants make a large investment in writing an application to IES’ grant programs (and peer reviewers make a substantial time investment in reading them). Applications submitted to inappropriate topics or goals are not accepted for review and are a poor investment of applicant time. Applications that do not respond well to the requirements for the four sections of the research narrative often receive poor reviews and again represent a poor investment of applicant time and reviewer time. The peer review process provides feedback on substantive issues and may provide advice regarding these issues. However, it would be more efficient for applicants to be made aware of ways to better present their intended research and pitfalls to avoid before submitting their application. By providing detail on writing clearer more informative sections of the application, this workshop seeks to help applicants write clearer, responsive applications that can be judged on their substantive merits by the peer reviewers. Our experience as program officers indicates that researchers believe either their application is not appropriate for IES when indeed it is, or believe that a grant written for another funding agency only needs minor “tweaks” to be acceptable for IES, when in fact terminology and expected content can be quite different in the field of education.

The immediate goal of the course is for the participants to leave with an understanding of what information should be provided in each section (Significance, Research Plan, Personnel, and Resources) of the Research Narrative portion of the IES grant application. The course is not intended to lead to a cookie cutter approach to writing an IES application but to ensure that the content required is included and that applicants are aware of different ways to more clearly express this content. By helping prevention scientists understand how to write a research grant application to IES, these researchers can expand their research agendas and grow as scientists.

The distal goals of the course are twofold: 1) to raise awareness among prevention scientists of unique funding opportunities that are available through IES to support prevention research in education; and 2) to increase the quality of the applications received by IES (at least
by course attendees) leading to an increase in the likelihood of their receiving positive peer reviews, and resulting in an increase in the likelihood of their being funded. Funding more prevention science work will bring important ideas from the field to bear on pressing problems in the field of education.

Target Workshop Audience
Participants should be ready and in a position to submit an application to IES grant competitions. They can include experienced prevention science researchers who have never submitted to IES, less experienced researchers who have not received an IES grant, and finishing graduate students who are taking on a position in the education research or prevention science fields. Because the workshop is to include advice on participants’ research ideas, applicants should have research questions in mind and have read the IES Requests for Applications (http://ies.ed.gov/funding/). Participants will also be asked to complete a series of exercises prior to the workshop to facilitate discussion.

Materials to be provided to attendees

- A handout describing three exercises to be completed prior to the workshop:
  1) Participants should review the structured abstracts on the IES website http://ies.ed.gov/funding/grantsearch/index.asp and become familiar with their basic structure and elements.
  2) Participants will be shown an example of a Logic model and should complete a draft version of a Logic Model for their own research questions.
  3) Participants will be shown an example of a Gantt chart and should consider how their research questions may translate into a timeline that meets the IES research grant requirements.

- Participants will also be asked to send an email to the workshop presenters at least one day prior to the workshop. In the email, participants need to list at least one research topic of personal interest that is appropriate for IES funding (e.g., classroom management, character education, social/emotional learning, etc.). Participants will also be asked to describe what they already know and what they want to know about IES and its application process.

Outline of workshop

The workshop will run for 6 hours (8:00am to 2:00pm). Emily Doolittle and Jackie Buckley will divide the presentation equally. When one is at the front of the room, the other will be moving around the room to answer questions or provide support as needed to participants or the presenter.

8:00am to 9:30am
  1. As participants enter the room, ask them to do the following:
     a. Write name and institutional affiliation on the front of a cardboard tent.
     b. Write the research topic of personal interest (classroom management, character education, social/emotional learning, etc) that was submitted via email on the back of the tent.
  2. Identify purpose of the workshop:
This workshop will provide instruction and advice on writing a successful application to the Institute of Education Sciences’ research grant programs.

The workshop will focus on the four sections of the Research Narrative:

i. Significance, Research Plan, Personnel, and Resources
ii. Participants will learn the purpose of each section including:
   1. the content expected to be addressed
   2. techniques to clearly explicate the content
   3. ways to provide continuity throughout the Narrative

The workshop will use the structured abstract to guide instruction

d. Review the agenda for the 6-hour workshop.
   i. Background of IES
   ii. Grant Programs and Topics
   iii. Goal Structure
   iv. Project Narrative – 4 parts

3. Briefly describe background of IES:
   a. IES organizational structure
   b. Overall research objectives
   c. Student outcomes
   d. Key dates for current competitions

4. Understand the IES review process and the role of the Program Officer
   a. Show screen capture of IES Standards and Review Web page.
   b. Discuss the review process using the slides.
   c. Describe technical assistance Program Officers provide to interested applicants

5. Ask participants to describe their research topic and design by doing the following:
   a. Distribute a blank copy of the structured abstract elements to each participant.
   b. On page 1, ask participants to write a paragraph describing their research topic and research design.
   c. Begin filling in structured abstract elements based on this paragraph. We will refer to the structured abstract throughout the remainder of the workshop.

15-Minute BREAK

9:45am to 11:45am

6. Introduce the 5 Goals by doing the following:
   a. List the 5 goals (2 slides).
   b. Describe Exploration (2 slides).
   c. Ask participants to write on an index card a research question on their specific research topic that could be addressed by the Exploration Goal. On the back of the card, write “Exploration”.
   d. Repeat b and c for the remaining Goals: Development, Efficacy, Scale-up, and Measurement.
   e. (Activity) Do this activity either as a large class or in small groups of 4-5:
      i. Invite one participant to shuffle their 5 index cards then share the cards with the group (Goal name face down).
      ii. Ask participants to work as a team to identify the goal for each question and discuss if the question is appropriate for each goal.
      iii. Ask participants if the goals build on one another in any way.
   f. Use the slides to discuss how the goals build on one another. Point out, “When you write your proposal you must articulate how your project fits into this research trajectory.”
30-Minute BREAK to get lunch and bring back to room

12:15 to 2:00pm

7. Explain the 4 key sections of the research narrative and their key components by doing the following:
   a. Significance - Use the power point slides to introduce “Significance Section.”
      i. Key features
      ii. Discuss Key Problem Areas for Significance, including reviewers’ comments.
      iii. Analyze example portions of Significance sections and discuss possible strengths and weaknesses of each.
   b. Research Plan - Use the power point slides to introduce “Research Plan Section.”
      i. Key features
      ii. Discuss Key Problem Areas for Research Plan, including reviewers’ comments.
      iii. Analyze example portions of Research Plan sections and discuss possible strengths and weaknesses of each.
   c. Personnel – use the slides to discuss the Personnel section.
   d. Resources – use the slides to discuss the Resources section.
   e. Discuss how the information included in each section of the project narrative is represented in the structured abstract
      i. Purpose includes information about Significance
      ii. Research Design and Methods corresponds to Research Plan
   f. Distribute Tips on Writing sheet

8. Complete course evaluation.
### Presenters

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<tr>
<th>Name</th>
<th>Title</th>
<th>Institution</th>
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**EMPLOYMENT**

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- **202-219-2130**
- **Jacquelyn.Buckley@ed.gov**

**EDUCATION**

Emily J. Doolittle
  - **The University of Chicago**

Jacquelyn A. Buckley
- **Ph.D. (2002) Educational Psychology**
  - **The University of Wisconsin-Madison**

**SELECTED INVITED PRESENTATIONS**

**Emily J. Doolittle**
- Association for Positive Behavior Support 2009: Funding Opportunities at the Institute of Education Sciences
- IES Research Funding Webinars on the Application Process

**Jacquelyn A. Buckley**
- Society for Research on Adolescents Bian Conference (2010, March)
- Research and Training Center for Children’s Mental Health, University of South Florida (2009, March)

Emily Doolittle and Jackie Buckley are program officers at IES and provide technical assistance to applicants prior to submission of a proposal. This technical assistance ranges from help with understanding the substantive requirements of a proposal to assistance with completing the application package to guidance on the criteria for review of scientific merit.