GE Fund – Math Excellence Initiative

Goal areas of the activity:
- Improving Teacher Quality
- Supporting High Quality Research
- (Funded efforts also relate to Engaging the Public and Increasing Public Understanding, but the other two areas are primary)

Brief Summary and Purpose:
Math Excellence, launched in 2001, seeks to strengthen and expand the pipeline of under-represented minority students and women in the “quantitative disciplines” of engineering, information technology, finance, accounting, and economics – through efforts that:
- Strengthen teaching and learning of under-represented students in mathematics, from middle school through high school (our research showed that precollege math preparation is the single largest barrier to under-represented students' participation in these fields). Increase students’ awareness of and motivation to pursue careers in these fields through case studies, industry context, and local GE volunteers and partnerships
- Build a continuum of academics and support to students from middle school into college, through university/k-12 partnerships
- Integrate practices into school and university structures and policies to achieve long-term improvements, rather than maintaining them as separate “programs”
- Rigorously measure impact on student performance in mathematics, including participation in a required third-party evaluation system for the overall GE Fund initiative.

The framework of this initiative is based in a literature review commissioned by the GE Fund to identify what practices with evidence of effectiveness in increasing the participation and success of under-represented students. The research basis, “Upping the Numbers,” can be found on the GE Fund website, www.gefund.org, under “Resources/Publications. To date, over $10 million has been committed through 31 grants.

Accomplishments/Results
Since the first grants in this initiative were made in late 2001, most do not have definitive impact data to date. However, some are showing great promise. For example, one of the grants, which is funding accelerated math courses, intensive teacher training, and community outreach, has more than doubled the number of students in calculus prerequisite classes in its first year. The third-party, cross-project evaluation funded by the GE Fund will generate data on the projects and contribute to the overall knowledge base in the field.

Plans for the next 12 months
- Continued review of proposals and awarding of grants.
- Building partnerships with College Board and other national associations.
- Review of impact data to date, to refine and focus the initiative.