NYS P-TECH
Q&A FOR BUSINESS PARTNERS
What is NYS P-TECH?

NYS P-TECH (New York State Pathways in Technology Early College High School) is establishing grade 9-14 career schools throughout the state. These innovative schools focus on a two-year college degree in addition to a high school diploma and mastery of professional skills. Each school is a local partnership among school districts, private sector companies and a community college. Students will also gain the workplace experience necessary to be first in line for STEM jobs.

Why should the business community become involved in this initiative?

The “skills gap” is a well-documented phenomenon that leaves millions of jobs unfilled in the U.S. In New York alone, employers will face a deficit of approximately 350,000 workers for middle skill jobs (those that require more than a high school diploma but less than a four-year degree)\(^1\).

These *industry-driven* P-TECH partnerships allow businesses to play a direct role in addressing this skills gap, assuring that the program delivers requisite skills and experiences while providing students with mentors and on-site learning experiences. These partnerships give employers the ability to better develop and manage their talent pipeline.

How many schools are open under the program?

There are currently 26 NYS P-TECH partnerships that are receiving state grants. Sixteen statewide P-TECH schools opened their doors in September 2014, joining five additional P-TECH-model schools operating in New York City. Schools are structured after the flagship P-TECH school in Brooklyn—a collaboration between IBM, New York City Department of Education, City University of New York and City Tech—which opened in September 2011.

Ten additional grant-winning partnerships that were announced in November 2014 will open in September 2015.

Where are the NYS P-TECH schools located?

The schools represent all 10 economic development regions in New York. The following provides an overview of all schools currently operating, as well as the additional schools approved for their planning year in November 2014 (for additional information visit [www.ptech.org](http://www.ptech.org)).

### NYS P-TECH

Public-Private Partnership for College and Career Readiness

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- Central New York
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- Hudson Valley
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CAPITAL REGION

2014

*Advanced Manufacturing Early College High School Program* - Washington-Saratoga-Hamilton-Essex BOCES, Hudson Falls CSD leading a regional consortium, SUNY Adirondack and GLOBALFOUNDRIES. Focus: Advanced manufacturing

*Clean Technologies & Sustainable Industries Early College High School* - Ballston Spa CSD leading a regional consortium, Hudson Valley Community College, GLOBALFOUNDRIES, Cisco and TRC. Focus: Clean technologies

*Troy Riverfront P-TECH* - Questar III BOCES, Troy City SD, Hudson Valley Community College, GE Health Care, Regeneron and SMT Corp. Focus: Manufacturing/health

CENTRAL NEW YORK

2014

Syracuse P-TECH - Syracuse City SD, Onondaga Community College and the Manufacturers Association of Central New York (MACNY). Focus: Advanced manufacturing

2015

Auburn Enlarged City SD, Cayuga Community College and MACNY. Focus: Advanced Manufacturing

“P-TECH has really helped me to become a more independent person…open(ed) up my eyes to really see what’s in store, what’s next, what it really is when you get out there, and how to prepare for it. It showed me how to be when I reach the next level, and I think that really changed my life rather than if I was to go to ‘regular high school.’”

-3rd year student, Brooklyn P-TECH [excerpt from Rockland BOCES recruitment video]

FINGER LAKES

2014


*P-TECH Rochester* - Rochester City SD, Monroe Community College, Rochester Community College and Monroe Community College Business Consortium. Focus: Information technology (IT)

2015

HUDSON VALLEY

2014

Excelsior Academy - Newburgh Enlarged City SD, SUNY Orange and IBM. Focus: IT

Hudson Valley P-TECH - Rockland BOCES, North Rockland CSD leading a regional consortium, Rockland Community College, Rockland Business Alliance and Rockland Economic Development Council (with a local consortium of businesses including SUNY IT, Avon, Fairway Testing, All Bright Electric, Hightech Security Services and Wick Arborists). Focus: IT, engineering and green building technology

Hudson Valley Pathways Academy - Ulster BOCES (with Sullivan, Dutchess, Orange and Sullivan BOCES), Kingston City SD leading a regional consortium, Ulster County Community College (with Dutchess, Orange and Sullivan Community Colleges) and Hudson Valley Council of Industry. Focus: IT and manufacturing

Yonkers P-TECH - Yonkers Public Schools, Westchester Community College, Fuller & D'Angelo and Yonkers Workforce Investment Board. Focus: Architecture and civil engineering

2015

Yonkers CSD, Westchester Community College, Verde Electric Corporation and the Yonkers Chamber of Commerce. Focus: Advanced manufacturing

Poughkeepsie City SD, Dutchess Community College and Central Hudson Gas & Electric Corporation. Focus: Advanced manufacturing/energy

LONG ISLAND

2014

Long Island P-TECH - Nassau BOCES, Uniondale UFSD (with Freeport Public Schools and Wyandanch UFSD), Farmingdale State College and Arkwin Industries (with a local consortium of businesses including APICS, ADDAPT, Long Island Forum for Technology and Farmingdale State College’s STEM Diversity Summit). Inc. Focus: Mechanical engineering

MOHAWK VALLEY

2014


2015

Herkimer-Fulton-Hamilton-Otsego BOCES, Herkimer CSD leading a regional consortium, Herkimer Community College, Mohawk Valley Edge, Mohawk Valley Applied Technology Corp. and King & King Architects. Focus: Quality assurance

Oneida-Herkimer-Madison BOCES, Utica City SD leading a regional consortium, Mohawk Valley Community College and Mohawk Valley Edge. Focus: Advanced manufacturing and IT
NEW YORK CITY

2014

*Business Technology Early College High School* - New York City Department of Education, Queensborough Community College and SAP. Focus: Business IT

2015

New York City Department of Education, CUNY, New York City College of Technology (City Tech), Building Trades Employers’ Association of New York City and CH2M Hill. Focus: Construction skilled trades

“P-TECH in Brooklyn captured the attention of education and elected officials worldwide by proving that students, regardless of their preparation to date, could complete rigorous coursework and master the professional skills necessary for career success. Now that we have designed and opened 16 new schools serving every economic region of the state and a wide range of industries and careers, we have moved beyond a unique success to a relevant, effective model preparing thousands of students in New York State.”

-Robin Willner, Director, P-TECH Leadership Council

NORTH COUNTRY

2014

*ADK P-TECH* - Peru CSD leading a regional consortium, Clinton Community College, Clarkson University, ETS, Fujitsu, Bombardier, Nova Bus, Spencer ARL, Swarovski and Camoplast. Focus: Advanced manufacturing

2015

St. Lawrence-Lewis BOCES, Norwood-Norfolk CSD, North Country Community College, SUNY Canton, St. Lawrence Health System, Claxton-Hepburn Medical Center, Massena Memorial Hospital, United Helpers, Kinney Drugs and Northern Area Health Education Center. Focus: Health care

SOUTHERN TIER

2014

*Southern Tier P-TECH* - Broome-Tioga BOCES, Binghamton City SD leading a regional consortium, Broome Community College, Lockheed Martin MS2, Rockwell-Collins, Delta Engineers, Architect & Land Surveyors, P.C., Bothar Construction, Our Lady of Lourdes Memorial Hospital, Inc. and United Health Services Hospitals, Inc. Focus: Health-tech, IT and advanced manufacturing

WESTERN NEW YORK

2014

*P-TECH Health Occupation Pathways to Employment (HOPE)* - Lackawanna City SD, Erie I BOCES, Trocaire College and Catholic Health System. Focus: Health careers

2015

Buffalo City SD, Alfred State College, TEAM (Technology, Engineering and Architecture Mentoring), Compliance Administrative Services of New York, Montante Solar, Montante Construction, Construction Exchange of Western NY, and the Construction Industry Education Foundation. Focus: Construction skilled trades
Erie 2 Chautauqua-Cattaraugus BOCES, Dunkirk CSD leading a regional consortium, Jamestown Community College, Chautauqua County Industrial Development Agency, the Manufacturers Association of the Southern Tier and the Chautauqua Chamber of Commerce. Focus: Advanced manufacturing

How well are students doing in the program?

The legacy cohort—those students who entered grade 9 at the Brooklyn P-TECH school in September 2011—are achieving impressive milestones. Ninety-eight of the 103 students started their senior year in September 2014: 87 have met at least one college-ready benchmark; 69 have met the college-ready benchmarks on both the ELA and math Regents exams; and six students are on track to complete an AAS in May 2015, when they also complete the requirements for their HS diploma. The retention rate and the Regents performance match those for the exam schools in New York City, although this is an unscreened student population. Sixty-one students also completed paid internships in summer 2014, making substantial contributions to the bottom line and receiving exceptional evaluations from their supervisors.

How do the new partnerships compare to the original P-TECH school?

All partnerships must include the following: a six-year curriculum culminating in an industry-recognized AS or AAS; work-site visits and activities leading to internships; mentoring; incorporation of academic, technical and workplace skills; and several other structural components. Aside from these stipulations, innovation is encouraged so that partnerships can develop a program that suits the needs of the target industry and community.

There are a number of industries represented at the different schools, including: advanced manufacturing, clean technologies, IT, agribusiness, green building technology, engineering, health care and architecture.

Curriculum is back-mapped to ensure students are thoroughly prepared to succeed in real jobs. They are in a professional career-ready environment beginning on their first day at a P-TECH school, and begin taking college courses no later than grade 10.

How are the partnerships funded?

Funding in the FY 2013 state budget allowed for 16 partnerships, and funding in the FY 2014 state budget supported 10 additional partnerships, for a total of $56 million over eight years.

“[Our intern] is a pleasure. He is extremely motivated, driven, and asks the right questions. He goes above and beyond expectations, always offering to lend a hand and curious to know about the additional work our team does. We are constantly looking to give him more responsibility as he is proving to be a valuable asset to any team!”

-IBM P-TECH supervisor discussing 3rd year intern

What is the cost to the private sector partner?

There is no financial contribution expected of business partners involved in NYS P-TECH partnerships. However, employer participation in the program design is essential to assure that students will master all of the skills that are required for successful employment. Additionally, the work-based learning component — which is integral to the success of the students — emphasizes mentoring and worksite visits (which begin as early as grade 9) and internships, all of which take planning and time. Employers are advised to plan out the mentoring strategy, a six-year commitment, in advance. The Business Council
and NYS P-TECH Leadership Council provide guidance on how best to design and implement mentoring programs, workplace visits and internships to meet student and employer needs and comply with relevant regulations.

**What does the six-year mentoring component look like?**

There are many ways to provide mentoring and guidance to students in the program. The following is a basic guide to the job of a mentor in each year:

**Year 1:** Mentor provides exposure to the workplace and careers in the school’s focus areas

**Year 2:** Mentor supports workplace learning projects

**Year 3:** Mentor offers tailored college and career guidance; in the summer, mentor supports internships

**Year 4-6:** Mentor supports internships and continues to offer college and career guidance as students approach graduation

IBM has developed a secure platform for online mentoring, MentorPlace, that is available free of charge to all NYS P-TECH partnerships. The platform connects registered mentors to students using activities that correspond to classroom lessons. Contact Robin Willner for more information on how to participate as a mentor.

**Are private-sector partners all “big business?”**

No. In fact, many of the partnerships feature a consortium of small- and mid-sized business.

**Can I join an existing partnership?**

Yes. Please contact Robin Willner for more information.

**Why should my company get involved in this education initiative?**

NYS P-TECH offers businesses an opportunity to assure that students are prepared with the skills necessary for success in real world jobs. The success of these partnerships between schools, community colleges and employers will lead to the success of local businesses by building a robust talent pipeline and fostering economic growth.

**Who should I contact for more information?**

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1 Source: “Ensuring the Central New York Region’s Global Success” (April 2014). ReadyNation/America’s Edge

2 According to IBM (www.ibm.com/ibm/ibmgives), more than 6,000 employees provide academic assistance and career guidance to over 7,000 students
The Public Policy Institute is the research and education arm of The Business Council of New York State, Inc. The organization's purpose is to formulate and promote public policies that will restore New York's economic competitiveness.

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