



THE STATE EDUCATION DEPARTMENT / THE UNIVERSITY OF THE STATE OF NEW YORK / ALBANY, NY 12234

**TO:** Higher Education Committee

**FROM:** John L. D'Agati 

**SUBJECT:** Update on the New York State Pathways in Technology Early College High School Program (NYS P-TECH)

**DATE:** September 9, 2015

**AUTHORIZATION(S):** 

### **SUMMARY**

#### **Issue for Information**

The New York State Pathways in Technology Early College High School Program (NYS P-TECH) is a public-private partnership that will prepare more than 10,000 New York State students for high-skill jobs of the future in technology, manufacturing, healthcare and engineering. The model incorporates a six-year program that combines high school, college, and career training and is targeted to academically at-risk, disadvantaged students.

#### **Reason(s) for Consideration**

For Information

#### **Background Information**

Funding was provided through the New York State Education Department to open 16 new projects in September 2014. A second cohort of 10 projects opened in September 2015, and a third cohort of 7 projects will open to students in September 2016.

NYS P-TECH is both an education and economic development initiative. The model, based on the successful partnership among the NYC Department of Education, The City University of New York, and IBM to design and operate the first P-TECH school in Brooklyn, NY, prepares under-served students to be the highly skilled, critical thinkers and problem-solvers that our 21<sup>st</sup> century workforce requires.

The 33 innovative NYS P-TECH schools – serving all of the state’s 10 economic development regions - bring together three essential partners: K-12 education, higher education, and industry. The model offers an integrated six-year program, combining high school, college, and career training. Focusing on disadvantaged and at-risk populations, each student will have the opportunity to graduate with an Associate in Applied Science (A.A.S.) degree (or other two-year degrees that are the industry standard for the targeted jobs) at no cost to the student’s family and will be considered first in line for a job with participating businesses. The school design, drawn from research-based effective practices, offers a rigorous academic curriculum, targeted technical training, comprehensive workplace learning, and individualized support services and pathways.

Through local partnerships, business and industry representatives work with education professionals to create a six-year integrated scope and sequence that meets the specific requirements for real jobs. Skills mapping, a unique approach to curriculum development, assures that the program delivers 21<sup>st</sup> century talent needs. This career focus is infused into every academic and technical course, providing relevant opportunities for students to hone skills, create projects, and address complex problems through multiple pathways. Project-based learning in authentic situations is an essential instructional approach.

The bedrock of NYS P-TECH is the partnership among the three sectors. Delivering on the promise of the NYS P-TECH model requires specific commitments from all participants. School districts and colleges must develop and implement a seamless six-year curriculum of rigorous academic and technical study with individual pathways for students of every academic level. Integrated into this six year curriculum are various types of internships and field experience specifically designed to support a student’s academic program. Employers are responsible for identifying mentors, developing substantive workplace and classroom activities and offering internships along with future job opportunities. This requires innovative staffing, scheduling and instruction, and new relationships among faculty, school leaders and employers.

The NYS P-TECH model delivers five core benefits to students:

- A rigorous, relevant, and cost-free grades 9-14 education focused on the knowledge and skills students need for Science, Technology, Engineering and Math (STEM) careers;
- Workplace learning that includes ongoing mentoring by professionals in the chosen career sector, worksite visits, speakers, and internships;
- Intensive, individualized academic support by K-12 and college faculty within an extended academic year or school day that enables students to progress through the program at their own pace;
- An A.A.S. degree or a two-year degree that is the industry standard for the targeted jobs in a high-tech field (referred to as an A.A.S. degree); and
- The commitment to be first in line for a job with the participating business/employer partners following completion of the program.

The program is also designed to:

- Develop programs of study in high-wage, high-skill, high-demand career areas;
- Align school, college, and community systems in these programs of study;
- Increase opportunity and access to postsecondary education for academically at-risk, disadvantaged populations of students;
- Support strong academic performance;
- Promote informed and appropriate career choice and preparation; and
- Ensure that employers in key technical fields have access to a talented and skilled workforce.

The 16 Cohort I P-TECH programs were launched across New York State and opened their doors to approximately 800 students in fall 2014. Ten Cohort II NYS P-TECH projects opened their doors to approximately 450 students in September 2015, while seven Cohort III NYS P-Tech projects are beginning their planning year in September 2015 and will welcome students in the fall of 2016.