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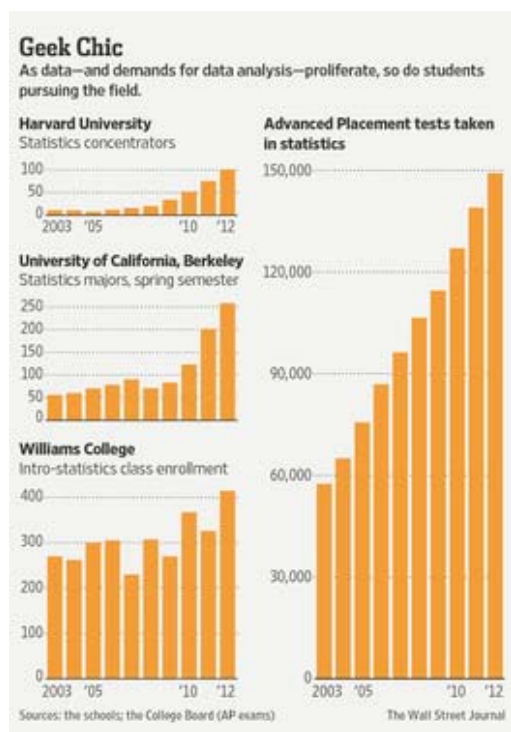
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Data Crunchers Now the Cool Kids on Campus



By CARL BIALIK

On campuses, at cocktail parties and in American corporations, statisticians are walking a bit taller these days.



The explosive growth in data available to businesses and researchers has brought a surge in demand for people able to interpret and apply the vast new swaths of information, from the analysis of high-resolution medical images to improving the results of Internet search engines.

Schools have rushed to keep pace, offering college-level courses to high-school students, while colleges are teaching intro stats in packed lecture halls and expanding statistics departments when the budget allows.

When asked for his occupation, "even 20 years ago I would try to say something other than statistics," said Richard De Veaux, professor of mathematics and statistics at Williams College in Williamstown, Mass. Today, though, "It's just a great time to be a statistician."

Growth has been spurred by both supply and demand. More students arrive in college with an interest in statistics thanks to the launch of an Advanced Placement examination in the subject in 1997. The number of high-school students taking the college-level test has more than tripled since 2001, to 149,165 last year, according to the College Board, which administers the examination.

"We see students coming in as freshmen saying they want to be statisticians," said Robert Gould, who is on the statistics faculty at the University of California, Los Angeles. "That was unheard-of

before the AP test."

In a still-soft jobs market, rising demand for statisticians also has spurred interest in the field. There were 28,305 postings for jobs in statistics, analytics and, in the trendy phrase, "big data" at the jobs website icrunchdata last month, up from 16,500 three years earlier, according to Todd Nevins, a site co-founder.

Bethany Vohlers, a junior double-majoring in statistics and computer science at North Carolina State University, said, "I see things in the news all the time about statisticians and analysts being in high demand," adding that "I'll be on the front end of this wave."

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Universities have been turning out more students with stats degrees, though the totals remain small. U.S. universities conferred nearly 3,000 bachelor's, master's and doctoral degrees in statistics in the 2010-2011

academic year, with increases of 68%, 37% and 27%, respectively, from four years earlier, according to the federal National Center for Education Statistics. (The numbers don't include degrees in biostatistics and business statistics.)

Dan Thorpe, senior director for analytics and global customer insights at [Wal-Mart Stores Inc.](#), attributes the surge in stats jobs not only to the growth in data available to firms such as Wal-Mart about customers' behavior and preferences, but also to increased competition in the field. That has pushed companies to get better at data analytics than their rivals, much as awareness of analytics has driven competition among statistically savvy executives in baseball.

Several also point to a comment by [Google Inc.](#) chief economist Hal Varian, published in January 2009, as a key moment in the cultural shift toward statistics. Dr. Varian told the McKinsey Quarterly, "I keep saying the sexy job in the next 10 years will be statisticians."

He expects the demand for statisticians will persist. "Data availability is going to continue to grow," Dr. Varian said. "To make that data useful is a challenge. It's generally going to require human beings to do it."

But upward trends don't necessarily continue. Joe Blitzstein, professor of statistics at Harvard University, fears some of the buzz is bound to abate. "I do think there's too much hype about big data," he said.

Prof. Blitzstein expects, however, to see a slowing of growth rather than a burst bubble—in part because the trend isn't dependent on one industry, but on an entire economy seeing the value in data. "We're not seeing lots and lots of statistics startup companies," he said. "What we're seeing is every company out there seeing the importance of working intelligently with data."

There have been growing pains. Some executives in industry seeking to hire statisticians say academic departments are doing a good job teaching statistical tools but could do better at teaching ways to apply those tools.

"The bulk of the people coming out [with statistics degrees] are technically competent but they're missing the consultative and the soft skills, everything else they need to be successful," Dr. Thorpe said.

Also, some departments don't have the budget to add faculty or classes. And departments with the funds to grow can find it difficult to attract qualified candidates. "Finding Ph.D.s in statistics

who are willing to devote themselves to teaching is getting harder and harder," Prof. De Veaux said. "Everybody wants them."

Despite statisticians' newfound sexiness, not everyone wants to be one. Ms. Vohlers, at North Carolina State, said she still occasionally gets negative reactions when she tells classmates her major. "They look at me funny and say, 'Stats? I hate it,' " she said. "It's a little bit reassuring. It means I'll have a little less competition in the job market."

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