



# High School Pathways to Prosperity

Nancy Hoffman and Amy Loyd  
JOBS FOR THE FUTURE



Marlborough's spring STEM 2014 Showcase.

The Pathways to Prosperity Network helps young people attain an industry credential or associate's degree in a high-demand field.

Roughly 30 percent of the job openings projected for the United States over the next decade will require some education beyond high school, not necessarily a four-year degree. Currently, barely 50 percent of today's young people arrive at age 25 with any postsecondary credential.<sup>1</sup>

That disconnect is the focus of the 11-state Pathways to Prosperity Network, created in 2012 by Jobs for the Future (JFF) and the Harvard Graduate School of Education in response to the 2011 report *Pathways to Prosperity: Meeting the Challenge of Preparing Young Americans for the 21<sup>st</sup> Century*.<sup>2</sup>

The report argued that the U.S. education system had been too focused on preparing all young people to pursue four-year degrees immediately after high school. It called for early pathways to high-growth, high-demand occupations—through community or technical college, with the option of going on to complete a bachelor's.

## Promising Approaches

The Pathways to Prosperity Network's goal is to build career pathways from grade 9 to 14 (the first two years of postsecondary education), focusing on high-demand sectors and providing students with useful credentials while keeping options for further education open. Network participants are encouraged to work on early and sustained career advising, employer engagement, infrastructure to support work-based learning, and state policy.

In Massachusetts, the work began in Boston, West Springfield, and Marlborough, with Brockton joining later. The Boston effort

focuses on health-care careers, West Springfield on advanced manufacturing, Marlborough on jobs in science, technology, engineering, math (STEM), plus information technology. Each collaborative effort features a school, a postsecondary institution (Framingham State University or a community college such as Bunker Hill, Massachusetts, Quinsigamond, or Springfield Technical), the region's workforce investment board (WIB), and one or more employers.



Boston demonstration sites include Edward M. Kennedy Academy for Health Careers and the Community Academy of Science and Health. The software company SAP is sponsoring C-town Tech, an information technology program at Charlestown High School, launching in September 2015. The Private Industry Council, Boston's WIB, is providing workplace opportunities.

JFF has supported West Springfield's advanced-manufacturing pathway, which began in fall 2013 with an exploratory course for 9<sup>th</sup> graders. Students make visits to Hampden County manufacturers and participate in summer enrichment at Springfield Technical

Community College's engineering-technology department. Thanks to the leadership of the Hampden County Regional Employment Board, IT and health-care pathways are scheduled to begin in 2015 at other comprehensive high schools in the area.

Marlborough, meanwhile, launched its STEM early-college high school in fall 2011 with funding from a Race to the Top grant and with technical assistance from Jobs for the Future. Early colleges provide low-income students a mix of high school and college courses allowing them to earn up to two years of college credit or an associate's degree while earning a high school diploma.

The Marlborough program immerses 600 young people, grades 6 through 12, in advanced, interdisciplinary, collaborative projects and work-based learning. Starting in 10<sup>th</sup> grade, students earn college credits through partnerships with local colleges and universities. In addition, they explore the world of work through internships, including at Marlborough Hospital/UMASS Memorial, the software company Parametric Technology Corporation, and the medical-device company Boston Scientific. Intended for students at risk of not completing any postsecondary credential, the program serves English language learners, Latino students, and students with disabilities. Nearly half of the participants are eligible for free or reduced-cost lunch.

### Youth CareerConnect

In 2013, JFF applied for a U.S. Department of Labor Youth CareerConnect (YCC) grant, using the Pathways framework as the guiding rubric, and was awarded \$4.9 million to scale up innovative high school models geared to regional labor market needs. Boston, Brockton, Marlborough, and West Springfield became the demonstration sites for YCC in Massachusetts and are expected to serve 1,650 students over four years.

A distinction of the Massachusetts Pathways approach (which became part of the College and Career Ready unit of the Massachusetts Department of Elementary and Secondary Education in 2014) is that community colleges and WIBs, not school districts alone, serve as the organizing hubs. Massachusetts has supported its WIBs by a unique line item in the state budget called "Connecting Activities," which establishes public-private partnerships in ways that support career-development education. Through Connecting Activities, students are provided structured, work-based learning with stipends provided by the private sector.

The job market in Massachusetts demands very high levels of technical skills. The White House's argument for developing Youth CareerConnect through the U.S. Department of Labor was that the country should be growing its own labor force rather than importing immigrants on H-1B visas. H-1Bs are particularly common in New England.<sup>3</sup>

It's true that Massachusetts is the top educational performer in the nation.<sup>4</sup> Nevertheless, the system may not be producing enough

of the middle-skilled workers that companies seek.<sup>5</sup> Pathways students gain credentials in advanced manufacturing, allied health, and IT while also earning general education requirements that could allow them to move on to a bachelor's later.



## Ongoing Work

One challenge in Massachusetts is the absence of policies and sufficient funding to enable high school students to take college courses. As research in other parts of the country confirms, such dual enrollment can give young people a leg up and help them develop a college-going self-image before they actually matriculate.<sup>6</sup> JFF is helping states to develop dual-enrollment policies and funding strategies that give those who are underrepresented in higher education a head start on college.

Today in many states, high school students can take college courses free of charge without exposing the school district or the postsecondary institution to loss of funding. Research shows that students who enter a two-year or four-year college without need for remediation—a goal of early college—have a significantly increased likelihood of completing a degree.<sup>7</sup>

\*\*\*

Much of the optimism about the latest initiatives is based on JFF's work developing early-college high schools across the United States. Now close to 300 strong and serving more than 80,000 low-income students and students of color in 28 states, the schools have seen the average student completing a year of nonremedial college work before graduating from high school. Indeed, about one-third of the students graduate from high school with an associate's degree.<sup>8</sup>

The Pathways to Prosperity Network expects comparable or even better results going forward, given the growing understanding among families and young people that gaining technical skills in high school is more likely to lead to success in the labor market.

Although it's still early for robust results data, we can say that students and their families are taking advantage of the opportunities.

The advanced-manufacturing program in West Springfield, for example, has exceeded its quota of applicants, 10<sup>th</sup> and 11<sup>th</sup> grade Marlborough students are taking college courses, and both Boston health-science schools are preparing students to complete the math and English requirements that will permit them to move to the next level without needing remediation.

Although education is not only for finding a job, the Pathways team believes that, given today's challenging economy and high youth unemployment, helping young people understand the labor market and get some experience in an initial career is a moral and practical imperative.

---

**Nancy Hoffman** is a vice president and senior advisor at Boston-based *Jobs for the Future*, and co-lead of the *Pathways to Prosperity Network*, where **Amy Loyd** is a director. Contact them at [nhoffman@jff.org](mailto:nhoffman@jff.org) or [aloyd@jff.org](mailto:aloyd@jff.org).

## Endnotes

- <sup>1</sup> See <http://nces.ed.gov/pubs2014/2014083.pdf>.
- <sup>2</sup> William C. Symonds, Robert B. Schwartz, and Ronald Ferguson, *Pathways to Prosperity: Meeting the Challenge of Preparing Young Americans for the 21<sup>st</sup> Century* (report, Harvard Graduate School of Education, February 2011), <http://www.nmfoundation.org/resources/multiple-pathways/pathways-to-prosperity>.
- <sup>3</sup> See Robert Clifford, "Demand for H-1B Visas in New England: An Analysis of Employer Requests for Highly-Skilled Guest Workers" (New England Public Policy Center Policy research report no. 14-1, Federal Reserve Bank of Boston, 2014), [http://www.bostonfed.org/economic/neppc/policyreports/2014/neppcpr1401.htm?wt.source=bfo\\_h1bvisas\\_nn](http://www.bostonfed.org/economic/neppc/policyreports/2014/neppcpr1401.htm?wt.source=bfo_h1bvisas_nn).
- <sup>4</sup> The National Assessment of Educational Progress (NAEP), "The Nation's Report Card" and the only nationally representative and continuing assessment of what America's students know, assesses representative samples of students in grades 4, 8, and 12. Massachusetts has led the nation for five consecutive NAEP administrations, the last in 2013.
- <sup>5</sup> See Julia Dennett and Alicia Sasser Modestino, "The Middle-Skills Gap: Ensuring an Adequate Supply of Skilled Labor in Northern and Southern New England" (Federal Reserve Bank of Boston New England Public Policy Center policy brief no. 11-1, Boston, April 2011), <http://www.bostonfed.org/economic/neppc/briefs/2011/briefs111.pdf>.
- <sup>6</sup> See Ben Struhl and Joel Vargas, "Taking College Courses in High School: A Strategy for College Readiness" (report, Jobs for the Future, Boston, 2012), [http://www.jff.org/sites/default/files/publications/TakingCollegeCourses\\_101712.pdf](http://www.jff.org/sites/default/files/publications/TakingCollegeCourses_101712.pdf). The study tracked 32,908 students who graduated from Texas high schools in 2004 and found that those who took college courses in high school were significantly more likely to attend and graduate from college than peers who did not.
- <sup>7</sup> See <http://all4ed.org/wp-content/uploads/2013/06/SavingNowSavingLaterRemediation.pdf>.
- <sup>8</sup> See Michael Webb and Carol Gerwin, "Early College Expansion: Propelling Students to Postsecondary Success at a School Near You" (report, Jobs for the Future, Boston, 2014), <http://www.jff.org/publications/early-college-expansion-propelling-students-postsecondary-success-school-near-you>.

This Communities & Banking article is copyrighted by the Federal Reserve Bank of Boston. The views expressed are not necessarily those of the Bank or the Federal Reserve System. Copies of articles may be downloaded without cost at [www.bostonfed.org/commdev/c&b](http://www.bostonfed.org/commdev/c&b).

photos Jobs for the Future