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High Demand for Science Graduates Enables Them to Pick Their Jobs, Report Says

By Paul Basken

A couple of years ago, a pair of researchers at Georgetown University and Rutgers University concluded that, contrary to widespread perception, the United States [produces plenty of scientists and engineers](#).

The problem, wrote Harold Salzman of Rutgers and B. Lindsay Lowell of Georgetown, is that fewer than half of all college graduates in science and engineering actually take jobs in those fields. So instead of pressing colleges to produce more science graduates, [they wrote](#), the country needed only to persuade new graduates to take the right jobs.

A [study](#) released on Wednesday by another Georgetown research team suggests, however, that lot of persuasion may be necessary.

Among its findings, the study, from the Georgetown University Center on Education and the Workforce, shows that science and engineering graduates enjoy high demand in a variety of fields, with a bachelor's degree in a science major commanding a greater salary than a master's degree in a nonscience major.

And, the new report says, English-speaking science graduates are much less likely than foreign-born science graduates to take a job in a traditional science career, which American graduates often view as too socially isolating.

"It sort of fits the stereotype, frankly," said the report's lead author, Anthony P. Carnevale, a research professor at Georgetown who serves as director of the Center on Education and the Workforce.

In recent months, the center has also issued reports that analyzed [students' future earnings](#) based on [their undergraduate majors](#), and that tied [lifetime earnings](#) as much to [students' choice of occupation](#) as to their degrees.

The 2009 study by Mr. Salzman, a professor of public policy on Rutgers's New Brunswick campus, and Mr. Lowell, director of policy studies at Georgetown's Institute for the Study of

International Migration, used 30 years of federal job data to show that American colleges produce far more talented graduates in the sciences than is required by the industry for which they've been specifically trained. But there is a labor shortfall, the professors said, because so many science graduates take jobs in areas such as sales, marketing, and health care.

The training and expertise of science graduates give them that flexibility, Mr. Carnevale found in his study. Sixty-five percent of students earning bachelor's degrees in science or engineering fields earn more than master's-degree holders in nonscience fields do, the report says. And 47 percent of bachelor's-degree holders in science fields earn more than do those holding doctorates in other fields.

A liberal-arts education is often regarded as giving a graduate a wide degree of flexibility in a fast-changing job market. The wage data may now be showing that a narrower education in a scientific field offers similar benefits, Mr. Carnevale said. "The technical foundation," he said, "is worth even more than we thought."