

IBM and P-TECH



President Barack Obama has [acknowledged IBM's key role](#) in creating a new education model that will build technical skills and fill good jobs in the United States. This new education model, called [Pathways in Technology Early College High Schools](#) (P-TECH), is a system of innovative public schools spanning grades 9 to 14 that bring together the best elements of high school, college, and career. This new breed of school is building national momentum.

Background

[Reinventing education](#) isn't new at IBM. The company has long brought the education community together to help establish national standards. Figuring prominently in IBM's philanthropic portfolio is the support given to the education community, from kindergarten all the way through college, as well as to not-for-profits involved that support non-traditional students. To that end, IBM supports improved career and technical education, particularly for the topics of science, technology, engineering and math (STEM), subjects that contribute to societal improvement and economic development.

Experts are troubled that STEM studies are not sufficiently emphasized in the United States. This is a missed opportunity, in particular, for the socio-economically disadvantaged. Even graduates with technical skills are often at a disadvantage because they have no prior exposure to the workplace, which demands proficiency in social and business skills. At the same, demand for college graduates with STEM skills is [growing](#).

Philosophy

IBM believes that the public, private and not-for-profit sectors should partner with one another to create a new model for STEM education and workplace preparedness. To foster collaboration among these communities, IBM developed a career and technical education model that emphasizes STEM subjects, and blends free, public high schooling with community college. This new breed of grades 9-14 public school pairs students, who are admitted with no special tests or requirements, with mentors from the business community and provides practical workplace experience with internships. It provides students with a solid foundation across the core academic curriculum linked directly to common core standards.

How it Works

IBM's Pathways in Technology Early College High Schools (P-TECH) are innovative public schools spanning grades 9 to 14 that bring together the best elements of high school, college, and

career. Within a six-year, structured, and integrated timeframe, students graduate with a no-cost associates degree in applied science, engineering, computers and related disciplines, along with the skills and knowledge they need to continue their studies or step seamlessly into well paying, high potential jobs in the information technology arena for multiple industries. This model was designed to be both widely replicable and sustainable as part of a national effort to reform career and technical education.

Corporate partners, having helped shape the curriculum and interacted with these students for years, will feel comfortable putting them "at the head of the line" when they apply for entry level jobs after graduation. For its part, IBM is guaranteeing job interviews for qualified graduates of P-TECH schools affiliated with the company.

IBM created a [detailed blueprint](#) for how this model can be replicated elsewhere in the US, and has made it publicly available. Called "STEM Pathways to College and Careers Schools: A Development Guide," the document outlines specific details such as designing a curriculum and related assessments, creating an integrated college experience, and building a strong teaching faculty.

Timeline

- The first school to adopt this model was an IBM [P-TECH](#) school that opened in the fall of 2011. It is a collaboration between IBM and the New York City Department of Education, City University of New York, and New York City College of Technology.
- In September 2012, IBM, in partnership with the Chicago Public Schools, City Colleges of Chicago and Richard J. Daley College, [helped open Sarah E. Goode STEM Academy](#), a grades 9-14 public school near the southwest side of Chicago. It enables students to graduate with a no-cost associate's degree from Richard J. Daley College.
- In 2013, NY State [announced](#) that it will establish 16 such schools. New York City also has plans to open more. The model is also being adopted in rural areas. IBM is assisting in all of these initiatives. US President Barack Obama has praised IBM's role in developing this education model.
- On February 6, 2014, in his State of the State Address, Connecticut Governor Dannel P. Malloy's expressed a desire to work with the IBM Corporation and other local companies to "develop a Connecticut version of P-TECH, IBM's acclaimed, innovative high school and college partnership. This approach will allow students to graduate with both a high school diploma and an associate's degree. Let's offer students this experience, and help put them on a path to a great job."