

## A Transformation Proclamation

# Alliance for Promoting Innovation in Engineering Education

April 1, 2009

**Background.** Traditionally, engineers conceive, design, produce, sustain, and recycle the complex artifacts, systems, services, and processes integral to modern life. The early twenty-first century is a fast-paced time in which commerce is increasingly global and interconnected, science and technology advance with dizzying speed, work is performed in complex organizational settings requiring the effective, efficient integration of disparate disciplines, and societal impact and sustainability are critically important. These challenges and changes demand a critical reexamination of how, and to whom, engineering is taught, and although calls for substantial transformation have been many, investments from funding sources, public and private, have been substantial, and progress has been made, widespread concern remains that the pace, degree, and diffusion of educational transformation at present is insufficient to satisfy the imperatives of our challenging era.

**Alliance.** Inasmuch as (1) the transformation of engineering education is a problem that requires negotiation between, agreement among, and implementation by faculty members and other actors in a variety of organizational settings, (2) the organizational processes involved in making those decisions are a major obstacle to effective transformation, and (3) there are many stakeholders within and outside the engineering academy, including students, alumni, and corporate and organizational friends, whose voices and views would benefit the transformation process, **therefore** this proclamation calls for the formation of a grassroots alliance of likeminded individuals called the *Alliance for Promoting Innovation in Engineering Education* (hereafter the Alliance or APIE<sup>2</sup>).

**Purpose.** The purpose of APIE<sup>2</sup> is to bring together and organize individuals who strongly support substantive, principled, and responsive transformation of engineering education by actively encouraging widespread, rapid, effective, and persistent collaboration to (a) promote prompt and effective action by the engineering academy and its supporting institutions, (b) share best curricular, content, teaching/learning, pedagogy, organizational and cultural practices, templates, and materials immediately, vigorously, and openly, (c) bring voices from stakeholders within and outside the academy into the processes of change to better align engineering as taught with engineering as practiced, and (d) assess the degree and effectiveness of national and institutional change as a way of drawing attention to the importance of engineering education transformation.

**Signers.** Any individual who supports the goals articulated above is eligible to be a co-signer of this proclamation. The initial signers are drawn from among the attendees of the Summit on the Engineer of the Future 2.0 (EOTF2.0) held at Franklin W. Olin College of Engineering (hereafter Olin) on 1 April 2009 and co-sponsored by Olin and the University of Illinois at Urbana-Champaign (hereafter Illinois) as part of the Olin-Illinois Partnership (hereafter OIP). Thereafter, signers to the document will be gathered

on the APIE<sup>2</sup> web site ([www.apie2.org](http://www.apie2.org)), and all signers will be posted on that site. Signing the proclamation is intended as a public act of support and does not entail any financial obligation or dues.

**Governance.** As the Alliance is a formal outgrowth of the Olin-Illinois Partnership and the EOTF2.0 event, the initial governance APIE2 comes from the advisory board of the EOTF2.0 chaired by institutional leaders of the OIP. At the soonest possible convenience, a set of bylaws will be drawn up formalizing the governance of the Alliance. It is intended that Alliance will maximize action and collaboration aimed at educational transformation, and utilize modern digital media, sharing, and social networking technology to the fullest extent.

Signed this 1<sup>st</sup> day of April 2009 in Needham, Massachusetts