

Grant Title: INSTITUTE OF EDUCATION SCIENCES-EDUCATION RESEARCH GRANT PROGRAM: MATHEMATICS AND SCIENCE EDUCATION 84.305A

Funding Opportunity Number: CFDA Number(s): 84.305A.

Agency/Department: U.S. Department of Education, Institute of Education Sciences (IES).

Area of Research: Mathematics and Science Education.

Release and Expiration: Release date: February 28, 2011.

Application Deadline: June 23, 2011; September 22, 2011. Letter of Intent Due Date: April 21, 2011; July 21, 2011.

Amount: Exploration Goal: Secondary data analysis or meta-analysis \$100,000 to \$300,000 (total cost = direct + indirect costs) per year. Data collection - \$100,000 to \$400,000 per year. Development and Innovation Goal: \$150,000 to \$400,000 per year. No more than 30 percent of the total funds may be used for collection of pilot data to demonstrate the promise of the intervention for achieving the desired outcomes. Efficacy and Replication Goal: Efficacy and replication evaluations are \$250,000 to \$650,000 per year, follow up studies are \$150,000 to \$300,000. Scale-up Evaluations Goal: Scale-up Evaluation projects are typically \$350,000 to \$900,000 per year. Follow-up studies are typically \$250,000 to \$400,000 per year. Measurement Goal: \$150,000 to \$300,000 per year.

Length of Support: Exploration Goal: Secondary data analysis or meta-analysis - up to 2 years, data collection - up to 4 years, but must justify the need for the number of years requested. Development and Innovation Goal: Up to 3 years. Efficacy and Replication Goal: Up to 4 years, follow-up studies - up to 3 years. Scale-up Evaluation Goal: Scale-up Evaluation projects - up to 5 years, follow-up studies - up to 3 years. Measurement Goal: Up to 4 years.

Eligible Applicants: Eligible applicants include, but are not limited to, non-profit and for-profit organizations and public and private agencies and institutions, such as colleges and universities.

Summary: The Institute intends for the research program on Mathematics and Science Education (Math/Science) to contribute to the improvement of mathematics and science knowledge and skills of students from kindergarten through Grade 12. The long-term outcome of this program will be an array of tools and strategies (e.g., curricula, programs, assessments) that have been demonstrated to be effective for improving or assessing mathematics and science learning and achievement. The Institute intends for the Math/Science program to support research on curricula and instructional approaches intended to improve mathematics and science proficiency from kindergarten through high school. The Institute is primarily interested in interventions that address core mathematics and science content (e.g., Math: addition/subtraction, fractions, algebra, geometry, trigonometry, calculus; Science: physical science, earth science, life science). The Institute encourages applications focusing on the development or evaluation of instructional approaches to improve the mathematics and science performance of K-12 students. The Institute also encourages researchers to explore malleable factors (e.g., children's abilities and skills, instructional practices) that are associated with better mathematics or science outcomes, as well as mediators and moderators of the relations between these factors and student outcomes, for the purpose of identifying potential targets of intervention. To improve mathematics and science skills, instruction may need to be tailored to the sources of difficulty that individual students experience. An ideal learning environment might involve regular and frequent assessment of skills and the possibility of individualized instruction for students based on the particular source of their difficulties. The Institute is currently funding the development and validation of formative assessments in mathematics and science that are intended to provide teachers with timely data on students' progress that can inform subsequent instruction. The Institute invites proposals to develop and validate new assessments of, as well as proposals to validate existing measures of, mathematics or science learning to be used for instructional purposes.

Detail Information: http://ies.ed.gov/funding/pdf/2012_84305A.pdf
http://ies.ed.gov/funding/ncer_rfas/mathsci.asp