

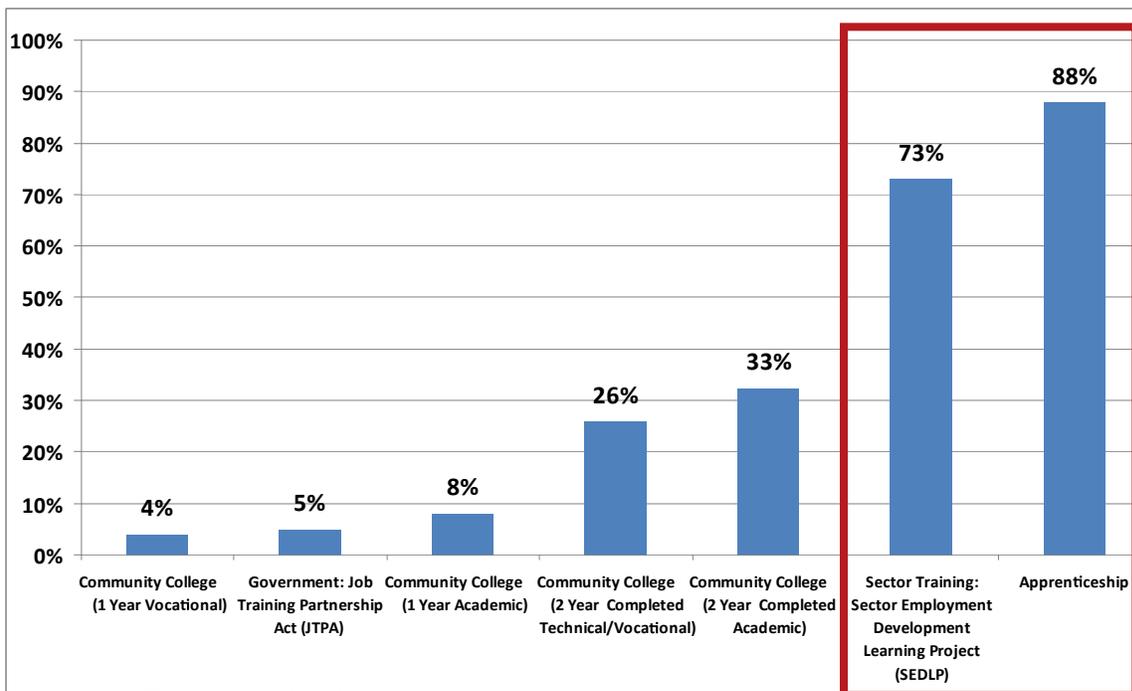
Building Effective Education and Training for America's Workers Issue Briefing

President Obama has issued a challenge for all Americans and all those involved in education and training: He has called for all Americans to complete at least one year of education or training beyond high school. He has particularly urged that unemployed workers should be able to use their time not working to build skills to advance their careers when they return to employment.

The President's challenge confronts a fundamental problem in the US labor market. We have a relatively underdeveloped system of workforce training for people who have finished their formal education. US public spending for workforce programs is last among major countries, less than one tenth the level of the leading countries. Moreover 70 percent of our limited employer investment for workforce training goes to the 30 percent of the workforce that already has a 4-year college degree. Most fundamentally the US lacks a training system for workers not on an academic track. Wages have stagnated for US workers without some post-secondary training. For occupations requiring some training or education beyond high school – for instance machinists or transit mechanics – important labor shortages persist. Providing an additional year of training or education could go a long way toward raising wages and improve America's position in the world economy.

In his May 8 statement, the President cited a wide range of possibilities for the additional year of training or education, including community college, technical school, on-the-job training and apprenticeship.

Annual Earning Gains from Education and Training Programs



Source: Transportation Learning Center, Academic Studies

As the President's challenge moves from inspired rhetoric to actual policy, the options seem to be narrowing. Most discussion on how to achieve the additional year of education focuses on increasing access to community colleges, through federal student loans and Pell grants. Proposals for hundreds of millions of dollars in capacity building for community colleges are also being discussed.

Community colleges certainly do have a role in an expanded system of education and training for adults and youth. But making community colleges the sole focus of that expanded system would be a mistake for many workers and for the country.

For many workers who are not headed toward a 4-year college degree, workplace-based training provides a better learning environment – and far larger earnings gains than one or two years in community colleges (see companion chart). Completing one year of an academic program at a community college increases a worker's wage by 8 percent over what she would earn with only a high school diploma. If workers go on to complete an associate's degree, they earn on average 33 percent more than a high school graduate. That's a significant increase. But a worker participating in a training program organized to focus on an industry sector experiences a 73 percent earnings gain. A graduate of a joint labor-management apprenticeship program sees a wage gain of 88 percent, eleven times the gain experienced after one year of community college and more than two and one half times the earnings gain from a community college degree.

This evidence confirms the experience of well-established training systems in other advanced economies and from the best training and apprenticeship programs in US industries (see the Center's recent research report on International and Domestic Comparisons). Training systems are built around training partnerships bringing together management and labor within an industry, often with support from government agencies and the education system. Specific competencies needed to master an occupation are defined by industry subject matter experts who do that work and by front-line supervisors who oversee the work. Training may be delivered by workplace partners or by post-secondary schools like our community colleges. The curriculum is defined by industry need, rather than being determined by academic committees. Learning takes place at work, with a close coordination between classroom and hands-on learning opportunities.

Skill training tied to industry need and to specific occupational skills can also address the active learning styles of most adult learners. The learning takes place in the context of the job I hold or want to advance into. That's much less abstract than most college courses. Because I am learning specific skills that others around me have, much of the training can be hands-on. After seeing and even performing the work, I can go back and learn the theory I need to master my craft. Given the contextual and hands-on learning and the opportunity to earn while I learn, available in both sector training and apprenticeship, I am likely to complete the training.

Community colleges experience drop-out rates in the 50 percent range. People who have not thrived in classrooms earlier in their educational experience aren't likely to be enthusiastic about returning to a traditional classroom.

Congress and the Administration certainly should expand Pell grants and student loans to support broader training and education opportunities for American workers. As the nation moves to address President Obama's challenge, we need to include in the policy and funding some of the other options, President Obama laid out on May 8. Specifically, this would include:

- Significant expansion of the current budget of the Department of Labor's National Office of Apprenticeship. We need to change the situation where the most effective education and training option receives the least public support.
- Specific funding from the federal government directly or to the states to help pay the costs of related instruction (classroom hours) for apprenticeship
- Expansion of funding under the Workforce Investment Act (WIA) to support sector-based training partnerships, particularly the highly effective labor-management sector partnership programs including apprenticeship
- Expansion of Title I of WIA to address basic skills needs of Americans with less than a high school education and non-native speakers. Workplace education and community-based providers can and should partner with community colleges in this effort, and the instructional emphasis needs to be on contextual and hands-on based in workplace and industry partnerships.

SOURCES

Annual Earning Gains from Education and Training Programs

	Program	Average Percent Annualized Earning Gains Compared to High School Graduate Earnings	Range
Government	Job Training Partnership Act (JTPA)	5%*	-
Community College	1 Year Academic	8%	0% to 16%
	1 Year Vocational	4%	0% to 8%
	2 Year (completed) Academic	33%**	25% to 40%
	2 Year (completed) Technical/Vocational	26%**	5% to 47%
College BA	4 Year Degree	83%****	-
Sector Training	Sector Employment Development Learning Project SEDLP	73%***	-
Apprenticeship		88%****	-

The data for this table was calculated by the Transportation Learning Center using the following sources:

Lerman, Robert. 2008 "Are Skills the Problem? Reforming the Education and Training System in the United States." In *A Future of Good Jobs? America's Challenge in the Global Economy*. Edited by Timothy J. Bartik and Susan N. Houseman, Upjohn Institute for Employment Research. pp. 1-80.

* Carneiro, Pedro, and James J. Heckman. 2003. "Human Capital Policy" and "Responses." In *Inequality in America: What Role for Human Capital Policies?* James J. Heckman and Alan B. Krueger, eds. Cambridge, MA: MIT Press, pp. 77-240 and pp. 293-326.

**Silverberg, Marcia, Elizabeth Warner, Michael Fong, and David Goodwin. 2004. *National Assessment of Vocational Education: Final Report to Congress*. Jessup, MD: US. Department of Education . Solomon Amy L., Christy Visher, Nancy G. La Vigne, and Jenny Osborne, 2006. *Understanding the Challenges of Prisoner Reentry: Research Findings from the Urban Institute's Prisoner Reentry Portfolio*. Washington, DC: Urban Institute, Justice Policy Center. <http://www.urban.org/publications/411289.html>. and Bureau of Apprenticeship Standards. 2009. "Apprenticeship & WIA. A Strategic Advantage." Slides 21 & 22. www.wicwi.org/powerpoint/apprenticeship_strategic_advantage_032709.pp

*** Blair, Amy J. 2002. "Measuring Up and Weighing In: Industry-Based Workforce Development Training Results in Strong Employment Outcomes." Sector Policy Project Series Report No. 3. Washington, DC: The Aspen Institute.

****Bureau of Apprenticeship Standards. 2009. "Apprenticeship & WIA. A Strategic Advantage." Slides 21 & 22. www.wi-cwi.org/powerpoint/apprenticeship_strategic_advantage_032709.ppt

Annual Earning Gains from Education and Training Programs

In light of President Obama's one year skills challenge the Center has created a table comparing the benefits of several types of post-secondary education.¹ The above table has taken the earnings gains normalized over High School graduate earnings to convey the private gains experienced by individuals who complete various post-secondary education programs. Government programs such as the Job Training Partnership Act produced the lowest earning gains. Depending on the specific focus (academic or vocational) the completion of an Associate's degree yields earning gains between 26% and 33%. In contrast sector based training such as Sector Employment Development Learning Project (SEDLP) provides earning gains of 73%. Rivaling wage gains received by four year college graduates, those who complete an apprenticeship program will earn 88% more than individuals with only a high school diploma. Applying this data to the transit industry *and* coupling this with the realization that community colleges are not equipped to handle transit specific technologies and equipment used for hands-on learning, provides a compelling argument for work-based training partnerships and apprenticeship programs for transit employees.

¹ <http://www.whitehouse.gov/issues/education/>