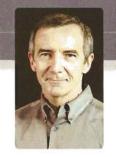


EDITORIAL

Engineering students who don't go into engineering



When I was growing up in the Sputnik era, engineering jobs seemed to pay pretty well. At least that was the impression I got talking to the few engineers who happened to show up at our school for career days. And engineers appeared to do okay compared with the other professionals I happened to run into back then. Those were times when physicians, attorneys, and stockbrokers did not live in McMansions. In fact, the idea that engineers were well remunerated was one of the things that drew me and a lot of other kids I knew into the field

I bring this up because it has seemed to me that more-recent graduates can't cite good pay as a reason for pursuing technical careers. Now a study by researchers from Rutgers and Georgetown University seems to confirm this view. They sifted through data from the Dept. of Education and the National Bureau of Labor Statistics to come up with this surprising conclusion: Over the past three decades, U.S. colleges and universities have graduated about three times more scientists and engineers than are employed in the science and engineering workforce. And despite a lot of hand-wringing to the contrary, there is no evidence of a long-term decline in the proportion of American students with the right training and qualifications to pursue careers in technical fields.

What has been happening, they say, is that a lot of the students with math and science skills don't go into those kinds of jobs. The trend began accelerating in the 1990s and is most apparent among kids who had the highest scores on their SAT or ACT exams. In fact, only about 45% of the kids who graduated with technical degrees in the late 1990s went into technical jobs or continued to pursue advanced technical degrees.

This is all the more interesting because on average, say researchers, there has been no real change since the 1970s in the proportion of high-school graduates who go on to enroll in or complete science or technical fields of study. And though you might expect the best students in technical fields to be those most likely to stick with technical careers, the reverse is true. Top performers, say researchers, are the ones most likely to leave for greener pastures.

In fact, the picture didn't change much after graduation. When researchers looked at who was most destined to stay employed in a technical field 20 years after earning a degree, they found the best academic performers were just as likely as anyone else to bail out for something else.

These results have a lot to say about the current debate over the teaching of science and technology in secondary schools. "Arguments that students are not prepared for majors and careers in STEM (science, technology, engineering, and mathematics) are not supported by this data," the researchers say.

The FIRST Robotics competition, a program designed to get kids interested in technical careers, wound up last month. If the study's results are any indication, a lot of those kids engaged in FIRST will also be smart enough to go where the money is when it comes to choosing their vocations. — *Leland Teschler, Editor*

AND SPEAKING OF BEING SMART...

To date, players have answered a total of 227,456 questions in the World's Smartest Design Engineer game. That's a lot of brain power. We are impressed. And you're looking fairly smart with a correct response about 60% of the time. The category with the highest percentage

of correct answers is CAM/Manufacturing & Assembly. Easy questions or just smart engineers? You be the judge! Check it out at www.smartestdesignengineer.com.