

Career Academies: Preparing Maine Students For Post-Secondary Education and Careers

The Problem: Too many high school students leave school unprepared for post-secondary education or the workforce, contributing to the “skills gap” reported by America’s businesses.

- 23 percent of Maine high school students fail to graduate on time.¹
- Almost nine of every ten new jobs created in Maine between 2008 and 2018 will require some type of formal education beyond high school.²
- A recent Maine skills gap analysis projects 26,000 new high-wage and growth Maine jobs over 10 years. Significant skills gaps are forecast because of the state’s mismatch between worker skills and labor demand. The report predicts:
 - A shortage of over 1,500 associate’s degree workers in information and computer technology;
 - Over 1,000 unfilled machinists positions; and
 - 4,000 high-wage jobs going unfilled over the next 10 years.³
- Science, Technology, Engineering and Math (STEM) jobs will grow by 7 percent in Maine between 2008 and 2018, and 87 percent of STEM jobs will require post-secondary education by 2018.⁴



The Career Academies Model: Career Academies integrate career technical training with a rigorous academic curriculum, equipping students with important skills highly valued by employers.

- Also called “smaller learning communities,” an academy:
 - Is comprised of a group of students who take classes together for at least two years and are taught by the same group of teachers;
 - Provides a college preparatory curriculum based on a career theme that helps students see relationships and connections between academic subjects and their application in the real world; and
 - Develops partnerships with employers, the community, and colleges.
- Approximately 4,800 high schools nationwide report having at least one Career Academy, serving an estimated 1 million students, many of whom are at-risk students in large urban areas.
 - Maine does not have any Career Academies registered with the National Academies Foundation or the Career Academy Support Network.⁵

- By working in teams and through real work experience, students begin to understand the importance of professionalism, reliability, teamwork and clear oral communications skills.⁶

Proven and Promising Outcomes:

- A high-quality randomized control study showed that:
 - Career Academies students were twice as likely to be working in the computer, engineering or media technology sector eight years after graduation as students left out, thus helping to increase the supply of STEM workers.⁷
 - High-risk Career Academies students were 50 percent more likely to complete a core academic curriculum than similar students left out.⁸ Completing a core curriculum may better prepare students for college or the workforce.
 - Academies produced a significant, sustained increase in former participants' earnings and overall months and hours of employment, without any decrease in educational outcomes, especially among young men and youth in the high-risk subgroup. Young people who went through Career Academies worked 12 percent more hours per week and earned 11 percent more than those who did not participate.⁹

Policy Opportunities: With only approximately 5 percent of U.S. public high school students attending a Career Academy, the public and policy-makers must be made aware of their value as a key workforce development strategy.

¹ Editorial Projects in Education. (2011). *Diplomas Count 2011. Beyond high school, before baccalaureate: Meaningful alternatives to a four-year degree*. Bethesda, MD: Education Week. Retrieved April 17, 2012 from http://www.edweek.org/media/diplomascount2011_pressrelease.pdf

² Carnevale, A.P., Smith, N., & Strohl, J. (June 2010). *Help wanted: Projections of jobs and education requirements through 2018*. Washington, DC: Georgetown University Center on Education and the Workforce. Retrieved April 17, 2012 from <http://www9.georgetown.edu/grad/gppi/hpi/cew/pdfs/maine.pdf>

³ Planning Decisions, Inc. (September 2011). *Closing the gap: A Southern Maine Community College report on Maine education and labor skills gaps and the economic impact of higher education*. Southern Maine Community College. Retrieved April 17, 2012 from <http://media.kjonline.com/documents/ClosingtheGap.pdf>

⁴ Carnevale, A.P., Smith, N., & Melton, M. (2011). *STEM: Science, Technology, Engineering and Math*. Washington, DC: Georgetown University Center on Education and the Workforce. Retrieved April 17, 2012 <http://www9.georgetown.edu/grad/gppi/hpi/cew/pdfs/stemmaine1.pdf>

⁵ Career Academy Support Network. Directory, Academies nationwide. Retrieved April 17, 2012 from <http://casn.berkeley.edu/directories.php?us=1>; National Academies Foundation. Find a Local Academy. Retrieved April 17, 2012 from <http://x.naf.org/map>

⁶ Brand, B. (November 2009). *High school career academies: A 40-year proven model for improving college and career readiness*. Commissioned by The National Career Academy Coalition. Retrieved November 29, 2011 from <http://www.aypf.org/documents/092409CareerAcademiesPolicyPaper.pdf>

⁷ Kemple, J. J., & Willner, C.J. (July 2008). *Technical resources for "Career Academies: Long-term impacts on labor market outcomes, educational attainment, and transitions to adulthood."* MDRC. Retrieved May 10, 2011 from <http://www.mdrc.org/publications/482/techresources.pdf>

⁸ Kemple, J. J., & Willner, C.J. (July 2008). *Technical resources for "Career Academies: Long-term impacts on labor market outcomes, educational attainment, and transitions to adulthood."* MDRC. Retrieved November 29, 2011 from <http://www.mdrc.org/publications/482/techresources.pdf>

⁹ Kemple, J.J., & Willner, C.J. (2008). *Career Academies: Long-term impacts on labor market outcomes, educational attainment, and transitions to adulthood*. New York: MDRC.