

Grant Title: INNOVATIVE TECHNOLOGY EXPERIENCES FOR STUDENTS AND TEACHERS (ITEST)

Funding Opportunity Number: Funding Opportunity Number: 09-506. CFDA Number(s): 47.076. NSF 09-506.

Area of Research: Effectively interest and prepare students as participants in the science, technology, engineering, and mathematics (STEM) workforce of the future.

Release and Expiration: Release date: November 19, 2008.

Application Deadline: ITEST - February 20, 2009 and February 12, 2010. Letter of Intent ITEST - January 12, 2009 and January 19, 2010. Innovation through Institutional Integration (I3) - February 24, 2009 and August 25, 2009.

Amount: Research projects: Up to \$1.5 million. Strategies projects: Up to \$1.2 million. Scale-up projects: Up to \$2.5 million. Conferences and Workshops projects: Up to \$250,000. Innovation through Institutional Integration (I3) projects: Up to \$250,000 per year. Estimated Number of Awards: ITEST - 25 to 40 in each year. Innovation through Institutional Integration (I3) - Up to 12 continuing awards.

Length of Support: Research projects and strategies projects: Up to three years. Scale-up projects: Will range from three to five years. Conferences and Workshops projects: Up to one year. Awards for Innovation through Institutional Integration (I3) projects: Up to five years.

Eligible Applicants: Institutions of higher education (including two- and four-year colleges).

Agency/Department: National Science Foundation, Directorate for Education & Human Resources, Research on Learning in Formal and Informal Settings.

Summary: The ITEST program responds to current concerns and projections about the growing demand for professionals and information technology workers in the U.S. and seeks solutions to help ensure the breadth and depth of the STEM workforce. ITEST projects may include students or teachers, kindergarten through high school age, and any area of the STEM workforce. Projects that explore cyberlearning, specifically learning with cyberinfrastructure tools such as networked computing and communications technologies in K-12 settings, are of special interest. Four types of projects are invited: Research projects may conduct efficacy and effectiveness studies of intervention models, conduct longitudinal studies of efforts to engage students in the STEM areas, develop instruments to assess engagement, persistence, and other relevant constructs of student motivation, or conduct studies to identify predictors of student inclination to pursue STEM career trajectories. The program is especially interested in projects that target students from groups that are underserved and underrepresented in STEM and ICT-intensive careers, including those residing in rural and economically disadvantaged communities. Strategies projects design, implement, and evaluate models for classroom, after-school, summer, virtual, and/or year-round learning experiences for students and/or teachers. The strategies are intended to encourage students' readiness for, and their interest and participation in, the STEM workforce of the future. Scale-up projects implement and test models to prepare students for information technology or the STEM workforce of the future in a large-scale setting such as at state or national level. A scale-up project must be based on evidence of demonstrated success from an existing strategy for students or teachers. Conferences and Workshops target STEM educators, educational researchers, and evaluators. Conferences or workshops must be designed to bring together individuals with expertise in technology and STEM education, career development, cognitive science, sociology, anthropology, science fields, and other communities that are invested in STEM workforce careers. Evaluation approaches for innovative STEM and ICT workforce motivation, preparation, and development models are also sought. Innovation through Institutional Integration (I3) projects enable faculty, administrators, and others in institutions to think and act strategically about the creative integration of NSF-funded awards.

Detail Information: <http://www.nsf.gov/pubs/2009/nsf09506/nsf09506.pdf>