

# High School Career Academies: A 40-Year Proven Model for Improving College and Career Readiness

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# High School Career Academies: A 40-Year Proven Model for Improving College and Career Readiness

*Career academies are a time-tested model for improving academic achievement readying students for both college and careers, and engaging the world outside of school in the work of reforming them. As lawmakers work to craft policies that will dramatically improve American public education, career academies should be recognized for their effectiveness and included in reform efforts.*

## Need for Action

Despite many well-intentioned school reform efforts, many high school students continue to leave high school unprepared for college-level work or careers. Nationwide, only about 70% of students graduate from high school in four years. Dropout rates are even higher in many urban areas and also for African American and Latino students.<sup>1</sup> Those without a high school diploma earn significantly less (\$1 million over their working life) than those with a college degree.<sup>2</sup> Additionally, 42% of America's community college freshmen and 20% of freshmen in four-year institutions must take at least one remedial college course.<sup>3</sup> Those numbers are even more troubling considering that students who take remedial classes are less likely to complete a postsecondary degree.<sup>4</sup>

When one considers that more and more jobs in the global economy require some type of postsecondary education or training, these statistics have serious implications for the U.S. labor force and the quality of life of our citizens.

To address these issues, state and local policymakers have been piloting various strategies to improve high school success rates. These include increasing academic rigor, making school more relevant to students' lives, and ensuring that students have stronger, supportive

relationships with adults. Accordingly, there have been changes in longtime policies which include increasing the mandatory school attendance age and the number of courses required for high school graduation and raising standards and aligning them with college entrance requirements. There have also been efforts to create smaller learning communities, expand and improve career and technical education, and implement accelerated learning programs. Some policymakers, particularly at the school district level, are also exploring the use of multiple pathways (various types of schools and programs) to meet the diverse needs of youth.

To date, state and local policymakers have taken the lead on high school reform and improving college and career readiness. But President Obama's goal of expanding access to a college education is changing that. Policymakers at the national level are increasingly focused on reducing the number of high school dropouts and improving prospects for college and career success. The Obama Administration has requested new funding streams in the FY 2010 budget that support initiatives in these areas. Additionally, several legislative proposals have been introduced in Congress aimed at improving high school graduation rates and college and career readiness. Given the Administration's policy focus, it is very likely that

lawmakers' attention to these issues will continue to grow.

### Career Academies: A Widely-Used Reform Model

In analyzing various high school reform efforts that have been employed nationwide, the career academy model has emerged as a strategy that works to improve student outcomes.

Originally conceived forty years ago, career academies address academic rigor, relevance of instruction, and build relationships between students and adults. Career academies have thrived because of their dual objectives of career and college preparation, the broad cross section of students they serve, the evidence of their success, and the deep relationship between research and practice.

A career academy is commonly defined as a smaller learning community (SLC) within a larger high school which:

- Is comprised of a group of students that takes classes together for at least two years and is taught by a team of teachers from different disciplines.
- Provides 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 of work and a specific career pathway.
- Develops partnerships with employers, the community, and colleges which draw upon their resources and increases opportunities for students to engage in internships and work-based learning and provides adult mentors to motivate students and spur achievement.<sup>5</sup>

Career academies have been widely adopted across the United States, and as a smaller learning community model, career academies are a popular approach to reform. According to the U.S. Department of Education's Smaller Learning Communities Award Database, a total of 1,535 schools in 634 school districts

received grants from 2000-2007,<sup>6</sup> and approximately 60% of the schools that received a SLC grant in years 2000-2004 used the funding to create a career academy.<sup>7</sup>

In the 2004 National Center for Education Statistics Schools and Staffing Survey, 4,800 high schools nationwide reported having at least one career academy, defined as "a multi-year program in which the curriculum integrates academic and career/technical education courses organized around one or more broad career themes."<sup>8</sup>

Several states have legislation supporting career academies. California provides support through multiple funding streams for nearly 500 Partnership [Career] Academies at hundreds of high schools.<sup>9</sup> Many school districts, often in large urban areas, either have

networks of academies or have broken all high schools into SLCs, many of which are career academies. Miami-Dade County Public Schools, the New York City Department of Education, and the Houston Independent School District are just a few urban systems that have supported and promoted the career academy model as a major strategy of their high school reform efforts.

While no one has a precise count, a reasonable estimate is that there are now about 1,000,000 students

in career academies nationwide.

Career academies are also widely supported by the business community which sees value in the skills and knowledge students learn during their career academy years. Employers from all size companies contribute substantial time and resources to support career academies by serving as curriculum advisors, providing internships and work-based learning opportunities for students, advising and mentoring youth, exposing them to career fields, and encouraging them to pursue postsecondary education. These contributions from employers and local chambers of commerce provide needed resources to career academies and schools and improve the quality of education for youth.

Career academies also help students develop skills beyond academic achievements that are important to career and life success. Experiences in the workplace and with employers allow students to experience real work and see beyond the classroom. Student who are given opportunities to work in teams on real projects begin to understand the importance of professionalism, reliability, teamwork, and clear oral communication skills. They also see how their education is related to a

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career field(s). Frequently, after being exposed to the realities of the workplace and careers during internships, students will press harder in their studies and set higher goals for college.

Many of the key components of career academies are endorsed by the Carl D. Perkins Career and Technical Education Act (Perkins Act). In particular, when the Perkins Act was renewed in 2006, it placed a strong focus on linking academic and career-technical instruction. Career academies are founded on the concept of academic-technical instructional integration, which is a fundamental distinction between career academies and traditional vocational education. With their strong history of integration and academic rigor, career academies can fulfill the mandates of the Perkins Act.

### Research Shows Career Academies Improve Education and Labor Market Outcomes

Career academies are a particularly well-researched reform approach. A number of comparison group evaluations showed positive impacts on academic outcomes including attendance, earned credits, grade point averages, graduation rates, college attendance rates, and also on labor market outcomes.

The largest and most rigorous study of career academies was undertaken by MDRC, an independent

research organization. The MDRC study randomly assigned students, from a pool of academy applicants, either to the academy at their school or to the regular high school program. MDRC found that students who participated in career academies were more likely to complete the required credits for high school graduation. Additionally, the academies doubled the rate at which high-risk students completed a core academic curriculum, raising this completion rate to 32 percent, versus 16 percent for the control group.<sup>10</sup> Ultimately, however, there were no impacts on high school graduation rates.

In addition to benefits in high school, the MDRC study found very significant labor market gains, particularly for at-risk males. Eight years after expected high school graduation, participation in a career academy increased post-high school employment rates and earnings, without reducing the chances of going to college or completing a postsecondary credential. At the post-high school level, career academies produced a significant, sustained increase in former participants' earnings and overall months and hours of employment. These labor market impacts were particularly concentrated among young men and youth who had been in the high-risk subgroup.<sup>11</sup>

The conclusion from this study is that participation in a career academy can raise earnings, especially for young men, without any decrease in educational outcomes.

Research in California suggested that career academy graduates were more likely to graduate high school, more likely to attend a postsecondary institution, and more likely to attend a four-year college compared to California high school students from general and vocational tracks.<sup>12</sup> Research conducted in 2001 found that career academy graduates who enrolled at a local California State University campus were more likely to complete their bachelor's degrees than non-academy graduates from the same Oakland high schools.<sup>13</sup>

Research from 2008 shows that students in California's state-funded Partnership Academies were more likely to pass the California High School Exit Exam as sophomores, more likely to complete the entrance requirements needed for admissions eligibility to California's public universities, and more likely to graduate from high school.<sup>14</sup>

### Career Academy "National Standards of Practice"

Career academies, while based on the three elements listed earlier, vary in structure and themes. Sometimes the term “career academy” is loosely applied to any program that has a career theme. To help ensure the consistency and quality of the model, an informal consortium of career academy organizations developed the “Career Academy National Standards of Practice in 2004.” These standards are framed around ten key elements of successful implementation drawn from many years of research and experience from all parts of the country.<sup>15</sup> These national standards have helped career academies continually improve their practices, and they also serve as a guide for new programs.

Career academies have also been supported in their development and growth by various organizations that have provided critical technical assistance, created professional networks for academy directors and teachers, and pushed for quality control. The Career Academy Support Network, National Academy Foundation, National Career Academy Coalition, Philadelphia Academies, Inc., along with the University of California Berkeley and Johns Hopkins University, have helped expand the number of career academies throughout the United States, while maintaining a strong commitment to quality standards.

The National Career Academy Coalition has also developed an assessment process for academies based on the National Standards. A rigorous review process identifies the “model academies” nationally, providing them with the visibility from which others can learn and the local/state recognition for high quality. Implementing national quality standards has led to stronger and more comprehensive programs. It is this commitment to using standards of practice that sets career academies apart from many other reform models.

### Policies to Support Career Academies

Given career academies’ scope and proven success, it is logical that they should be integrated more fully into policy decisions on improving high school graduation and college and career success. While there has been significant growth in career academies in recent years, it is estimated that only about 5% of public high school students attend a

career academy nationally, meaning there is a great deal of room for expansion of this proven model.

If career academies are to be expanded, efforts must be undertaken to heighten public awareness of their value, and several policy issues need to be addressed:

- Policymakers must come to recognize career academies as a key college and career readiness strategy.
- Funding and resources must be increased.
- There must be resources focused on building the capacity of the system and of educators.
- Quality must improve.

Each issue is discussed in greater depth below.

Recognizing Career Academies as a Key Reform Strategy for College and Career Readiness – Given their proven value in reforming high schools and their effectiveness in helping at-risk students and in improving wages, career academies should be recognized as a key education reform and workforce development strategy.

While career academies can be supported by the Perkins Act and the Smaller Learning Communities program, they have not been included as a central part of broader

discussions on national education policy. As Congress considers the reauthorizations of the Elementary and Secondary Education Act, Perkins Act, and other laws that relate to secondary and postsecondary education, career academies should be highlighted to ensure that adequate support is provided for their implementation. Funding from the Race to the Top Fund, created by the American Recovery and Reinvestment Act, could also be used to support the expansion of career academies.

Dual enrollment and articulation agreements between career academies and postsecondary institutions should be expanded so that all students can participate in

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these educational experiences. Career academies help students develop an awareness of the need for college and often allow students to earn dual credit while they are in high school. By allowing students to take classes for credit on college campuses, students feel more comfortable in the postsecondary world and begin to see themselves as college students.

Because participation in a career academy has the potential to raise the earnings of young men, particularly males at risk of dropping out of high school, without any decrease in educational outcomes, career academies should also be considered as a viable strategy to increase the financial independence of young males. The Workforce Investment Act (WIA) could support the expansion of the career academy model as a means of improving workforce development and labor market outcomes.

It is also important that policymakers recognize that career academies provide opportunities for students to earn important life skills and industry-recognized skills that are highly valued by both colleges and employers. Therefore, when legislators amend or refine school accountability systems, they should acknowledge the importance of developing these other types of skills and consider how academic standards and industry certifications can be more fully integrated.

Finally, policymakers should also signal their support for career academies by publicly and actively sharing information about their effectiveness, drawing attention to high quality programs, and being strong advocates for them.

Increase Funding and Resources – Career academies involve multiple partners and require significant instructional change, but there is no dedicated funding stream that supports this type of education reform model. The Perkins Act and Smaller Learning Communities program provide support for certain aspects of career academies, but other funding streams that affect secondary education could be amended to provide support as well. The Workforce Investment Act could also be a designated source of funding for career academies especially to support increased school-employer partnerships, a part-time coordinator to

conduct employer outreach, and student internships or wages.

It is important to have reliable, multi-year funding that can be used in flexible ways to ensure the programs are well-planned and implemented and that the partnerships can be sustained. Because schools need to change their structure and curriculum to implement career academies, funding should be flexible enough to allow schools to target dollars where they are most needed. That could mean money spent on developing new schedules, reducing teaching loads to allow common planning time for teams of teachers, or supporting dual credit strategies.

Career academies work in partnerships that involve high schools, postsecondary education institutions, employers, and other community organizations. These

organizations contribute a great deal of their own staff time to support career academies and bring resources to the public school system. These resource-rich partnerships should be encouraged and supported, but finding and accessing funds to bridge these different systems and support collaboration can be difficult, and there is usually no funding directly targeted to supporting partnership efforts. Funding should be made available to support ongoing partnerships by supporting a coordinator position and

intermediary organizations that often help to manage such community-wide relationships.

#### Building the Capacity of the System and of Educators –

In order for educators and community partners to implement effective career academies, they first must have a shared understanding of the key components of the model and know how to plan and implement a high-quality program. This will require professional development for all the partners involved: teachers, administrators, counselors, employers, as well as college and community representatives. Education and policy leaders also need to build public support for such models and engage a broader group of community members, especially parents, employers, and college leaders, in the planning and implementation of the academy.

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As smaller learning communities, career academies require different kinds of structural support, and educators often need to adapt to school-wide changes. For example, many high schools switch to a block schedule and restructure into separate administrative units when they create multiple career academies. Moving to these new structures shifts both management and teacher responsibilities, and most staff need assistance and guidance in making the required changes.

Career academies also focus on integrating academic and career coursework and rely on interdisciplinary teams of teachers who commit to staying together for two or more years. Teachers and counselors also work closely with the employer community to ensure that curriculum is relevant and that there are adequate numbers of internship placements for students. They must also work with postsecondary partners on course alignment and dual credit opportunities. As schools implement career academies, many school personnel need ongoing guidance, technical assistance, and professional development to help them move through these various changes. Policy can ensure that adequate and flexible support for school personnel is available.

Integration of curriculum is a foundation of career academies. For that reason, teachers also need support on developing lessons that blend academics with career-technical content. Programs also need to be linked to postsecondary education, which requires high school teachers and college faculty to collaborate. Lastly, the instruction must support academic and industry standards, requiring academic and career-technical education teachers to work closely together.

Internships, workplace learning, and employer involvement are critical components of career academies, but most traditional high schools are ill-equipped to develop relationships with employers or support robust career counseling because of limited resources. Career academies require school personnel to identify and recruit employers, organize employer advisory boards to review curriculum and programming, secure internships, prepare employers to work with youth, and aid employers in the mentorship process. Developing expanded career counseling and employer outreach programs and helping teachers navigate employer partnerships is required.

Across the system, developing the capacity of the professionals involved is key. Various sources of funds

exist at the national and state levels for teacher professional development. Those sources could be amended to include a greater focus on helping staff implement high quality career academies.

Improving Quality – As mentioned previously, career academies are one of the very few educational models that has developed “National Standards of Practice” to encourage continuous improvement. These “National Standards of Practice” have been adopted by many existing career academies and have led to improvements across the field. As funding for education becomes tighter and funders demand greater effectiveness and efficiency, these standards of practice should be used to guide the development and implementation of programs and promote a cycle of continuous improvement.

The “National Standards of Practice” focus on key functions such as: mission and goals; professional development; curriculum and leadership; employer, postsecondary, and community involvement; and student assessment. Standards provide specific guidance to programs. For example, they ensure that career academies are open to any student. They specify that curriculum is sequenced, integrated, relevant, and meets college entrance requirements. Standards provide assurances that students have options for dual credit with two- and four-year colleges, as well as work- and community-based service learning options. They also require that teachers are credentialed and provided with ongoing training in the academy structure, curricular integration, student support, and employer involvement.

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Efforts to develop these and other quality measures by the career academy field demonstrate a commitment to providing the most effective high school experience possible. Public dissemination of information, guides, and technical assistance can help others learn about these best practices. Policymakers can support this work by recognizing and acknowledging the importance of voluntary standards.

## Closing

As policymakers consider how to improve outcomes for high school students and ensure their preparation for college and careers, the career academy model should be viewed as a time-tested strategy that has produced not only academic, but labor market results, for 40 years. Career academies have demonstrated a lasting value to the communities that have implemented them.

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<sup>1</sup> Alliance for Excellent Education. July 2009. *Understanding graduation rates in the United States*. Washington, DC: Alliance for Excellent Education.

<sup>2</sup> Center on Education Policy and American Youth Policy Forum. 2001. *Higher learning = higher earning*. Washington, DC: Center on Education Policy and American Youth Policy Forum.

<sup>3</sup> National Center for Education Statistics. 2004. *The condition of education 2004, indicator 18: Remediation and degree completion*. Washington, DC: U.S. Department of Education.

<sup>4</sup> Adelman, C. 1999. *Answers in the tool box: Academic intensity, attendance patterns and bachelor's degree attainment*. Washington, DC: U.S. Department of Education.

<sup>5</sup> Career Academy Support Network website, retrieved September 11, 2009.

<http://casn.berkeley.edu/Definition.html>

<sup>6</sup> Smaller Learning Communities Awards Database, U.S. Department of Education website, retrieved August 26, 2009.

<http://slcprogram.ed.gov/cgi-bin/mysql/slcawards.cgi?l=summary-state>

<sup>7</sup> Smaller Learning Communities Awards Database, U.S. Department of Education website, retrieved August 26, 2009.

[http://slcprogram.ed.gov/cgi-bin/mysql/slcawards.cgi?l=summary\\_ss&show\\_ss\\_type=Structure&ss\\_sortby=ss\\_count](http://slcprogram.ed.gov/cgi-bin/mysql/slcawards.cgi?l=summary_ss&show_ss_type=Structure&ss_sortby=ss_count)

<sup>8</sup> National Center for Education Statistics. 2004. *Schools and Staffing Survey*. Washington, DC: National Center for Education Statistics, U.S. Department of Education.

<sup>9</sup> California Partnership Academies, California Department of Education website, retrieved August 26, 2009.

<http://www.cde.ca.gov/ci/gs/hs/cpagen.asp>

<sup>10</sup> Kemple, J.J. 2008. *Career academies: Long-term impacts on labor market outcomes, educational attainment, and transitions to adulthood*. New York, NY: MDRC.

<sup>11</sup> Ibid.

<sup>12</sup> Maxwell, N. and Rubin, V. 2000. *High school career academies: A pathway to educational reform in urban school districts?* Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.

<sup>13</sup> Maxwell, N. December 2001. *Step to college: Moving from the high school career academy through the four-year university*. *Evaluation Review* 25(6):619-654.

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<sup>14</sup> Studier, C., ed. May 2008. *Evidence from California partnership academies: One model of pathway programs*. Berkeley, CA: ConnectEd: The California Center for College and Career.

<sup>15</sup> For a copy of the National Standards of Practice, see: [http://www.careertech.org/uploaded\\_files/Career\\_Academy\\_National\\_Standards\\_of\\_Practice.pdf](http://www.careertech.org/uploaded_files/Career_Academy_National_Standards_of_Practice.pdf)