

Guest Editorial

“Today, we live in an age in which national borders no longer present restraints. We live in a global village and this applies most particularly to engineers and the engineering study programmes (FEANI address at opening session of the 7th WFEO World Congress on Engineering Education in Budapest/Hungary on 4 March 2006 – FEANI is the Fédération Européenne d’Associations Nationales d’Ingénieurs or European Federation of National Engineering Associations). This special issue of the **International Journal of Engineering Education** is the first of two issues dedicated to trends in pre-college engineering and technology education. The pre-college arena was selected because of the critical need to increase the number of people choosing careers in engineering and technology. In the book **Rising Above The Gathering Storm: Energizing and Employing America for a Brighter Economic Future**, produced by the Committee on Prospering in the Global Economy of the 21st Century: An Agenda for American Science and Technology, National Academy of Sciences, National Academy of Engineering, Institute of Medicine, one recommendation was to create “*K–12 curriculum materials modeled on a worldclass standard*: Foster high-quality teaching with worldclass curricula, standards, and assessments of student learning. Convene a national panel to collect, evaluate, and develop rigorous K–12 materials that would be available free of charge as a *voluntary* national curriculum. The model for this action is the Project Lead the Way pre-engineering courseware.

Engineering and technology innovators of the future will solve the important problems in the world. Engineering and technology can also be used in pre-college education to supply context to improve mathematics and science education. University educators in engineering and technology programs are becoming more engaged in pre-college programs. For example, the American Society for Engineering Education began a K-12 Engineering Education Division and hosts a K-12 Center web site at <http://www.asee.org/k12/index.cfm>. There are many examples, too numerous to credit here, of other such projects.

In this special issue and the subsequent second issue we have collected examples of some showcase programs that are attempting to create such pre-college materials in the United States and around the world. You will find contributions aimed at all grade levels and from five different countries in this first special issue. We hope you find these articles stimulating and we look forward to your comments on pre-college engineering and technology education.

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