

# U.S. technological leaders can't be smug during Information Age

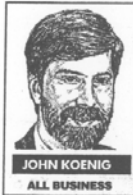
Last weekend, students from the University of Central Florida went to Atlanta for an international computer-programming competition. They returned having learned something about the nature of technological advantages in the global Information Age.

In 1987, a UCF team finished second in the International Collegiate Programming Contest World Finals, held by the Association for Computer Machinery. This year, UCF's team tied for 29th place.

The difference? In part, the arrival of stiff competition from abroad.

Calling the 1987 event the "world finals" was something of a misnomer. Most of the contestants were from colleges and universities in the United States and Canada. And even when more foreign teams began entering the competition later, their programming skills were hardly on par.

Contest director William Poucher, a



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ALL BUSINESS

computer science professor at Baylor University in Texas, remembers talking with one of his counterparts from an eastern European university in 1991. The European professor told him most computer-science students there

did not even get to work on computers in their first two years at school because the universities didn't have enough machines.

But computers soon became more affordable. At the same time, the Internet became widely accessible, giving people around the globe a better way to tap into state-of-the-art information.

At last year's finals, foreign teams took seven of the top 10 spots.

This year, the winning team was from Charles University of the Czech Republic, and foreign schools captured nine out of 10 top places. The best U.S. finisher, a team from the Massachusetts Institute of Technology, placed fourth.

I remember a decade ago asking a computer company executive about the inroads Asian firms were making into the computer-chip market, which was once monopolized by the United States.

He said Asians would capture most of the mass-production chip market and become strong competitors in personal computers because those were areas in which they could copy U.S. technological developments. But he predicted the United States would retain its lead in software development because that field requires innovative skills at which Americans excelled.

Americans still dominate software development. But they no longer monopo-

lize the field.

The harsh reality of the Information Age is that technological advantages are not sustainable for long. Knowledge is too easily transported.

Today's superior skills can be readily copied tomorrow and surpassed the next day.

The only way to sustain a technological lead is with ever-increasing knowledge and skills.

But the United States appears to be doing a lousy job of equipping its young people for this arduous challenge. As the international computer programming competition was going on in Atlanta, a new study was released showing American students rank 21st in the world in their knowledge of science and math.

As Poucher told me a couple of days ago, "If Americans aren't serious about being industrious [in learning], they're going to end up being spectators to the

rest of the world."



None of this takes away from the outstanding performance of the UCF programming students, or of a team from the Florida Institute of Technology in Melbourne, which also placed 29th.

The UCF and FIT computer-science students proved themselves to be among the most able programmers in the world.

If we truly value educational achievement, we'll cheer these computer whizzes as loudly as we do UCF's football team.

*John Koenig's column appears Sunday and Thursday in Business and Monday in CFB. He also can be heard at 5:30 p.m. Monday on 90.7 FM (WMFE). He welcomes your comments. Telephone: (407) 420-5352. E-mail: jkoenig@orlandosentinel.com*