

Carnegie Mellon  
**ENGINEERING**

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Something to Think About:

# Is America Falling Behind?

**On December 2, a panel of government, industry and academic authorities met at the Engineering Society of Western Pennsylvania in downtown Pittsburgh. They along with nearly 75 members of the CIT community converged to discuss ways to ensure that the U.S. educates enough first-rate engineers to meet our future needs and reinforce our global lead in innovation.**

The American Society for Engineering Education reports that in 2004 less than 5% of the bachelor's degrees awarded in the U.S. – around 73,000 – were in engineering. China reports that in 2004 it granted more than 600,000 bachelor's and subbaccalaureate engineering degrees. While the number of engineers that China produces is debatable, statistics still raise questions: How can we entice American students to study engineering? Ten or 20 years from now, will the U.S. have enough creative engineers who possess say, business skills in addition to high-level technical abilities?

"The new focus is no longer on technology itself," says Pradeep Khosla, dean of the College of Engineering. "I believe that broadening engineering education by enhancing technical course requirements with breadth requirements, such as courses in management, policy, finance and entrepreneurship will serve our students well."

During the session, the experts and audience explored academic issues – how do we improve science and math education in K-12 and encourage U.S. students to pursue engineering degrees – and industry concerns – what effect does global competition have on the job outlook for U.S. engineers?

While the session did not provide any solutions to the challenges facing American engineers – matter of fact, there was healthy debate as to what the challenges are – the session did, nonetheless, raise to the forefront issues we must consider if CIT is to advance engineering education and subsequently, contribute to our nation's and the world's social and economic well-being.

In addition to Khosla, members of the panel included: Bob Black, deputy executive director of The American Society for Engineering Education; Peter Faletta, assistant director of the office of science for workforce development for teachers and scientists for the Department of Energy; Alex G. Sciulli, senior vice president at Mellon Financial Corp.; and William J. Holstein, panel moderator and editor-in-chief of CEO Magazine.

Tell us what you think.

**Do you think we're falling behind?**

**We want to hear from you.  
Please direct letters to:**

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Send email to  
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Please include your name and  
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