IES Grant Writing Workshop

Institute of Education Sciences
U.S. Department of Education
• Getting Started
• Identify Appropriate Research Program
• Which Goal is Right for You?
• Preparing the Proposal
• Preparing the Project Narrative
• Reviewers’ Perspectives
• Submitting a Proposal
• What Happens Next?
• Final Reminders
Getting Started
Getting Started

• Request for Applications
• Application Package
Finding Requests for Applications

FY 2009 Requests for Applications are available on:

http://ies.ed.gov/funding

Sign up for the IES Newsflash:

http://ies.ed.gov/newsflash/
Welcome to IES

The Education Sciences Reform Act of 2002 reauthorized the Institute of Education Sciences (IES) within the U.S. Department of Education. IES brings rigorous and relevant research, evaluation, and statistics to our nation's education system. Grover J. (Russ) Whitehurst was appointed as the first Director of IES in November 2002.

What's New?

Ten Years After College: Comparing the Employment Experiences of 1992-93 Bachelor's Degree Recipients With Academic and Career-Oriented Majors

The report uses longitudinal data from the 1992-93 Baccalaureates and Beyond Study, which represents about 1.2 million bachelor's degree recipients that year. [more info]

IES releases RFAs for three NCER FY 2009 research grant competitions: Education Research program (84.305A), Statistical and Research Methodology in Education (84.305D), and Evaluation of State and Local Education Programs and Policies (84.305E)

IES has released funding announcements for three NCER FY 2009 research grant competitions: Education Research program (84.305A), Statistical and Research Methodology in Education (84.305D), and Evaluation of State and Local Education Programs and Policies (84.305E). [more info]

IES releases the FY 2009 RFA for the Special Education Research program (84.324A)

IES has released the FY 2009 funding announcement for the Special Education Research program (84.324A). [more info]

NCER - Supports rigorous, scientifically based research that is intended to improve student outcomes and the quality of education in the U.S. through its research initiatives and the national research and development centers

NCES - Is the primary federal provider of statistics on the condition of education at preschool, elementary, secondary, postsecondary, and adult levels, including education data from other nations

NCCE - Conducts rigorous evaluations of the impact of federal programs, synthesizing and disseminating information from evaluation & research, and providing technical assistance to improve student achievement

NCSER - Sponsors a comprehensive program of special education research designed to expand the knowledge and understanding of infants, toddlers and children with disabilities.

http://ies.ed.gov
Finding Application Packages

• FY 2009 Application Packages will be available on [www.grants.gov](http://www.grants.gov).

• Check Requests for Applications for when Application Packages and Application Instructions will become available.
Determine Whether You are Eligible to Apply

- Applicants that have the ability and capacity to conduct scientifically valid research
- Include, but are not limited to, non-profit and for-profit organizations, and public and private agencies and institutions, such as colleges and universities
Identify Appropriate Research Program
Identify Appropriate Research Program

• Read the Request for Applications
• Check the announced topics
• Look at the abstracts of projects funded under a research topic
NCER Standing Research Programs

- Reading and Writing
- Mathematics and Science Education
- Cognition and Student Learning
- Social and Behavioral Context for Academic Learning
- Teacher Quality
- Education Leadership
- Education Policy, Finance, and Systems
NCER Standing Research Programs

• Early Childhood Programs and Policies
• Middle and High School Reform
• Interventions for Struggling Adolescent and Adult Readers and Writers
• Postsecondary Education
• Education Technology
NCER Standing Research Programs

- Early Intervention and Early Childhood Special Education
- Reading, Writing, and Language Development
- Mathematics and Science Education
- Social and Behavioral Outcomes to Support Learning
- Transition Outcomes for Special Education Secondary Students
NCSER Standing Research Programs

• Cognition and Student Learning in Special Education
• Teacher Quality
• Related Services
• Systemic Interventions and Policies for Special Education
• Autism Spectrum Disorders
Which Goal is Right for You?
Which Goal is Right for You?

- Identify/explore programs, practices, or malleable factors associated with better student outcomes
- Develop new education interventions
- Evaluate the efficacy of interventions
- Evaluate the impact of interventions implemented at scale
- Develop and/or validate measurement tools
Identification Goal

Identify/explore education programs, practices, and malleable factors that are associated with better student learning and achievement outcomes

- Secondary analyses of longitudinal datasets
- Conduct small descriptive studies
- Meta-analyses
Identification Goal

• $100,000 to $350,000 per year total cost (direct + indirect)
• 2 to 4 years
Development Goal

• Develop new interventions (e.g., instructional practices, curricula, teacher professional development)

• Demonstrate the feasibility of the intervention for implementation in an authentic education delivery setting

• Collect pilot data on promise of intervention to achieve intended outcomes
Development Goal

- $150,000 to $500,000 per year (total cost = direct + indirect)
- 1 to 3 years
Efficacy and Replication Goal

• Test efficacy of fully developed interventions
• Efficacy = the degree to which an intervention has a net positive impact on the outcomes of interest relative to the program/practice to which it is being compared
Efficacy and Replication Goal

- $250,000 to $750,000 per year (total cost)
- Up to 4 years
Scale-up Evaluation Goal

- Test the impact of interventions implemented at scale
- As implemented by practitioners (i.e., not by researchers)
- Studies using randomized assignment to treatment and comparison conditions are strongly preferred
Scale-up Evaluation Goal

- $500,000 to $1,200,000 per year (total cost)
- Up to 5 years
Measurement Goal

• Develop and test assessments or other measurement tools

• $150,000 to $400,000 per year (total cost = direct + indirect)

• Up to 4 years
Which Goal is Right for You?

- Read the Request for Applications
- Start to think about which goal is appropriate for the question(s) you want to answer
What if My Program is “Between” Goals?

PICK ONE!

– Read the Request for Applications
– Don’t just go for the largest amount of money.
– Break the project down into smaller pieces.
– Aim for a well-crafted project that will deliver what it promises....
Next Steps

- Think about the type of expertise that is needed to carry-out the project
Build a Good Team
Who Should Be on Your Team?

- Consider Goal
- Consider training and experience
- Commit sufficient time to competently implement the proposed research
- What if you are a relatively junior researcher or do not have a track record with large projects and grants?
Young Investigators

• Challenge – convince reviewers that you (and your team) have the skills and experience to implement well what you have proposed
• Develop a team
• Demonstrate productivity
Next Steps

• Read the Request for Applications closely one more time and confirm that your idea fits the requirements for a specific topic (e.g., Read/Write) and goal.

• Then, contact the appropriate program officer and discuss your project with him or her.
Preparing the Proposal

(Complete all components)
Preparing the Proposal

- ED 424 (Cover Sheet)
- ED 524 (Budget Form)
- Project Summary/Abstract
- Contents of the Application
Preparing the Proposal:
Contents of Application

- Project Narrative
- Bibliography and References Cited
- Biographical Sketches of Key Project Personnel
- Narrative Budget Justification
- Subaward Budgets
Preparing the Proposal: Contents of Application

- Appendix A (letters of agreement; tables; figures)
- Appendix B (curriculum materials)
- Additional forms for applicants selected for funding
Preparing the Proposal: Creating a Budget

- Personnel
- Fringe Benefits
- Travel
- Equipment

- Supplies
- Contractual
- Other
- Indirect Costs
Preparing the Project Narrative
Project Narrative

• Significance
• Research Plan
• Personnel
• Resources
Significance

- Read the RFA
- Information required to address significance of project depends on the Research Goal
Research Plan

• Read the RFA

• Information required of the research plan depends on the Research Goal
Research Plan

Designing Projects Under Each Goal
Designing Identification/Exploration Projects

Secondary Data

• Choose a pre-existing dataset (local, district, state, national).
• Explain characteristics of dataset well.
• Provide sufficient detail as to the statistical and analytic plans you will use to draw conclusions.
• You may propose to collect additional data.
Designing Identification/Exploration Projects

Primary Data

• Clearly describe the sample
• Explain the measures and how the data are coded in sufficient detail so that the relation between measures and hypotheses are clear
• Provide detailed statistical and analytic plans.
Designing Identification Projects

Meta-analysis

• Clearly describe:
  – Criteria for including studies and rationale
  – Search procedures
  – Coding scheme and procedures for extracting data
  – Procedures for ensuring reliability of coding

• Demonstrate sufficient numbers of studies are available

• Provide detailed statistical and analytic plans including defining effect size statistics
Designing Development Projects
FY 2009 IES Development Project

• Fully developed intervention
• Pilot data on the feasibility of implementing the intervention in schools
• Pilot data on the promise of the intervention for generating desired outcomes
Why Develop This Intervention?

• Context for the proposed intervention
  – Describe attributes of existing practice
  – Specify shortcomings of existing practice
  – Clarify the problem
Why Develop This Intervention?

• Describe the proposed intervention
  – What are the components or features of intervention?
  – Who will implement or use it?
  – How will it be used?
• Practical importance of the proposed intervention
Why Develop This Intervention?

• Theory of change
  – What is the causal chain of events that leads from the implementation of the intervention to the desired outcome?

• Rationale for theory of change
  – Theoretical and empirical justification
  – How does the proposed intervention address the shortcomings of current practice?
Development (Research) Plan

• What will be developed
• How it will be developed
• How will the intervention (components) be tested to see if it operates as intended
Operating as Intended

• Define “operating as intended”
  – Criteria to determine if intervention operates as intended
  – Correspondence with theory of change
Operating as Intended

• What data will be collected to determine how the intervention is operating?
  – Often involves collection of process data (e.g., observation of teacher implementing a lesson)
  – Feedback from users
  – Specify how data will be coded (i.e., what are you looking for?)
Operating as Intended

- Define “operating as intended”
- What data will be collected to determine how the intervention is operating?
- How will the data be used to revise the intervention, if needed?
Iterations?

- Number of iterations depends on the complexity of the intervention and its implementation
Feasibility of Intervention

• Demonstrate that intervention can be implemented with fidelity
  – In settings that represent the type of settings for which the intervention is intended
  – By users who are like those for whom the product is intended
Promise of the Intervention

• Does performance on outcome measures progress in the appropriate direction?
• Is implementation of intervention associated with changes in activities and behaviors that are consistent with the theory of change?
Designing Efficacy and Replication Projects

• Goal is to determine whether or not fully-developed interventions – programs, practices, policies – are effective
  – Under specified conditions (e.g., urban schools with high teacher turnover rate)
  – With specific types of students (e.g., students with reading disabilities ).
Designing Efficacy and Replication Projects

• Describe what the components of the intervention are.
• Describe how the intervention differs from what is typically offered in education settings.
• Define your sample well.
Designing Efficacy and Replication Projects

- Prefer use of random assignment.
- Decide level of randomization (student, teacher, school).
- Ensure that level of randomization matches level of analysis.
Designing Efficacy and Replication Projects

• Use power analysis to determine number of students, teachers, schools needed to draw conclusions about impact.
• Include standardized measures of student achievement.
• Attend to fidelity of implementation.
Designing Scale-up Evaluations

• Does this intervention produce a net positive increase in student learning and achievement relative to the variety of products or practices that are currently available and utilized by schools?
Designing Scale-up Evaluations

• All of the methodological requirements for Efficacy and Replication projects

• Implementation occurs at scale and under typical conditions
Designing Scale-up Evaluations

Choosing Outcome Measures

– Do they map well onto your theoretical questions?
– Are you using standardized achievement tests?
– Have you included proximal measures?
– Who will administer them?
– Did you budget to buy them?
Designing Measurement Projects

• Provide strong theoretical rationale for development of new measurement tool.
• Justify the need for this new tool.
• Detail the proposed procedures for developing the assessment instrument.
• Describe the research plans for determining the validity and reliability of the instrument.
Designing Measurement Projects

• Describe the characteristics and size of samples to be used in each study.
• Explain procedures for collecting data.
• Describe additional measures to be used to determine validity of new tool.
• Describe data analytic strategies.
Personnel and Resources

• Read the RFA
• Don’t forget to address these two sections within the project narrative
• Use biographical sketches (CVs) to further document expertise and productivity
• In Appendix A document access to schools or datasets needed to conduct research project
Build Relationships with Schools
Include Letters of Agreement

- Are expected for most competitions
- Reviewers look for them and read them carefully
- Should include detailed information that demonstrates that your partners understand what participation will entail
- From whom should you get letters?
  - Teachers, Principals, District?
Formatting Requirements

• Abstract is 1 page single-spaced.
• Research narrative is no longer than 25 pages single-spaced.
• Bibliography has no page limit.
• Each biographical sketch is limited to 4 pages.
• Budget justification has no page limit.
• Appendix A can be no longer than 15 pages.
• Appendix B can be no longer than 10 pages.
Additional Reminders

• Pay attention to what can and cannot be included in the Appendices
• Have a colleague who isn’t involved in the project read a draft
Reviewers’ Perspectives

• Write clearly and concisely
• Address the points described in RFA
• Organize information in logical sequence
• Label sections and number pages
• Make it easy for reviewers to find and understand the information
Submitting a Proposal

• All proposals must be submitted electronically to:
  – http://www.grants.gov

• By the date and time listed on the Request for Application
Final Proposal Submission

- On-line forms are complete
- PDFs of proposal contents have been uploaded
- Authorized representative has completed the final step of the electronic process.
- You have received an email acknowledging receipt of your application.
What Happens Next?
Peer Review

- Proposal is reviewed for compliance.
- Compliant proposals are assigned to a review panel.
- Two or three panel members conduct primary review of each application.
- At panel meeting, the most competitive applications are reviewed by full panel.
Notification

• All applicants will receive email notification of the status of their application.
• All applicants receive copies of reviewer comments.
• If you are not granted an award the first time, plan on resubmitting, and talk to your program officer.
Final Reminders
Don’t Forget...

• Start early
• Read the Request for Applications
• Talk with the program officer
• Start the online submission process early