



SPIE

Connecting minds. Advancing light.

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May 4, 2011

The Honorable Kirsten Gillibrand
United State Senate
Washington, DC 20510

Dear Senator Gillibrand:

On behalf of SPIE, the International Society for Optics and Photonics, I am writing to express our support for the proposed *Engineering Education for Innovation Act (E2 Act)*, which will provide planning, implementation, and evaluation grants for state partnerships and school consortia to integrate grade appropriate engineering curricula and content into classrooms across the country. Engineering know-how is key to innovation and solving technological problems, yet students and teachers know very little about the process or the many career possibilities.

SPIE is the largest international not-for-profit society in optics, photonics and imaging. Together with our 16,000 individual members and 450 corporate members, the Society seeks to build a better world with light through scientific education and innovation.

The goals of this bill include increasing: student achievement in STEM subjects; knowledge and competency in engineering design skills; the number of teachers prepared to teach engineering; and, the number and diversity of students planning to pursue a career in engineering.

The bill will allow for grantees to amend standards, assessments, and curricula frameworks to include engineering content, enhance teacher preparation and professional development to include engineering content and pedagogy, recruit qualified teacher candidates, create distance learning modules, and invest in afterschool programs in engineering.

Many espouse the need for improved STEM learning and graduates but few programs exist to advance K-12 engineering and technological literacy. This bill will advance K-12 engineering education and allow for extensive evaluation to inform possible expansion.

SPIE greatly appreciates your leadership and commitment to enhancing education in America. We stand ready to assist as this bill moves through the legislative process.

Sincerely,

Dr. Eugene G. Arthurs
SPIE CEO, eugene@spie.org

R.A. Lieberman
Director of SPIE