Project Information

Please tell us about yourself and give us a brief abstract of your project.

Name of Project ____________________________ Gateway to Technology and Engineering

Type of Project (e.g., Professional Development) District Professional Development

Project Manager:

Name ____________________________ Yvonne M. Spicer, Ed. D.

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____________________________________ at the Museum of Science

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PreK-16 Regional STEM Network affiliation (check one): ______ X ______ Boston

Description of Project:

The National Center for Technological Literacy® (NCTL®) at the Museum of Science, Boston, request a one year @ Scale grant for $200,000 to support its Gateway to Technology and Engineering (Gateway) project. Gateway will target students interested in STEM fields but only nearly prepared.

The objectives of the Gateway program are to: 1) Increase the number of Massachusetts school districts addressing high-quality standards-based curriculum and assessment in STEM education, to provide students with increased access to rigorous and engaging STEM coursework, and to target students interested in STEM fields but only nearly prepared; 2) Recruit a new cohort of school districts annually to attend the Gateway Institute from Massachusetts as well as support the 80 districts that have participated in the Gateway project to date.; 3) Target school districts that have significant high-needs populations to participate in the successful integration of technology and engineering in the core curriculum; and 4) Increase the number of students, especially those who are high-needs, to pursue post-secondary education and career opportunities in STEM fields.

Major Gateway project activities are: 1) three-day institutes in which district teams participate in district-wide planning to implement technology/engineering in their school districts; and 2) Regional Leader institutes to develop “program experts” who will then co-lead informational sessions and institutes in their geographic regions, leading to an exponential increase in the number of districts exposed to the project and its goals. Other supporting activities include: in-district visits, progress sessions, seminar sessions and annual symposia.

Expected outcomes of the project include: 1) add 16 new school districts in Year 1, 25% of which are high-needs, implementing high quality standards and assessments for technology and engineering; 2) increase student achievement in STEM among the Gateway districts, as measured by MCAS data and SAT STEM indicators and 4) facilitate connections between the community, industry, higher education and K-12 school districts.