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Education

Recruiting Tech Talent in High School

New Hampshire Employer, Hungry for Engineers, Helps Create a Program to Build Skills Locally

By

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Manchester High School West student Haley Nalen, 14, facing center, works with fellow students during a STEM class. Cheryl Senter for The Wall Street Journal

Desperate to attract tech-savvy workers, one company is turning to an unlikely talent source: high school.

Technology firm Dyn has struggled to lure top engineers to its Manchester, N.H., office. So the company, which helps clients like [Twitter Inc.](#) and [Netflix Inc.](#) manage their Internet traffic, is helping to create a high-school program that it hopes will prepare students for careers in science and technology—ideally at Dyn.

STEAM Ahead, a four-year program, is set to function as a high school within a high school. Students will get coursework in engineering and the arts in addition to staples like social studies. At STEAM, which stands for science, technology, engineering, arts and math, the students also will interact with local businesses through internships and mentorships.

The initiative illustrates the difficulties that some companies face in their search for job-ready talent in engineering and other tech-heavy fields. Businesses feeling the costs of not being able to staff up projects quickly are willing to experiment and make long-term bets, executives say.

"The business community is stepping up where they've never stepped up before because they're so scared" about the lack of skills, said Edie Fraser, chief executive of STEMconnector, a consortium of companies, universities, and other groups that advocates for STEM—science, technology, engineering and mathematics—education.

At Dyn, tackling the issue meant wading into the worlds of education and local government and putting down an investment of about \$150,000. Still, it will be at least eight years, including higher education, before the students are ready for full-time work—and they're under no obligation to become Dyn employees.

Dyn CEO Jeremy Hitchcock said the uncertainty and longer timeline are worth the potential benefit.

If we get "four people a year out of this, basically we'll make money," he said, estimating the costs the company could eliminate if it didn't need to pay recruiters' fees to fill positions. He described the investment as "a simple math equation."

Workers skilled in STEM are in high demand. There were more than twice as many entry-level job postings per new four-year graduates in STEM fields in 2013, compared with postings for new bachelor of arts graduates in non-STEM fields, according to a February report from Burning Glass, a labor market analytics firm. Companies advertise STEM positions, in areas such as computing and health-care, more than twice as long as they advertise other job openings, according to a July report from the Brookings Institution, a nonpartisan think tank.

Mr. Hitchcock said it often takes three to six months to find and secure a good applicant at Dyn. He said he'd like to cut that time by 25% to 50% to bump up the head count at the 400-person company.

Aware that the company likely couldn't draw recent college graduates away from tech powerhouses like [Google](#) Inc. and Facebook Inc., Mr. Hitchcock said he came to the realization that it had to grow talent locally. In 2013, he hired Bob Baines, a former Manchester high-school principal and mayor, to head up the effort.

Mr. Baines helped developed STEAM Ahead alongside local tech company SilverTech, the state university system, a local community college, the local school district as well as Manchester High School West, where the program was recently launched.

Dyn plans to offer mentorships and internships to participants and is even helping school officials redesign classrooms to resemble the company's trendy, open-concept office space. Last spring, 240 eighth-graders toured Dyn's workplace in an effort to drum up interest in the program. Sixty students signed up for the 75 open spots in the inaugural class.

Christopher Motika, principal of the 1,010-student Manchester High School West, acknowledged he was initially concerned about business having such a hand in shaping a high-school program.

"There's always a worry, are we advertising for a company, or are we creating a pipeline that is positive or negative for kids?" he said.

But Mr. Motika he doesn't see any conflicts anymore, especially after working with the companies and seeing the resources they're bringing to the table.

SilverTech, a digital agency in Manchester, is on pace to give \$25,000 to \$50,000 in cash to support the pilot phase of the program, said Nick Soggu, the company's CEO.

The two companies' struggles to find talent in New Hampshire are playing out across the country. Information-technology services firm [Tata Consultancy Services](#) Ltd. , part of Indian conglomerate Tata Group, has been facing a shortage of even entry-level workers with the right skills, said Balaji Ganapathy, the company's head of workforce effectiveness. So the company has been investing a few million dollars a year on partnerships and projects focused on STEM education, including a program for middle and high school students.

"It's a long-term investment," said Mr. Ganapathy.

But Daniel Masata, an executive at staffing firm [Adecco Group](#) North America's engineering and technology arm, said he doesn't see a lot of companies that are willing to make that commitment. American firms want a direct, fast, sure return on their investments when it comes to talent, he said.

Dyn has promised to sponsor the program for four years, at which point Mr. Hitchcock said he would take a closer look at data like college matriculation rates and the share of students pursuing STEM-related fields. Eventually, he said, the numbers will reveal "whether or not this is essentially a different way of spending recruiting dollars."

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