



Connecting Research,
Policy and Practice

Mathematics and Science Education: Funding Opportunities at IES

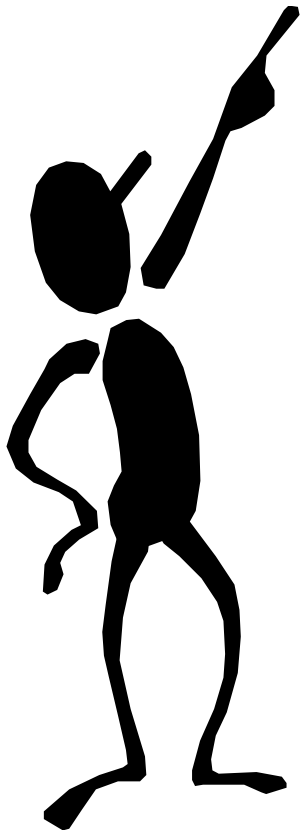
Christina Chhin

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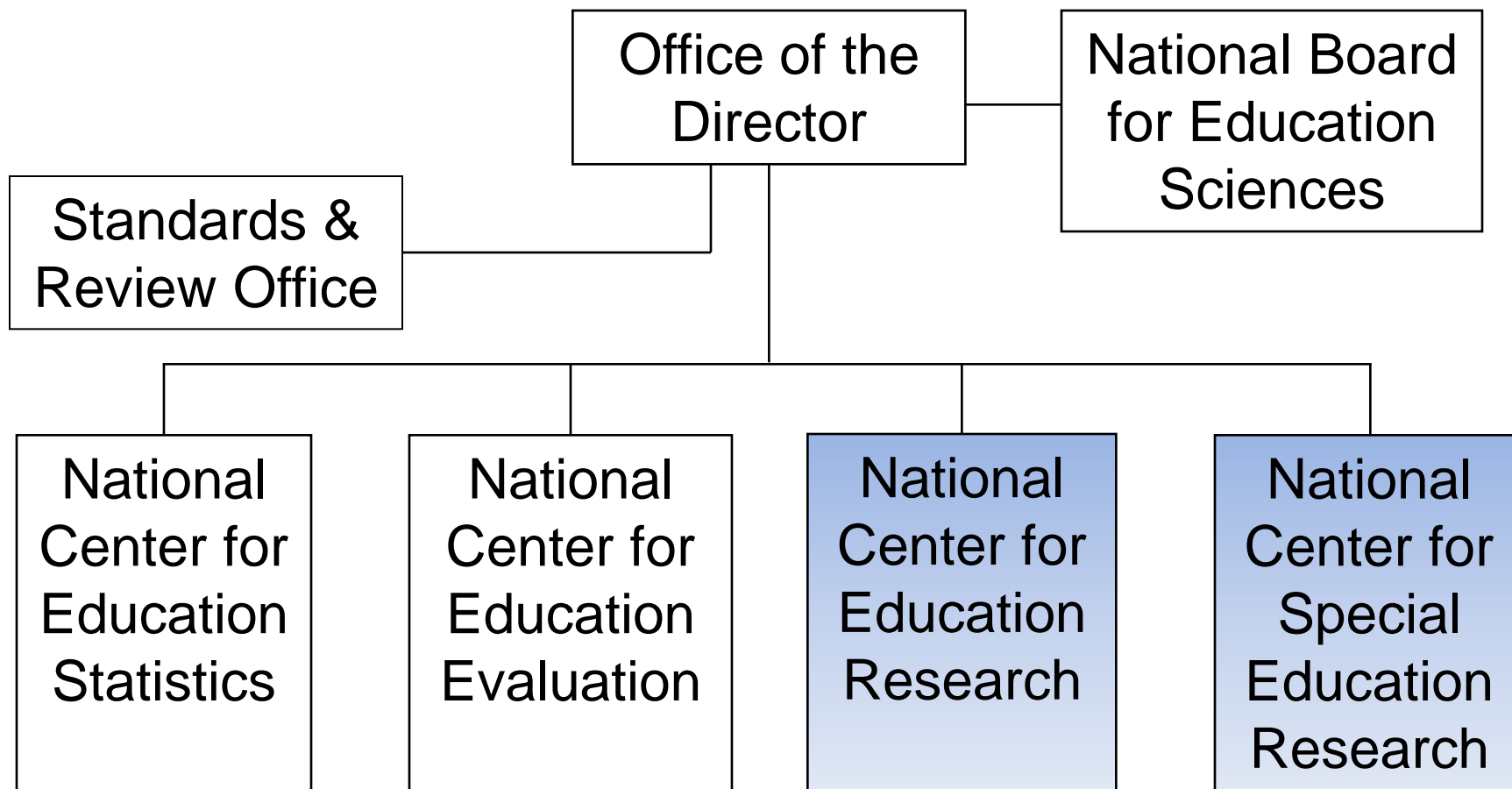
U.S. Department of Education

What is IES?



- Research arm of the U.S. Department of Education, non-partisan by law.
- Charged with providing rigorous and relevant evidence on which to ground education practice and policy and share this information broadly.
- By identifying what works, what doesn't, and why, we aim to improve educational outcomes for all students, particularly those at risk of failure.

IES Organizational Structure



IES Research Grant Programs

NCER

Education Research

Research & Development Centers

Pre- and Postdoctoral Research Training

Researcher & Policymaker Training Program in the Education Sciences

Evaluation of State & Local Education Programs & Policies

Statistical and Research Methodology in Education

Researcher-Practitioner Collaborations in Education Research and Decision-Making

Small Business Innovation Research

Research Networks Focused on Critical Problems of Education Policy and Practice

NCSEER

Special Education Research

Special Education Research Training Program
Postdoctoral Training
Early Career

Research & Development Centers

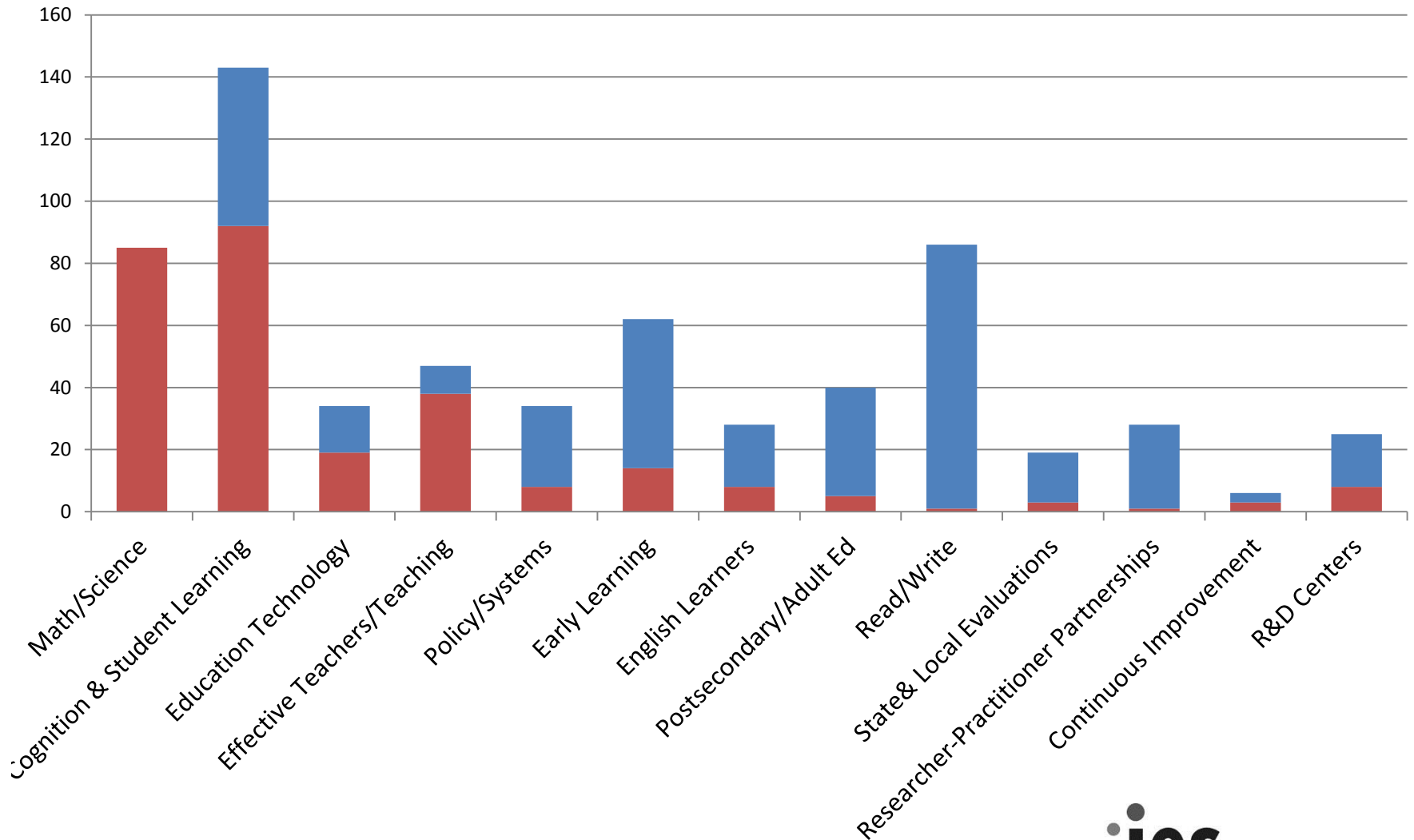
Research Objectives of IES Grant Programs

- Develop or identify education interventions (practices, programs, policies, and approaches) that enhance academic achievement and that can be widely deployed
- Identify what does not work and thereby encourage innovation and further research
- Understand the processes that underlie the effectiveness of education interventions and the variation in their effectiveness

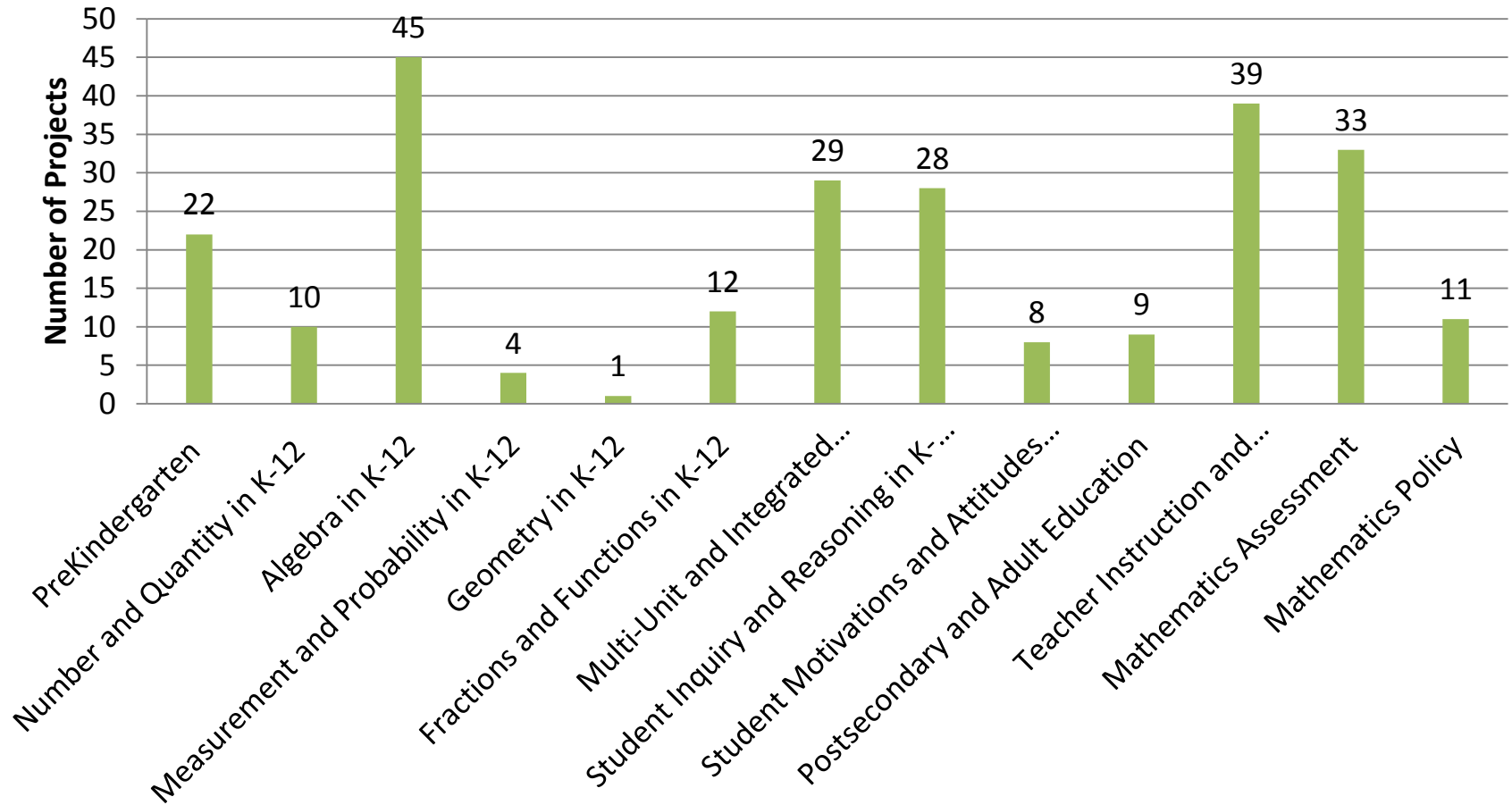
Education Research Grants Program – Research Topics

- Reading and Writing
- Mathematics and Science Education
- Cognition and Student Learning
- Social and Behavioral Context for Academic Learning
- Education Technology
- Effective Teachers & Effective Teaching
- Improving Education Systems: Policies, Organization, Management, and Leadership
- Postsecondary and Adult Education
- Early Learning Programs and Policies
- English Learners

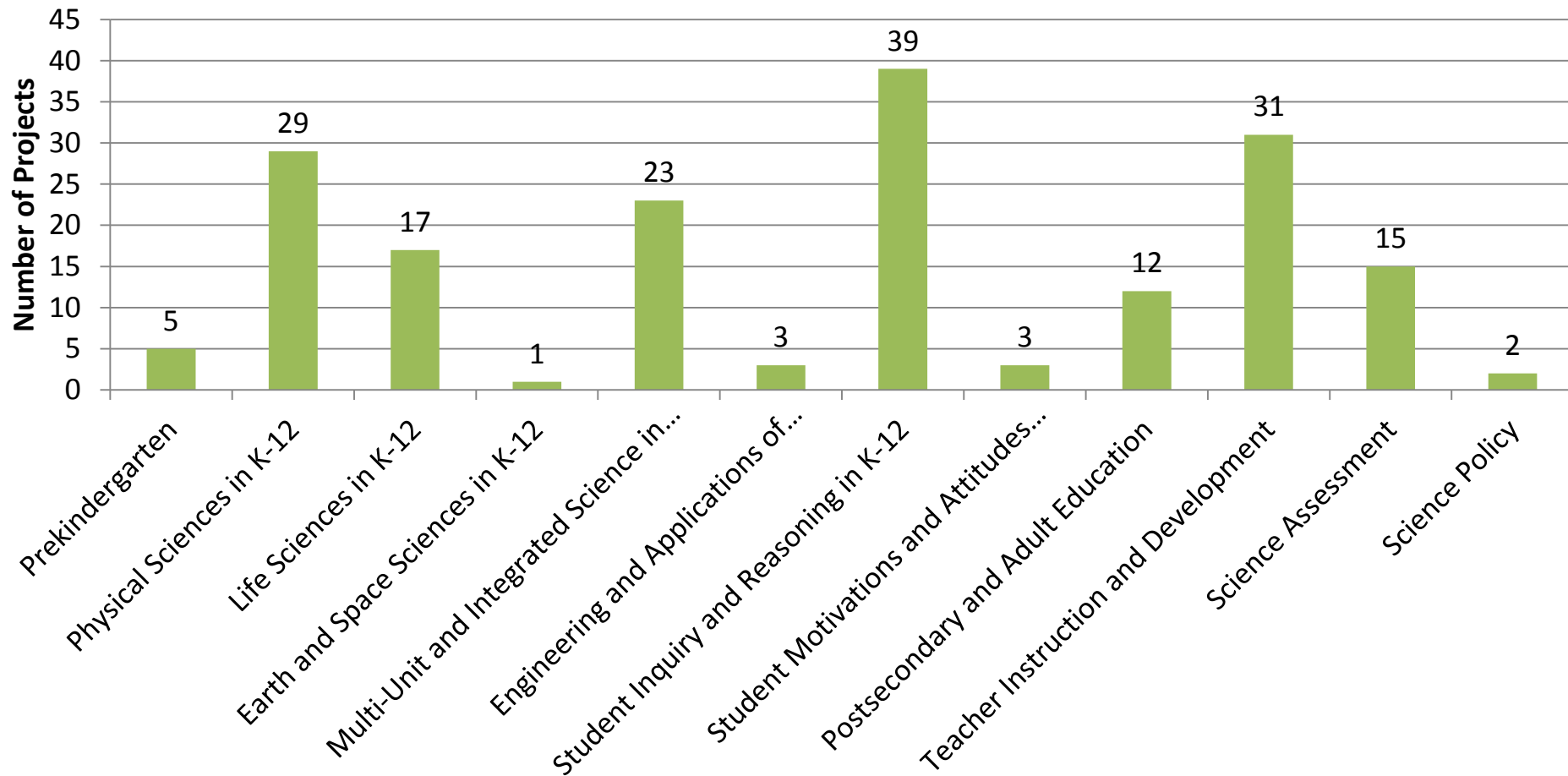
Math and Science Focused Grants by Topic/Program Area



Math Projects by Domain or Key Outcome



Science Projects by Domain or Key Outcome



Education Research Goals

- **Exploration** - Explore associations between education outcomes and malleable factors
- **Development & Innovation** - Develop an innovative intervention (e.g., curriculum, instructional approach, program, or policy) **OR** improve existing education interventions
- **Efficacy and Replication** - Evaluate whether or not a fully developed intervention is efficacious under limited or ideal conditions

Education Research Goals

- **Effectiveness** - Evaluate whether a **fully developed** intervention that has evidence of efficacy is effective when implemented under typical conditions through an independent evaluation
- **Measurement** - Development of new assessments or refinement of existing assessments, and validation of these assessments

Research Networks Focused on Critical Problems of Education Policy and Practice

- Exploring Science Teaching in Elementary School Classrooms
 - Grants will support a network of interdisciplinary research teams to delve deeply into early elementary school (first through third grade) science teaching
 - Each Research Team will conduct three complementary, prospective studies

| Network Role | Maximum # of Awards | Maximum Grant Duration | Maximum Grant Award |
|---------------|---------------------|------------------------|---------------------|
| Research Team | 4 | 5 years | \$4,000,000 |
| Network Lead | 1 | 5 years | \$2,000,000 |

- Program Contact: Wai Chow (Wai-Ying.Chow@ed.gov ; 202-245-8198)

Funding Opportunities


<http://ies.ed.gov/funding/>

Application Deadline – August 4, 2016

- Education Research Grants
- Special Education Research Grants
- Research Networks Focused on Critical Problems of Education Policy and Practice
- Partnerships and Collaborations Focused on Problems of Practice or Policy
- Statistical and Research Methodology in Education
- Research Training Programs in the Education Sciences
- Research Training Programs in Special Education
- Low-Cost, Short-Duration Evaluations of Education Interventions



Useful Information

- Christina Chhin
 - Program Officer, Mathematics and Science Education; christina.chhin@ed.gov ; 202-245-7736
- Math and Science Compendium: <http://ies.ed.gov/ncer/pubs/20162000>
-  @IESResearch
- Blog: <http://ies.ed.gov/blogs/research/>
- Facebook: <http://www.facebook.com/IESResearch>