



SHARED VALUE



## BUSINESS CASE STUDY: IBM

### Company Overview

**Sector:** Professional, Scientific, and Technical Services

**Number of Employees:** 431,212

**Headquarters:** Armonk, New York

**2013 Total Revenues:** \$99.7 Billion

### Initiative Overview: P-TECH School Model

**Department:** Corporate Citizenship

**Geography:** Global

**Time Frame:** 2011-Present

## Background

IBM is an American multinational company and the largest technology and consulting employer in the world, with more than 400,000 employees serving clients in 170 countries. Utilizing its business consulting and technology, including the Watson computing system and R&D expertise, IBM helps clients become "smarter" as the planet becomes digitally interconnected. Since 2010, IBM has worked with educators in K-12 and higher education to create a new approach to high school designed to enable students to gain the academic preparation, credentials, and workforce skills needed to be competitive in the job market – and thus reinvigorate local economies.

## Vision & Goals

Through its efforts on the Pathways in Technology Early College High School (better known as P-TECH) 9-14 School Model, first launched in Fall 2011, IBM hopes to transform the educational and employment opportunities available for young people – with a focus on the underserved – and create a pipeline of talent to alleviate the science, technology, engineering, and math (STEM) skills gap. A 2012 U.S. Census survey showed that the poverty rate for those who have completed college is approximately 5 percent, nearly three times lower than for people who have completed high school (14 percent). Poverty rates for those who have less than a high school diploma are even greater, at 28 percent. Failing to provide students with a high quality education in STEM subjects, along with a degree that matters, is a missed opportunity to give students the skills and knowledge for employment in high-demand jobs, and to narrow health disparity gaps for the socio-economically disadvantaged students.

## Creating Shared Value

All students have greater career and economic opportunities as a result of a quality STEM education that results in industry-recognized degrees. P-TECH schools offer an integrated six-year high school and college curriculum with opportunities for workplace experiences at IBM and the 70 other companies that are currently replicating IBM's model. Students graduate with both a high school diploma and a no cost, two-year, industry-recognized post-secondary degree and are first in line for jobs with their industry partner.

IBM is investing in P-TECH as a way to address education, which is also a social determinant of health, while building a qualified workforce pipeline. Through the model, IBM and other industry partners provide mentors for all students, worksite visits, speakers, job shadowing, and skills-based, paid internships to help ensure that students graduate college- and career-ready.

## Addressing the Social Determinants of Health, Building a Qualified Workforce Pipeline

- **Job Skills Are Academic Benchmarks:** Minimum requirements for entry-level IT jobs, as provided by IBM and other industry partners, have been mapped to the curriculum and serve as academic benchmarks and targets.
- **Workplace Learning:** Students are matched in one-to-one relationships with industry mentors, participate in project-based learning activities, meet guest speakers, participate in workplace visits, and tackle skills-based, real-world projects through internships and apprenticeships.
- **Career Readiness:** P-TECH graduates receive both their high school diploma and a two-year, industry-recognized post-secondary degree, at no cost to students and their families, and are first in line for consideration for entry-level positions at IBM and other partner companies.

## Community Choice Drivers

- **Socioeconomic Status:** The P-TECH 9-14 School Model is designed to serve historically underserved students. For example, P-TECH Brooklyn is located across the street from Albany Houses, a public housing development

in the Crown Heights neighborhood, and while students come from all five boroughs of the city, the majority are from the area. More than 80% of students are on free or reduced lunch.

- **Educational Attainment:** Many of the students will be the first in their families to earn a college degree.

## Program Reach

- **Geographic Reach:** The first P-TECH partnership opened in Brooklyn, New York, in September 2011. In September 2012, the model was replicated in five schools in Chicago. There are now 27 schools operating nationwide. In 2015-16, there will be 40 P-TECH schools. Of the 27 schools, IBM is serving as lead industry partner for four schools; in addition to P-TECH Brooklyn, schools include the Sarah E. Goode STEM Academy in Chicago, Excelsior Academy in Newburgh, NY, and the Norwalk Early College Academy in Norwalk, CT. More than 70 companies are currently participating in the model. In 2016-17, further replication will occur in New York and Connecticut, and new replication will launch in Rhode Island and Colorado, as well as Australia.
- **Total Number of Students at Full Enrollment across all P-TECH schools in 2015-16:** 18,000

## Engaging Stakeholders

- **School Districts:** School districts that develop P-TECH 9-14 schools rethink traditional patterns of student enrollment, staffing, curriculum, and scheduling. Departments or offices that oversee curriculum and instruction, student enrollment, career & technical education, facilities, and academic policies engage in the creation and ongoing support of a P-TECH 9-14 school. Districts work closely with external partners. Input from the College and Employer Partners can help shape a range of school-level decisions, from curriculum to supports, which are traditionally within the sole purview of the district.
- **College Partners:** Colleges work closely with districts and employers to align and strengthen the relationship between school and work. College deans and faculty participate in the school's curriculum planning and development, and through co-teaching, mentoring, and tutoring activities. In addition to college leadership, such as the Provost, Academic Deans, and faculty, P-TECH 9-14 schools also interact with tutoring centers, the registrar, bookstore, library, student advisors and support offices at their partner college.
- **Employer Partners**
  - These represent high-growth industries, and provide input on the skills and qualities they seek in prospective employees and a commitment to foster those in students. Employer Partners, colleges and school districts choose the associate degree(s) that students receive.
  - Employers contribute to student learning through skills mapping, mentoring, worksite visits, internships, and other workplace learning experiences.
  - While corporate citizenship professionals may often lead active engagement in P-TECH 9-14 schools, the schools also require employers to utilize human resources staff, front-line managers, technical experts, in-house trainers, marketing staff, and in-house professional development staff.
  - In some areas, a local industry association, chamber of commerce, workforce investment board or other local business group with experience in workforce development and community partnerships serves as a helpful intermediary to represent employers in the planning phases and to limit the principal's time recruiting individual businesses.

### Community Impact: Academic Achievement

School	2014 Results
P-TECH Brooklyn (Brooklyn, NY), opened Fall 2011	<ul style="list-style-type: none"> <li>• 204 students, 67% of those eligible, enrolled in at least one college course throughout their time at P-TECH</li> <li>• P-TECH students earned a grade of C or better in 70% of courses taken</li> <li>• 146 (45%) of eligible students have met the college-ready standard in both English Language Arts (ELA) and mathematics and are enrolled in more than one college course from a P-TECH affiliated college</li> <li>• Six students will graduate in June 2015 – accelerating through the program within four years, not six. Three students are college bound and three will join IBM as employees</li> </ul>
Sarah Goode STEM Academy (Chicago, IL), opened Fall 2012	<ul style="list-style-type: none"> <li>• 11th grade students in college courses have earned an average of 13 credits</li> <li>• 120 students in 10th and 11th grades are enrolled in 1-3 college courses</li> <li>• Average GPA for 11th grade students enrolled in college courses is 2.98</li> </ul>
Norwalk Early College Academy (Norwalk, CT), opened Fall 2014	<ul style="list-style-type: none"> <li>• 24% of students achieved high honor roll (a grade point average of 3.4 or higher)</li> <li>• 98% average school wide attendance rate</li> </ul>
Excelsior Academy (Newburgh, NY), opened Fall 2014	<ul style="list-style-type: none"> <li>• 98% attendance rate through first marking period, a 5% increase over the district high school average</li> <li>• 74% of all students passed all of their classes during 1st quarter</li> <li>• 66% of all students made the honor roll during 1st quarter</li> </ul>

### Looking to the Future: Scaling Up the P-Tech Model, Business Impact in Development

- IBM is providing thought leadership across the entire network of P-TECH schools through ongoing technical assistance and guidance. To support this work, IBM created [www.ptech.org](http://www.ptech.org) to help public-private partnerships replicate the model with high quality. The site, which IBM will grow over time, features more than 30 tools and case studies designed to share effective practices.
- P-TECH industry partners guarantee job interviews for qualified graduates of IBM-affiliated P-TECH schools.
- In 2014, IBM had 41 P-TECH interns and expects to hire 70 P-TECH interns in Summer 2015.

*This case study was adopted from a semi-structured qualitative interview and publicly available information. To learn more about the link between workforce and community health and the strategies businesses are implementing to invest in community health, read the Vitality Institute’s report “Beyond the Four Walls: Why Community is Critical to Workforce Health.”*

To access the report and additional case studies, visit [www.thevitalityinstitute.org/communityhealth](http://www.thevitalityinstitute.org/communityhealth) or look us up on social media @VitalityUSA #Beyond4Walls.