

**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:** Improvement of mathematics and science knowledge and skills of K-12 students.

**Release and Expiration:** Release Date: April 23, 2013.

**Application Deadline:** September 4, 2013. Letter of Intent Due Date: June 6, 2013.

**Amount:** Exploration Goal: Secondary data analysis or meta-analysis - The maximum award is \$700,000\*. Primary data collection - The maximum award is \$1,600,000\*. Development and Innovation Goal: The maximum award is \$1,500,000\*. Efficacy and Replication Goal: Efficacy and replication evaluations - The maximum award is \$3,500,000\*; follow-up studies - The maximum award is \$1,200,000\*. Effectiveness Goal: The maximum award for an Effectiveness project is \$5,000,000\*. The maximum award for an Effectiveness Follow-Up project is \$1,500,000\*. Measurement Goal: The maximum award for a Measurement project is \$1,600,000\*. \*(total cost = direct + indirect costs)

**Length of Support:** Exploration Goal: Secondary data analysis or meta-analysis - Up to 2 years; primary data collection - Up to 4 years. Development and Innovation Goal: Up to 4 years. Efficacy and Replication Goal: Up to 4 years; follow-up studies - Up to 3 years. Effectiveness Goal: 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 Mathematics and Science Education (Math/Science) topic supports research on the improvement of mathematics and science knowledge and skills of students from kindergarten through high school. The long-term outcome of this research will be an array of tools and strategies (e.g., curricula, programs, assessments) that are documented to be effective for improving or assessing mathematics and science learning and achievement. The Institute continues to encourage researchers to explore malleable factors that are associated with better mathematics or science outcomes for the purpose of identifying potential targets of intervention. The Institute invites applications to develop and validate new assessments of, as well as applications to validate existing measures of, mathematics or science learning. The Institute has supported research under three of the four disciplinary domains covered in the Next Generation Science Standards (NGSS) (physical science, life sciences, and earth and space sciences). The Institute welcomes applications under the fourth domain (engineering, technology, and the applications of science) as long as they link the factor, intervention, or assessment being examined to students' mathematics and/or science learning and include student learning outcomes in mathematics and/or science (e.g., Math: addition/subtraction, fractions, algebra, geometry, trigonometry, calculus; Science: physical, earth, or life science). The Institute encourages research in all four disciplinary domains, but the primary student outcomes examined must include mathematics and/or science learning. The Institute is interested in supporting several types of research related to the Common Core State Standards and the Next Generation Science Standards. This research may take many forms including: (1) exploratory research studies examining the association between the Standards' content and/or and student outcomes; (2) exploratory research studying the Standards' learning progressions and trajectories; (3) development of new interventions aligned with the Standards and their evaluation in regards to their alignment with the Standards, impacts on instruction, and impacts on student academic outcomes; and (4) development of formative assessments to help teachers monitor students' progress toward meeting the Standards' end-of-year benchmarks.

**Detailed Information:** [http://ies.ed.gov/funding/pdf/2014\\_84305A.pdf](http://ies.ed.gov/funding/pdf/2014_84305A.pdf)