

## **Create the right skill sets through professional co-op**

Is the United States producing the right skills sets in preparing innovators and engineers?

"It's been a topic of interest for some time," says Kettering University Provost and Vice President for Academic Affairs Michael Harris.

The results of a national survey of employers' ratings of the abilities of recent grads in 12 specific skill areas indicated that employers are not giving high marks to the skills of graduates either. The survey, conducted by Peter D. Hart Research Associates for the American Association of College and Universities, asked employers to rate new hires in the skills that represent a growing consensus regarding the abilities necessary to succeed in the 21st Century workforce.

Harris said of the employers surveyed in the AACU survey, 83 percent said that they would like to see evidence of graduates' ability to apply college to a "real-world setting" through faculty assessments of internship projects and community-based work. The Accrediting Board for Engineering and Technology has recognized this challenge and has begun to take steps in addressing this need for change. The new ABET standards, known as EC2000, ask programs to set clear educational objectives, to collaborate with industry, to conduct outcomes assessment and feed data from these assessments back into the program for continuous improvement.

"The challenge we face is further increased as a result of the downsizing of manufacturing operations in some of our largest corporations, coupled with the offshore movement of low-skilled jobs," Harris said. "This has created a public misconception that technical fields like engineering, and even the sciences, are no longer good areas for intellectual and career pursuit thus contributing to the very real decline in students seeking engineering degrees. Ironically, the same corporations that are downsizing are also experiencing unprecedented shortages of the workforce skills necessary to carry out their product strategies globally."



**Dr. Michael Harris**

Harris said the challenge requires a different educational paradigm and close collaboration between higher education and business and industry.

"Kettering University offers a learning model that combines two distinct learning environments -- an on-campus academic experience and a cooperative education work experience -- where students gain knowledge and skills relevant to working and living in a complex world," Harris said. "A Kettering education combines cutting-edge theory and practical application. The co-op experience is a transformative process through which students become increasingly acclimated and socialized to the corporate environment as they increase their knowledge-base and theoretical understanding of their discipline."

Co-op education at Kettering, with more than 600 co-op sponsors, provides the opportunity for employers to take part in that transformative process and create the new hires they seek. "We can do so by increasing the cooperation and coalition building between higher education and industry, working together toward a common goal," Harris added.

To read more about Kettering's co-op program, visit [www.kettering.edu](http://www.kettering.edu).

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