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## Energy's Latest Target: Women

Colleges designed to train workers for hydraulic fracturing and drill sites set their sights on recruiting women.



Sultana Holcomb worked at fracking and drilling sites as an intern for Anadarko Petroleum Company in Carrizo Springs, Texas.

By [Alan Neuhauser](#) Dec. 1, 2014 | 12:01 a.m. EST + More

## ENERGY OF TOMORROW

After two decades changing diapers, nanny Shelly Alexander was ready for a change herself.

"I wanted a job I could use my brain for," says Alexander, who lives in Spring Valley in northeast Pennsylvania. "I had a great job, but I had no retirement, I had no benefits. It was just time."

She tried working for a local gym. She made meal plans for friends, flirting with the idea of becoming a dietitian. But at age 40, four years of college to get the degree she'd need for that job held little appeal. Plus, in the past decade, a far more lucrative opportunity had moved into the area: hydraulic fracturing.

Fracking and horizontal drilling have unleashed an energy extravaganza in the Midwest and mid-Atlantic. American and international energy companies are churning out billions of barrels of oil and gas and attracting thousands of workers eager for entry-level paychecks of \$50,000 to \$60,000. In fact, in boom states like North Dakota, demand for workers is outstripping supply, as jobs remain unfilled for lack of qualified workers.



Workers drill a gas well Oct. 3 in northeast Pennsylvania

"We need more women, more workers," says Randy Pacheco, dean of the San Juan College School of Energy in New Mexico. "The energy companies want to hire them. Whether it's Chevron or BP or Conoco, they're looking for them. They're just looking for responsible, hardworking people."

Regional colleges in boom towns from Pennsylvania to New Mexico have launched one-year certificate and two-year associate programs to train workers – with students' educations often underwritten by the very energy companies that hope to hire them.

"A lot of the companies are struggling to field a workforce," says Rick Marquardt, executive director of Lackawanna College's School of Petroleum and Natural Gas, which opened in Dimock, Pennsylvania, the heart of the country's fracking boom. "We get calls for interviews from [energy] companies in Pittsburgh, Houston."

The reason, he says: "When our students come out, they're ready to work."

That sounded just fine to Alexander, who heard about the program through a friend last year. Within months, she'd bought herself steel-toed boots, a pink hard hat, and begun driving 90 minutes, each way, to Lackawanna's campus three times a week to earn an associate's degree in Petroleum and Natural Gas Measurement, one of four programs offered by the School of Petroleum and Natural Gas.

"I'm going to do something men do, and I'm going to do it better," she says. "That's what I've done my whole life."

Alexander is one of 18 women enrolled at the School of Petroleum and Natural Gas, and the only woman enrolled in her particular program. All told, women make up 14 percent of the 129 students at the school. About 12 percent of the student body are minorities, mostly Latinos and Southeast Asians.

For \$12,800 in tuition a year, they'll spend two years immersed in the theories and science of oil and gas drilling, gaining the skills they need to work at fracking and drilling sites as well tenders, compression engineers, mud trackers and more. The goal is to produce workers, not analysts: Just about every student lands a summer internship at a fracking or drill site, and the job placement rate upon graduation is about 90 percent.





**Rick Marquardt is executive director of Lackawanna College's School of Petroleum and Natural Gas, which has launched a support and advisory group for female students and graduates.**

"It's all science: physics, math computers," Marquardt says. "We fill that gap between all the vo-tech schools and the four-year programs. We're not interested in teaching them how to derive an equation."

What they are interested in, though, is attracting more women to the program.

Geared toward an industry where the dorms are known as man-camps, and where the signing bonuses or other perks can include new pickup trucks – where most of the jobs, in other words, are overwhelmingly held by men – it's a daunting challenge. A March 2014 study commissioned by the American Petroleum Institute, a trade group representing the oil and natural gas industry, found that women make up 19 percent of the workers in the oil and gas and petrochemical sectors. Women account for nearly half the country's workforce overall.

On drilling rigs, production wells and fracking sites, that share sinks to about 15 percent, and the number is actually expected to keep falling.

Yet, says Lackawanna College president Mark Volk says, "This is a field that is open to women. We need to ensure they know there are opportunities for men and women."

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Alan Neuhauser is an energy, environment and STEM reporter for U.S. News & World Report. You can follow him on [Twitter](#) or reach him at [aneuhauser@usnews.com](mailto:aneuhauser@usnews.com).

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