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What We Know About Workforce Development for Low-Income Workers: Evidence, Background and Ideas for the Future

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What We Know About Workforce Development for Low-Income Workers: Evidence, Background and Ideas for the Future

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This bibliography summarizes recent research on the structure and effectiveness of workforce development programs. While the term "workforce development" can mean many things, this document focuses on programs to help low-skill, low-wage and displaced workers increase their employment and earnings, as well as labor market trends that affect them. One estimate places the cost of primary DOL worker training programs at about \$6 billion annually in the mid-2000s (see Holzer 2009, brief). The discussion is organized as follows: Section I covers evidence on the overall effectiveness of job training and other active labor market programs, several proposals to improve them, and the impact of the Great Recession on workforce development in the U.S. Section II discusses the growing skills and earnings gaps between rich and poor Americans—phenomena that underlie efforts to improve low-wage workers' earnings and future prospects. Section III catalogues evidence on training and advancement programs, including the Workforce Investment Act, community college education, experimental programs focused on advancement and reentry programs for the formerly incarcerated. Section IV discusses youth programs, both those in school and those who have dropped out or are at risk of doing so. Section V discusses employer-focused, or "demand-side," programs, including sectoral strategies and efforts to align workforce and economic development efforts.

I. Does Workforce Development Work? The Effectiveness of Active Labor Market Programs and Ideas for Improvement

A large body of evidence indicates that workforce development programs help participants modestly increase their earnings. In light of these findings, what should we expect from workforce development programs? Numerous researchers believe that existing studies do not capture the programs' full impact on participants and society—because they do not follow participants for long enough, conflate different interventions (some of which are more effective than others), ignore impacts other than those on earnings and/or do not provide intensive enough services for us to see substantial impacts. However, many researchers have proposed ways to improve workforce development programs. These include increasing the intensity of training; better tailoring services to clients' individual needs; focusing on job retention and advancement, rather than simply on rapid job placement; and working more closely with employers to place clients in jobs and ensure the training they receive meets their needs. Some critics call for streamlining the sprawling federally-funded workforce development system, but many programs serve small populations with unique

needs. In the wake of the Great Recession, the American Recovery and Reinvestment Act expanded funding for training, and researchers have considered how public policy can increase the availability of jobs and help workers mitigate future earnings losses by improving their skills.

Effectiveness of workforce development

Holzer, H. 2009. "Workforce Development Programs as an Antipoverty Strategy: What Do We Know? What Should We Do?" In Cancian, M. & Danziger, S., eds., *Changing Poverty, Changing Policies*. New York: Russell Sage Foundation, 301-329. (28 p.) Brief version available at: http://www.irp.wisc.edu/publications/focus/pdfs/foc262k.pdf

Holzer traces declines in funding for most major federal workforce development programs since the 1960s and 70s and catalogues new approaches to workforce development, including labor market intermediaries, sectoral strategies, incumbent worker training and transitional jobs for ex-offenders and disconnected youth. He also reviews evidence on the effectiveness of training programs: in short, "modest expenditures usually produce modest positive impacts." Holzer recommends increasing funding for effective workforce development programs and tying rigorous evaluation to expansions of funding.

Barnow, B. & Smith, J. 2009. "What We Know about the Impacts of Workforce Investment Programs." In Toussaint-Comeau, M. & Meyer, B., eds., *Strategies for Improving Economic Mobility Programs*. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research, 165-178. (13 p.)

The authors review evaluations of employment and training programs, including studies of major federal programs (MDTA, CETA and JTPA), Job Corps, on-the-job training and sectoral training. In brief, "most employment and training programs have either no impact or modest positive impacts" and in many cases, programs' net economic benefits to society do not outweigh their costs. However, Barnow and Smith raise several analytic issues related to these evaluations: often, follow-up periods too short to see long-term impacts; evaluators not recognize the heterogeneity of services provided by programs they group together, e.g., "classroom training;" and many studies include less-than-rigorous cost benefit analyses or do not discuss costs and benefits.

Card, D., Kluve, J. & Weber, A. 2010. "Active Labour Market Policy Evaluations: A Meta-Analysis." *The Economic Journal*, 120, F452–F477. (25 p.)

The authors review 97 evaluations of active labor market policies around the world, including job search assistance, classroom and work experience training, subsidized private sector employment and public sector employment. All evaluations included were conducted between 1995 and 2007. Card, Kluve and Weber find that job search assistance programs have "relatively favourable" impacts, and while training programs often appear ineffective in the short term, they "are associated with positive medium-term impacts." However, public sector employment programs are "less effective."

King, C. & Heinrich, C. 2011. "How Effective are Workforce Development Programs? Implications for U.S. Workforce Policies." Presented at the Association for Public Policy Analysis and Management's Fall Research Conference. (18 p. with appendices) http://web27.cc.utexas.edu/research/cshr/pubs/pdf/King-Heinrich-APPAM-10222011.pdf

The authors provide an overview of workforce development programs and review evidence on their effectiveness, arguing that the conventional wisdom that these programs are ineffective results from misinterpretation and incomplete reading of the evidence. King and Heinrich argue that we have measured the impact of workforce development policy too narrowly, not followed participants for long enough to see programs' long-term impacts, failed to account for heterogeneity in services, and misunderstood the magnitude of positive impacts of some programs.

Proposals to improve the system

Wallace, J. 2007. "A Vision for the Future of the Workforce Investment System." New York: MDRC. http://www.mdrc.org/publications/440/concept.html

Wallace argues for four changes to federal workforce development programs such as WIA: the increasing size of the low-wage workforce calls for programs that help workers retain jobs and advance, not simply find low-paying jobs; workforce programs must engage with employers in order to improve the quality of jobs available; because other safety net programs (such as food stamps) have become increasingly important to low-wage workers over time, workforce programs should help clients access them—e.g., by placing eligibility workers in One Stop centers; performance standards should address these new directions and ensure that programs do not avoid serving the hard-to-employ.

Osterman, P. 2007. "Employment and Training Policies: New Directions for Less Skilled Adults." In Holzer, H. and Nightingale, D., eds., *Reshaping the American Workforce in a Changing Economy*, Washington, D.C.: Urban Institute, 119-154. (35 p.) Earlier version available at http://web.mit.edu/osterman/www/oster-rev.pdf

Osterman provides an overview of the public employment and training system and argues that in addition to improving workers' skills and matching workers with jobs, the system should engage with employers to increase job retention and on-the-job training opportunities for low-skilled workers. While job training is effective at increasing workers' earnings, Osterman argues, employers problematically see the employment and training system as an "extension of the welfare system," and many programs do not connect with each other effectively. Osterman also calls for the federal workforce development system to shift toward encouraging local innovation.

Stoll, M. 2010. "Workforce Development and Public Policy: Addressing New Realities in Low-Skill Labor Markets." In Plotnick, R., Meyers, M., Romich, J., & Smith, S.R., eds., Old Assumptions, New Realities: Ensuring Economic Security for Working Families in the 21st Century. New York: Russell Sage Foundation, 71-102. (31 p.)

As manufacturing has declined, higher-level job skills and have become increasingly important to employers. However, public workforce development programs have been too small—and, often, too disconnected from employers—to prevent less educated men's wages from stagnating/falling in the face of this decline and other labor market changes. Stoll calls for the expansion of workforce programs that maintain strong relationships with employers and cooperation among regional workforce agencies to reduce spatial mismatch of workers and jobs.

Holzer, H. 2011. "Raising Job Quality and Skills for American Workers: Creating More-Effective Education and Workforce Development Systems in the States." Washington, DC: Brookings Institution. (18 p., 6 p. summary)

http://www.brookings.edu/research/papers/2011/11/workforce-holzer

Holzer proposes a "Race to the Top"-like set of competitive federal grants that would fund state-level training partnerships between employers in key industries, education providers, workforce agencies and intermediaries. The program would build on current state efforts, encourage the expansion of initiatives shown to be effective through randomized controlled trials, and draw from evidence indicating that: (1) education and training programs targeting firms/sectors that provide relatively high-paying jobs tend to succeed in raising participants' earnings, and (2) successful training programs link to employer and labor market needs.

Uhalde, R.J. 2011 (April 7). "Statement of Raymond J. Uhalde, Vice President, Jobs For The Future, Before the Subcommittee on Labor, Health and Human Services, Education and Related Agencies, Committee on Appropriations, United States House of Representatives." (6 p.) http://appropriations.house.gov/files/040711TestimonyofRaymondUhaldeVPJobsfortheFuture.pdf

WIA is in need of reauthorization—particularly in light of the Great Recession's impact on the labor market—legislators should resist the urge to cut education and training programs due to deficit concerns, Uhalde says. WIA's core and intensive services have been shown to improve employment rates and raise earnings, with particularly strong results for community college training for dislocated workers. Uhalde argues that sector-based and on-the-job training "should become common practice nationwide;" that programs serving dislocated workers should help clients attain credentials faster, and that these programs would be improved through better assessment of dislocated workers' skills and needs.

Administration: duplication between federal workforce programs?

U.S. General Accountability Office. 2011 (January). "Multiple Employment and Training Programs: Providing Information on Colocating Services and Consolidating Administrative Structures Could Promote Efficiencies." GAO-11-92. (34 p. plus appendices)

http://www.gao.gov/new.items/d1192.pdf

This is one in a series of GAO reports on the large number of employment and training programs, and has been used to support assertions that many workforce development programs are redundant. GAO identified 47 employment and training programs, "almost all" of which provide services or serve populations that are similar to other programs. In FFY 2009, the federal government spent \$18 billion on these programs—an increase compared to 2003 due to temporary ARRA funding. While most programs track outcome measures, few have had an impact study completed since 2004.

National Skills Coalition. 2011. "Are Federal Workforce Programs Duplicative?" (1 p.) http://www.nationalskillscoalition.org/homepage-archive/documents/2011/nsc_programsduplicative_2011-03.pdf

NSC argues that contrary to GAO reports, duplication between the 47 federal employment and training programs is limited. Three programs (WIA Adult, WIA Dislocated Worker and Wagner-Peyser) serve

80% of participants in the federal workforce development system. Many of the smaller programs target specific populations with unique needs, while others are components of larger programs with broader purposes, such as TANF.

State workforce development programs

Larson-Krieg, M. 2007 (June). "Workforce Development and the States." National Conference of State Legislatures. (31 p.)

http://www.ncsl.org/Portals/1/documents/employ/StateRoleinWorkforceDevelopment.pdf

This primer, intended for policymakers, provides overviews of major funding streams for workforce development programs, WIA, and issues such as connecting workforce development and higher education and performance measurement. It also includes an appendix that catalogues some state workforce development programs in the mid-2000s.

Impact of the Great Recession/ARRA

O'Leary, C. & Eberts, R. 2010. "Employment and Training Policy in the United States during the Economic Crisis." Working Paper No. 10-161, W.E. Upjohn Institute for Employment Research, Kalamazoo, MI. (32 p.) http://research.upjohn.org/up_workingpapers/161/

ARRA doubled the amount of federal funding available for worker training/retraining. The authors provide an overview of how workforce and related programs were expanded under ARRA, particularly in Michigan, focusing on WIA, Trade Adjustment Assistance and Unemployment Insurance (UI). WIA's adult and dislocated worker programs received the largest boost. One option through which states could expand UI was to give participants job search waivers in order to attend training. The Summer Youth Employment Program also received a substantial boost from ARRA.

Edelman, P., Golden, O., & Holzer, H. 2010. "Reducing Poverty and Economic Distress after ARRA: Next Steps for Short-Term Recovery and Long-Term Economic Security." Washington, D.C.: Urban Institute. (8 p.) http://www.urban.org/UploadedPDF/412150-next-steps-ARRA.pdf
The authors suggest an agenda for workforce development and poverty-reduction programs to address the short- and long-term consequences of the Great Recession and reducing poverty in the long run. Their proposals include: tax credits to private companies that hire unemployed workers; federal grants to prevent local and state government job cuts; investment in education and training programs; the extension of the American Recovery and Reinvestment Act's safety net-strengthening measures, including the permanent expansion of unemployment insurance; child care subsidies; support for youth entering the labor market and dropout prevention programs.

II. Underlying Issues: Labor Market Polarization, the Skills Gap and the Low-Wage Labor Market

Why do we need workforce development programs, and what would it take to design an effective one? This section discusses trends in U.S. labor markets that have widened the earnings gap between high- and low-skilled workers, and increased the need for programs that help low-wage workers gain skills and advance. Autor and others argue that we have seen the labor market "polarize" over the last few decades: technology has allowed companies to replace workers who perform routine, middle-skilled tasks with technology, while opportunities have increased in the high- and low-skilled ends of the labor market. In a recent paper, Jaimovich and Siu argue that polarization is closely tied to the recent phenomenon of "jobless recoveries:" the loss of middle-skilled jobs has occurred almost entirely during the three most recent recessions. However, Holzer argues that Autor and his colleagues conflate "middle skill" and "routine" jobs—and that many non-routine middle-skill occupations are growing.

Whether or not middle-skilled jobs are disappearing, the earnings gap between high- and low-skilled workers has been growing. Goldin and Katz argue that technology is not the only influence; stagnating educational attainment has reduced the supply of skilled workers and rising demand for them has increased their earnings relative to their less-skilled counterparts. Carnavale and Rose argue that dramatically increasing the number of Americans who graduate from college could reduce the gap between high- and low-skilled workers' earnings. During the Great Recession, less skilled workers lost jobs at an especially high rate. Blank notes that unemployment significantly influences the poverty rate. What should policymakers do about this gap? While many call for increased investments in training and higher education, the quality of primary and secondary education also play an important role. Heckman argues that we should focus on funding intensive preschool interventions, since they have high benefit-cost ratios in the longer term and programs for adults and even older children require significant remediation. Finally, Holzer et al. argue that both workers' personal characteristics and unique employer characteristics make it difficult for workers to advance out of low-wage jobs and increase their financial security.

Labor market polarization

Autor, D. 2010. "U.S. Labor Market Challenges Over the Longer Term." Paper prepared for the Federal Reserve Board of Governors. (17 p. plus appendices) http://economics.mit.edu/files/6346 In this paper, Autor summarizes his employment (or labor market) polarization argument and discusses some long-term consequences of the phenomenon. In a polarizing labor market, the number of high-skill "abstract" jobs (which require college education) and low-skill service and/or "manual" jobs increase. However, "routine" middle-skill jobs decrease as they are automated and replaced by technology. The result is a labor market that "greatly rewards" educated workers and is unfavorable to the less-educated—especially men, when we consider the fact that women's postsecondary educational attainment has grown while men's has stagnated. Autor notes that in addition to employment consequences, these labor market changes may increase incarceration and affect childbearing and family formation.

Autor, D. & Dorn, D. 2012. "The Growth of Low Skill Service Jobs and the Polarization of the U.S. Labor Market." MIT Working Paper. (45 p. plus tables) http://economics.mit.edu/files/1474
Autor and Dorn offer an explanation for labor market polarization: As computers replace less-skilled workers in "routine" goods-production jobs, but consumers prefer not to substitute technology for service

workers, wages for service jobs rise relative to those for routine jobs, and routine workers shift into to service jobs. They hypothesize and demonstrate that from the 1980s to the mid-2000s, local labor markets that were previously more specialized in routine jobs were more likely to (1) adopt technology and displace workers from routine jobs; (2) undergo employment polarization as low-skilled workers shift into service jobs; (3) see greater nominal wage growth at the high and low extremes of the skill spectrum; and (4) experience inflows of high-and low-skilled workers.

Jaimovich, N. & Siu, H.E. 2012. "The Trend is the Cycle: Job Polarization and Jobless Recoveries." (37 p.) http://faculty.arts.ubc.ca/hsiu/research/polar20120331.pdf

The authors relate labor market polarization and the phenomenon of "jobless recoveries" seen in the last three recessions (1991, 2001 and 2007-9). They argue that job loss in middle-skill occupations occurs not gradually, but almost entirely during economic downturns, and in turn, most of the jobs lost during recent economic downturns have been middle-skill jobs. As technology increases the value of highly skilled workers, middle-skilled individuals see the potential benefits of gaining the knowledge to pursue high-skill jobs increase. As these workers advance, the supply of middle-skilled workers decreases, and the case for employers to replace them with technology becomes more compelling. In response, wages for middle-skill jobs fall relative to low-skill jobs, and middle-skill workers who lack the capacity to learn and advance move to low-skilled jobs. Thus, the number of middle-skill jobs decreases and the number of high- and low-skill jobs increases.

Arguments against the polarization hypothesis: growing middle-skill jobs

Holzer, H. & Lerman, I. 2007. "America's Forgotten Middle-Skill Jobs: Education and Training Requirements for the Next Decade and Beyond." Washington, D.C.: The Workforce Alliance. (30 p.) http://www.urban.org/UploadedPDF/411633_forgottenjobs.pdf

Holzer and Lerman consider the kinds of skills and education workers need to succeed in today's labor market, and argue that demand for workers to fill middle-skill jobs—which require some classroom or onthe-job training beyond high school, but less than a four-year college degree, e.g., many health technician and skilled construction jobs—will remain high relative to supply. They call for policies that increase access to education and training opportunities that are appropriate for middle-skill jobs as well as opportunities to earn four-year college degrees.

Holzer, H. 2010 (May 13). "Is the Middle of the Job Market Disappearing? A Comment on the 'Polarization' Hypothesis." Washington, D.C.: Center for American Progress. (7 p.) http://www.americanprogress.org/issues/2010/05/pdf/Holzer_memo.pdf

Holzer responds to Autor's labor market polarization argument, questioning Autor's definition of "middle skill" jobs as "routine." While Holzer agrees that the economy has lost some routine jobs—those that primarily comprise the execution of set tasks and procedures, which can be automated more readily than other jobs—he argues that not all middle-skill jobs are routine, and offers evidence that non-routine middle-skill jobs are not disappearing.

The skills gap

Heckman, J. 2008. "Schools, Skills and Synapses." NBER Working Paper 14064. (27 p. plus appendices and notes) http://www.nber.org/papers/w14064

Heckman argues that family background plays a dominant role in shaping adult outcomes: "about half of the inequality in the present value of lifetime earnings is due to factors determined by age 18." He writes that early interventions such as high-quality preschool (along the lines of the Perry Preschool or Abecedarian program) have more positive effects, higher cost-benefit ratios and much higher economic returns later interventions such as reduced student-teacher ratios and education and training programs for adults. As a result, Heckman argues, we should refocus policies to prioritize early interventions: "The longer society waits to intervene in the life cycle of a disadvantaged child, the more costly it is to remediate disadvantage."

Goldin, C. & Katz, L. 2009 (July). "The Future of Inequality: The Other Reason Education Matters So Much." *Milken Institute Review*, third quarter 2009, 26-33. (7 p.) http://www.milkeninstitute.org/publications/review/2009_7/26-33mr43.pdf (8 p.)

The authors summarize the main argument of their book The Race Between Education and Technology: While technological progress increases relative demand for skilled workers, the rising educational attainment increases the relative supply of skilled workers. Over time, as the paces of the two phenomena change, the wage premium for educated workers fluctuates—falling when educational attainment grows faster than technological progress, and rising when the trends reverse. Throughout the 20th century, technology has progressed, steadily increasing demand for skilled workers. However, while educational attainment increased into the 1970's, college-going then fell and high school graduation rates stagnated. Goldin and Katz attribute increases in the wage premium for college education since the 1980s to that change in educational attainment rates, and argue that the weakening union movement, globalization and immigration played lesser roles.

Blank, R. 2009. "Economic Change and the Structure of Opportunity for Less-Skilled Workers." In Cancian, M. & Danziger, S., eds., *Changing Poverty, Changing Policies*. New York: Russell Sage Foundation, 63-91. (28 p.)

Blank describes labor force participation and employment patterns of less-educated men and women since the 1980s and shows that unemployment influences the poverty rate significantly. Men's labor force participation has decreased due to dropping wages in the 1980s and possibly due to mass incarceration in the 1990s and today. Women's labor force participation has risen due to welfare reform and increases in the Earned Income Tax Credit. However, since welfare reform, the number of "disconnected" women neither working nor on welfare has grown, and skill-based technological change (a phenomenon described in the labor market polarization section above) has made higher-paying jobs for low-skilled workers harder to find.

Carnavale, A. & Rose, S. 2011. "The Undereducated American." Georgetown Center on Education and the Workforce. (38 p. plus appendices)

http://www9.georgetown.edu/grad/gppi/hpi/cew/pdfs/undereducatedamerican.pdf

The authors argue that income inequality has widened in recent decades in the U.S. because demand has outstripped our supply of college-educated workers—in contrast to assertions that we have too many college

graduates. They offer the rising wage premium for college as evidence that the U.S. economic has undersupplied college graduates. Carnavale and Rose call for policies that will add 20 million workers with postsecondary education to the U.S. economy in the next 15 years.

Tyson, L. 2012 (May 4). "Structural Unemployment and Good Jobs." *The New York Times* Economix blog. http://economix.blogs.nytimes.com/2012/05/04/structural-unemployment-and-good-jobs/

Despite reports of jobs going unfilled due to mismatches between applicants' skills and the skills required for the positions, overall structural employment does not appear to have increased since the Great Recession. However, less-educated, less-skilled workers experienced especially high job loss and unemployment rates during the recession, reflecting a long-term trend toward polarization of job opportunities. In response, we should invest more in education and training.

Arguments against skill-biased technological change: the skewed distribution of rewards

Schmitt, J. and Jones, J. 2012 (July). "Where Have All the Good Jobs Gone?" Center for Economic and Policy Research. http://www.cepr.net/documents/publications/good-jobs-2012-07.pdf

The authors argue that while we would expect a better-educated workforce to yield higher-paying jobs with benefits, the share of workers with these "good jobs" has declined since the late 1970s, and had declined even before the Great Recession. They argue that skill-biased technological change cannot be the culprit because if it were, the share of college-educated workers with "good jobs" would be higher. Instead, they attribute the loss of these jobs to workers' declining bargaining power and the falling share of private-sector workers who are unionized.

Dew-Becker, I. and Gordon, R.J. 2005 (December). "Where Did the Productivity Growth Go? Inflation Dynamics and the Distribution of Income." NBER Working Paper No. 11842. http://www.nber.org/papers/w11842

From 1966 to 2001, only the top 10 percent of the income distribution enjoyed growth in real income at or above the average economy-wide productivity growth rate. The authors argue that in economists have "placed too much emphasis on" skill-biased technological change as the cause of rising income inequality, rather than noting than growing rewards for those at the very top of the income distribution.

Can Workers "Escape" Low Earnings?

Holzer, H., Lane, J. & Vilhuber, L. 2004. "Escaping Low Earnings: The Role of Employer Characteristics and Changes." *Industrial and Labor Relations Review*, 57(4): 560-578. (18 p.) An earlier version of this paper is available at: http://www.irp.wisc.edu/publications/dps/pdfs/dp126903.pdf

The authors explore the whether and how low-wage workers "escape" poverty and low-earning status (defined as earning \$12,000/year in 1999 dollars for three consecutive years) through earnings growth. While workers' personal characteristics were important determinants of low-earning status, employers played an important role: unique employer characteristics (as well as observable factors such as size, turnover and

industry) affected whether workers escaped poverty, and many workers who improved their earnings did so by changing employers.

III. Job Training, Placement and Advancement Programs

This section summarizes papers on the impacts and structure of training and advancement programs, including the Workforce Investment Act, welfare-to-work programs, community college education, retraining for displaced workers, adult basic education, advancement-focused programs, reentry programs and other initiatives. Highlights include:

- Heinrich et al. find that adult recipients of WIA training see significant earnings gains after four years, but many note that the program does not ensure that training funds go to the hardest-to-employ. While a random assignment study of WIA is only now underway, a randomized controlled trial of its predecessor, the Job Training and Partnership Act, found that the program increased adult women's earnings and had positive social benefits.
- Policymakers differ on whether welfare-to-work programs should focus on training or rapid job placement; while training may have more longer-term benefits, in tight labor markets, job placement-focused programs can increase participants' earnings by encouraging them to wait for higher-paying jobs.
- Community college education can have a significant impact on students' earnings if they pursue high-return fields such as nursing or engineering and finish their courses of study, but academic advising is often limited. In addition, some employers see them as markers that students lacked the capacity to finish a four-year program.
- Training programs of all types may have trouble engaging participants because adults have many competing demands on their time. Financial incentives, work supports and efforts to make classroom education career-relevant—such as the I-BEST adult basic education program—can help overcome this challenge.
- Some experimental programs have focused specifically on helping workers advance. This task is challenging, and programs may need to help workers change jobs in order to increase their earnings.
- Reentry programs for the formerly incarcerated face some of the greatest challenges of any training program, including discrimination and participants' personal issues. While current evidence does not indicate reentry programs are highly effective in increasing long-term earnings, they may help some participants avoid recidivating.

Overview: Major Workforce Development Programs

Workforce Investment Act

Blank, D., Heald, L. & Fagnoni, C. 2011. "An Overview of WIA." In Besharov, D. & Cottingham,
P., eds., The Workforce Investment Act: Implementation Experiences and Evaluation Findings. Kalamazoo, MI:
W.E. Upjohn Institute for Employment Research for Employment Research: 49-78. (29 p.)
Three researchers with the Government Accountability Office describe WIA's administrative structure,
services, funding and performance measurement. They discuss the ways in which WIA departed from prior

federal workforce development funding legislation: a reduced focus on serving low-income workers and on job training as the primary means for getting a job, greater focus on the ideas of personal responsibility and local decision-making, increasing attention to streamlining services and an increasing role for the private sector. Key issues include WLA's responsiveness to changing economic and budgetary conditions, questions over which outcomes and which participants to track, questions over One Stops' ability to engage with businesses, and the need to balance flexibility and accountability with appropriate targeting of clients.

Heinrich, C., Mueser, P., Troske, K., Jeong, K., Kahvecioglu, D. 2011. "A Nonexperimental Evaluation of WIA Programs." In Cottingham, P., eds., *The Workforce Investment Act: Implementation Experiences and Evaluation Findings*. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research for Employment Research: 371-295. (24 p.) A 2009 version of this paper is available at: http://ftp.iza.org/dp4569.pdf

The authors evaluate the impacts of WIA Adult and Dislocated Worker training programs, comparing participants to Unemployment Insurance and Employment Service recipients with similar characteristics. They find that four years after entering training through the WIA Adult program, participants see large annual earnings gains—about \$2,400 for women and \$1,700 for men, or 26% and 15% of average earnings, respectively—despite initial earnings decreases while participants undergo training. Program participation also increases employment by about 10%. Assuming these earnings impacts continue for two to three years, the Adult program's benefits outweigh its costs. The WIA Dislocated Worker program does not clearly increase workers' earnings, but the authors estimate that it increases employment by nearly as much as the Adult program.

Perez-Johnson, I., Moore, Q. & Santillano, R. 2011. "Improving the Effectiveness of Individual Training Accounts: Long Term Findings from an Experimental Evaluation of Three Service Delivery Models." Princeton, NJ: Mathematica Policy Research. (142 p.) http://www.mathematica-mpr.com/publications/pdfs/labor/ITA_fnlrpt.pdf

This experiment compared three models for individual training accounts with varying levels of structure and consumer directedness, following participants for six to eight years. Researchers found that clients in the most structured ITA program spent more time in high-wage jobs than clients in the other models—a difference that translated into higher earnings. However, the level of choice allowed in the program did not affect labor force participation or employment during the six- to eight-year follow-up period. In addition, counselors in the most structured model had trouble steering clients toward high-return training as they were supposed to, and customers showed reluctance to participate in counseling.

Job Training Partnership Act

Orr, L. et al. 1996. "Does Training for the Disadvantaged Work? Evidence from the National JTPA Study." Washington, D.C.: Urban Institute. (233 p. plus appendices)

This book presents the results of a national, 30-month random assignment study of the Job Training and Partnership Act (JTPA) conducted in the late 1980s. JTPA, the federal workforce development legislation that preceded WIA, provided adult and youth participants with classroom-based training, on-the-job training, job search assistance, basic education, work experience and other miscellaneous services. Over 30 months,

JTPA increased adult women enrollees' total earnings by 15%, and also increased hours worked and GED/high school diploma attainment—all statistically significant results. The authors estimate that JTPA increased men's earnings by 8%, though the results did not meet the same statistical significance threshold as those for women. JTPA adult programs had positive net social benefits. However, the program did not significantly reduce welfare receipt, and the authors did not find that JTPA youth programs had significant impacts on participants' earnings.

Welfare-to-work programs

Dyke, A., Heinrich, C., et al. 2006. "The Effects of Welfare-to-Work Program Activities on Labor Market Outcomes." Journal of Labor Economics, 24(3): 567-607. (40 p.)

The authors estimate the impact of welfare-to-work programs in Missouri and North Carolina on earnings, focusing on whether strategies that emphasize longer-term training—e.g., basic skills remediation, vocational skills training, or postsecondary education—yield better results than programs focused on rapid job placement. They find that longer-term training is associated with earnings gains after two years (which appear to persist beyond that time frame), despite the fact that training participants initially sustain earnings losses. In contrast, job search/job readiness programs have minimal impacts, even after four years. While past studies find mixed results, the authors argue that many of those studies lack longitudinal data or fail to distinguish between training- and job placement-focused programs.

Hamilton, G. 2001. "Moving People from Welfare to Work: Lessons from the National Evaluation of Welfare-to-Work Strategies." New York: MDRC. (62 p.) http://www.mdrc.org/publications/52/full.pdf

The National Evaluation of Welfare-to-Work Strategies (NEWWS) evaluated the effectiveness of welfare-to-work programs that used a "labor force attachment" approach that favored placing recipients in jobs as quickly as possible or a "human capital development" approach that focused on basic education and other longer-term skill-building activities before participants searched for jobs. A large-scale, five-year random assignment study in the 1990s found that neither type of program had a greater impact on employment or earnings, although the labor force attachment approach moved people into jobs and off welfare more quickly. By far the most successful NEWWS program, located in Portland, OR, combined the two strategies, emphasizing employment but sending many participants to short-term training before they looked for jobs, and encouraging them to wait for a "good" job. Finally, while all NEWWS programs increased participants' employment and earnings relative to the control group, participants lost benefits as their earnings rose, meaning that their overall incomes did not increase.

Classroom-based programs

Community colleges

Van Noy, M. & Jacobs, J. 2012 (February). "Employer Perceptions of Associate Degrees: Information Technology Technicians in Detroit and Seattle." New York: Community College Research Center, Working Paper #39. (26 p.) http://ccrc.tc.columbia.edu/Publication.asp?UID=1018

This qualitative paper finds that associate degrees send "mixed messages" to employers: while employers expected similar skills and knowledge from applicants with either bachelor or associate degrees—and some employers said they expected associate degree holders to have more practical knowledge and experience—associate degrees could also be interpreted as a signal that applicants lack the ability, initiative or skill to obtain a four-year degree. Van Noy and Jacobs surveyed employers hiring for IT positions in Detroit and Seattle and analyzed job postings; they also discuss the differences between the two labor markets. The authors recommend that community colleges work to understand employers' views of their degree, build connections with employers to help overcome negative connotations, ensure they endow graduates with the skills employers expect and help students pursue bachelor's degrees.

Jenkins, D. & Cho, S. 2012 (January). "Get With the Program: Accelerating Community College Students' Entry into and Completion of Programs of Study." New York: Community College Research Center, Working Paper #32. (30 p.)

http://ccrc.tc.columbia.edu/Publication.asp?UID=885

Jenkins and Cho posit that many community college students want to earn postsecondary credentials but fail to do so because they do not enter programs of study. Many students, particularly younger students—lack clear academic and career goals and receive little guidance, and many become sidetracked by developmental courses. The weak ability of many community college departments to track students' progress and counsel them exacerbates these problems. The authors propose system-level reorganization of counseling and tracking services and offer questions for community colleges to consider as they rethink these processes.

Furchtgott-Roth, D., Jacobson, L. & Moker, C. 2009. "Strengthening Community Colleges' Influence on Economic Mobility." Washington, DC: PewTrusts Economic Mobility Project. (27 p. plus appendices)

http://www.pewtrusts.org/uploadedFiles/wwwpewtrustsorg/Reports/Economic Mobility/EMP COLLEGES_v10.pdf

This study uses statewide data from Florida to study the impact of community college attendance on upward mobility. The authors find that per-credit, the returns to community and four-year college are similar: 4 to 6% for every two semesters. In addition, many community college students go on to jobs related to their studies. However, community college education is particularly valuable for students in "high return" fields, such as nursing, engineering and computer programming: seven years after leaving community college, students who concentrate in high-return fields earn an average of \$12,000 more/year than those who concentrate in low-return fields such as humanities or fine arts. The high- or low-return nature of a student's field of study was even more influential on his or her earnings than high school GPA.

Retraining displaced workers

Jacobson, L., LaLonde, R. & Sullivan, D. 2004. "Estimating the returns to community college schooling for displaced workers." *Journal of Econometrics*, 125(2005): 271-304. An earlier version of this paper is available at: ftp://repec.iza.org/RePEc/Discussionpaper/dp1017.pdf (33 p.)

When mid-career workers are displaced, they often suffer significant earnings losses. The authors study the impact of retraining through community colleges on the earnings of displaced workers in Washington State in

the 1990s, including only workers were in their former jobs for three or more years. They find that over four years, earning a year's worth of community college credits is associated with increases in average earnings of 13% for women and 9% for men, holding workers' individual characteristics constant. However, the courses a worker takes matter greatly: an academic year of vocational and academic math and science coursework yields 29% and 14% average earnings increases for women and men, respectively, due to increased hours and higher wages. In contrast, however, "less technically oriented courses" have low or possibly no returns.

Dolfin, S. & Berk, J. 2010. "National Evaluation of the Trade Adjustment Assistance Program: Characteristics of Workers Eligible Under the 2002 TAA Program and Their Early Program Experiences: Final Report." Princeton, NJ: Mathematica Policy Research. (67 p.) http://wdr.doleta.gov/research/FullText Documents/National%20Evaluation%20of%20the%20T <a href="mailto:rade%20Adjustment%20Assistance%20Program%20Characteristics%20of%20Workers%20Eligible%20Under%20the%202002%20TAA%20Program%20and%20Their%20Early%20Program%20Experiences%20Final%20Report.pdf

Trade Adjustment Assistance (TAA) subsidizes training and provides financial support and reemployment assistance for workers who have been displaced for trade-related reasons. The authors use quasi-experimental methods to evaluate how effectively TAA reaches affected workers, comparing eligible workers to similar Unemployment Insurance claimants who were not eligible for TAA. Dolfin and Berk find that a majority of eligible workers were informed about the program, and that TAA participants were significantly more likely to receive training. Women and older workers were more likely to participate in the program, but women and younger workers were more likely to receive training.

Jacobson, L., Sullivan, D. & Lalonde, R. 2011. "Policies to Reduce High-Tenured Displaced Workers' Earnings Losses Through Retraining." Washington D.C.: Brookings Institution, Hamilton Project. (38 p., summary 6 p.) http://www.hamiltonproject.org/papers/policies to reduce high-tenured displaced workers earnings losses thro/

The authors call for reforms to help retrain workers who experience significant earnings losses. High-tenure displaced workers face two obstacles to effective retraining: lack of resources to finance long-term training and lack of information to help them select high-return programs they will likely complete. Jacobson, et al. propose linking the size of training grants to earnings losses rather than household income; increasing the maximum amount for grants; and using One Stop Career Centers as "honest brokers" to provide trainees with information about training programs and encourage them to choose programs with track records of substantially increasing graduates' earnings.

Policy Change." Washington, DC: National Skills Coalition. (10 p.)

http://www.nationalskillscoalition.org/assets/reports-/nsc_nwlb_lessonslearned_2011-01.pdf

Michigan's No Worker Left Behind (NWLB) initiative offered unemployed or low-income workers grants of up to \$10,000 to cover tuition and academic expenses for qualifying postsecondary education programs.

NWLB aimed to orient state's workforce development efforts toward increasing the number of workers who

Good, L. 2011. "Michigan's No Worker Left Behind: Lessons Learned from Big-Picture Workforce

earn market-relevant credentials, and benefited from strong bipartisan support. In fall 2010, three years after

the program was launched, 59% of Michigan WIA participants were enrolled in training, compared to 13% nationwide, and three times as many Michigan WIA participants were enrolled in training lasting a year or longer. However, challenges include: demand that has exceeded resources; the need to integrate basic skills instruction with training, in order to serve the large number of workers who need remediation; TANF work participation requirements that were incompatible with the program; and the need for cultural transformation so that workers value higher education.

Adult Basic Education (ABE)

Zeidenberg, M., Cho, S. & Jenkins, D. 2010. "Washington State's Integrated Basic Education and Skills Training Program (I-BEST): New Evidence of Effectiveness." Community College Research Center Working Paper #20. (45 p.) http://ccrc.tc.columbia.edu/Publication.asp?UID=805

The authors analyze the impacts of I-BEST, a model used in Washington State community colleges in which basic skills (reading, writing and math) and occupational instructors team-teach occupational courses with integrated basic skills content. Basic skills are a prerequisite to learning occupational course content, but few adult basic skills students go on to college-level coursework, possibly because of the time it takes to advance through ABE courses. Compared to peers who took both ABE and occupational courses on their own, I-BEST students earned more college credits—especially in occupational courses—were more likely to improve their scores on basic skills tests, and earned more certificates and degrees (these differences were statistically significant and moderate to large). A more rigorous, causal analysis confirmed that community colleges that began offering I-BEST increased the likelihood that their students earned college credits or certificates.

Pleasants, J. 2011. "Building Integrated Pathways to Sustainable Careers: An Introduction to the Accelerating Opportunity Initiative." Boston: Jobs for the Future. (32 p.) http://www.iff.org/sites/default/files/AO_BuildingIntegratedPathways_080811.pdf

This piece, intended as an overview of a nationwide ABE initiative, is valuable for its explanation of the connections between ABE and workforce development, and the issues the current ABE system raises. Many less-skilled adults need ABE before they can enter postsecondary education or training that would expand their job opportunities. However, ABE is disconnected from other postsecondary education and training, and does not prepare students to transition to other coursework; in addition, ABE coursework is often too lengthy and inflexible for adults with other demands on their time. The initiative described draws on I-BEST, discussed above, and aims to make the path from ABE to other education and training clearer and more streamlined.

Helping low earners advance

Lambert, S.J., Haley-Lock, A., Henly, J.R. 2010 (June). "Work Schedule Flexibility in Hourly Jobs: Unanticipated Consequences and Promising Directions." Working Paper of the University of Chicago Work Scheduling Study. http://ssascholars.uchicago.edu/work-scheduling-study/files/lambert haley-

lock henly unanticipated consequences of flexibility in hourly jobs.pdf

The authors use Census data and findings from three case studies of low-seniority hourly jobs to assess challenges in implementing work schedule flexibility in these jobs. The authors argue that low-level hourly jobs are often characterized by scarce and fluctuating hours: schedules have nonstandard start and end times that

may be posted just days before upcoming work weeks, and workers say they do not work as many hours as they would like. Managers reportedly prioritize staying within work hour limits set by their corporations over accommodating employees' preferences for work hours, and create further instability by adjusting work schedules after posting them or sending workers home if business is slow. Finally, within firms, low-level hourly workers often compete with each other for hours or prime shifts. As a result, when workers restrict their availability, it can restrict their income; certain hours may be more likely to be cut; and changing one's shift imposes a burden on a colleague. The authors suggest that employers post schedules further in advance, reduce hours fluctuation, and cross-train front line employees; and that policymakers consider setting minimum hour provisions or "minimum daily wages,"

Holzer, H. & Martinson, K. 2005. "Can We Improve Job Retention and Advancement among Low-Income Working Parents?" Washington, D.C.: Urban Institute. (16 p.) http://www.urban.org/UploadedPDF/311241 job retention.pdf

The authors discuss two problems that limit less-skilled workers' earnings: frequent job turnover and limited prospects for advancement. These challenges can be due to workers' low skill levels, limited work histories and child care and transportation difficulties; job turnover can also be due to low wages and benefits. They offer four policy prescriptions: (1) financial incentives and supports, such as the EITC and subsidized child care, that make low-income work "pay" more; (2) improved case management and links to support services; (3) education and training programs, particularly those that produce employer-recognized credentials and allow workers to move at their own pace or stop and start training as their personal lives demand; and (4) "employer-focused" strategies from on-the-job training to efforts to build career ladders.

Employment Retention and Advancement project

Hendra, R., Dillman, K., et al. 2010. "How Effective Are Different Approaches Aiming to Increase Employment Retention and Advancement? Final Impacts for Twelve Models." New York: MDRC. (248 p., summary 14 p.) http://www.mdrc.org/publications/558/overview.html

MDRC's Employment Retention and Advancement (ERA) project was a three-year random assignment study of various strategies to help former welfare recipients and other low-wage workers, most of whom were single mothers, retain jobs and advance their careers. Three of 12 programs produced positive economic impacts. The one that served unemployed welfare clients (in Texas) offered financial incentives for work. The other two, which served already-employed clients (in Chicago and Riverside, CA), increased participants' earnings by helping them change jobs. The fact that three-quarters of the programs analyzed did not produce statistically significant gains highlights the difficulty of helping low-wage workers advance.

Wavelet, M., Martinson, K. & Hamilton, G. 2010. "Finding the Next Job: Reemployment Strategies in Retention and Advancement Programs for Current and Former Welfare Recipients." New York: MDRC. (11 p.) http://www.mdrc.org/publications/576/overview.html

The authors offer lessons from MDRC's ERA project for welfare-to-work program practitioners. Because job loss is common among welfare-to-work participants, Wavelet et al. argue that programs must learn to reemploy participants quickly. Best practices include: checking with clients and employers frequently to learn about problems or job losses (and meeting clients at their work sites or offering incentives such as travel vouchers for meetings); designating staff to work with newly unemployed clients; and developing close relationships with employers and knowledge of the dynamics of the local low-wage labor market.

Other advancement programs

Henderson, K., McAllum, C. & Karakus, M. 2010. "Workforce Innovations: Outcome Analysis of Outreach, Career Advancement and Sector-Focused Programs." Rockville, MD: Westat. (64 p.) http://www.nyc.gov/html/ceo/downloads/pdf/workforce_programs_evaluation_report.pdf

This report evaluates three advancement-focused pilots run by New York City's Center for Economic Opportunity, comparing participants' employment and earnings outcomes to clients of traditional One-Stop Career Centers in New York City. All three programs increased placement rates and yielded positive returns on investment over five years. Two programs that focused on placing participants in higher-wage jobs with advancement potential appeared particularly effective. Across the board, receipt of individual training grants was associated with higher placement rates, hourly wages and weekly hours; interview and computer skills training were also associated with higher placement rates.

Reentry programs/transitional jobs

Bushway, S. 2003. "Reentry and Prison Work Programs." Presented to the Urban Institute Reentry Roundtable, New York University Law School, May 19-20, 2003. (15 p.) http://www.urban.org/UploadedPDF/410853 bushway.pdf

This article discusses whether prison work programs (in-prison jobs, in-prison job training, or short-term job search assistance upon release) can reduce recidivism by boosting participants' prospects for legitimate employment, a question he answers with, "maybe." Bushway argues that employment programs for exoffenders must: (1) focus on helping participants with "desistance," or the process of reorienting their lives away from crime, by supporting them during the transition after release, and (2) overcome the stigma of a criminal record by retaining jobs over long periods of time—tasks at which current reentry programs are not highly successful.

Tyler, J.H. & Berk, J. 2009. "Correctional Programs in the Age of Mass Incarceration: What Do We Know About What Works?" in Toussaint-Comeau, M. & Meyer, B.D., *Strategies for Improving Economic Mobility of Workers: Bridging Research and Practice*, Kalamazoo, MI: W.E. Upjohn Institute for Employment Research, 179-193. (14 p.)

The authors argue that (1) adult offenders face such high obstacles upon release (e.g., stigma), it is difficult to affect their long-term employment and life prospects through prison-based or post-release employment programs; (2) counseling or employment services for ex-offenders are underprovided, and many prisoners lack sustained access to training due to logistical issues such as moving between prisons; (3) employment may prevent recidivism, but it is not clear why; and (4) employment programs may work better for certain types of prisoners. Tyler and Berk base their conclusions on the experimental evaluation of the Center for Employment Opportunities (CEO) in New York City, studies of the national Serious and Violent Offender Reentry Initiative (SVORI) and their own analysis of data on ex-offenders in Florida, cautioning that many earlier studies of reentry programs fail to control for selection bias. They suggest these employment programs target offenders who have committed income-generating crimes.

Bloom, D. 2010. "Transitional Jobs: Background, Program Models, and Evaluation Evidence." New York: MDRC. (46 p.) http://www.mdrc.org/publications/553/full.pdf

This paper reviews the history, common characteristics and challenges of transitional jobs (TJ) programs—which offer hard-to-employ clients, such as ex-offenders, work experience and financial support through temporary paying jobs, as well as case management, support services and assistance finding long-term jobs. Bloom summarizes three evaluations of TJ programs: CEO and TJRD (discussed below), as well as the Transitional Work Corporation (TWC) in Philadelphia. While CEO and TWC seem not to have increased clients' prospects for unsubsidized employment, Bloom argues that we should both test new strategies to produce better long-term employment impacts and broaden our thinking about TJ programs' goals, e.g., to include recidivism.

Redcross, C., Millenky, M., Rudd, T., & Levshin, V. 2012. "More Than a Job: Final Results from the Evaluation of the Center for Employment Opportunities (CEO) Transitional Jobs Program." New York: MDRC. (78 p., summary 22 p.) http://www.mdrc.org/publications/616/overview.html

CEO provides former prisoners in New York City with temporary paying jobs and support services, with the goal of preparing them for permanent jobs and helping them transition back into society. A three-year random assignment study found that overall, CEO only increased participants' employment when it provided them with temporary jobs. However, among participants who enrolled shortly after their release, CEO significantly reduced recidivism—perhaps by fostering supportive mentor and peer relationships—and may have increased the likelihood of long-term employment. Though the recidivism remained above 60% for all groups, CEO's financial benefits exceeded its costs, due in large part to reduced criminal justice costs.

Jacobs, E. 2012. "Returning to Work After Prison: Final Results from the Transitional Jobs Reentry Demonstration." New York: MDRC. (36 p. plus appendices) http://www.mdrc.org/publications/629/overview.html

The Transitional Jobs Reentry Demonstration (TJRD) tested four employment programs for former prisoners using a random assignment study. Like CEO, TJRD sites increased participants' employment by providing jobs, but the effects did not persist to unsubsidized jobs. Unlike CEO, TJRD did not appear to have a significant impact on recidivism over a two-year follow-up period. Jacobs calls for extending the period of the transitional job, including vocational training or offering financial incentives to participants.

Incumbent worker training, temporary placements & apprenticeships

Hollenbeck, K. 2008. "Is There a Role for Public Support in Incumbent Worker On-the-Job Training?" Kalamazoo, MI: W.E. Upjohn Institute for Employment Research. (25 p.) http://research.upjohn.org/cgi/viewcontent.cgi?article=1155&context=up workingpapers

Hollenbeck describes state investments in incumbent worker training, details the rationales for using public funds to support it, and summarizes an analysis that found a positive return on investment from the Massachusetts Workforce Training Fund (WTF), one such program. In total, states spend \$550 to \$800 million per year on incumbent worker training—a small amount compared to private sector investment—including WLA funds, state funds and tax credits. Despite assertions that state funding for incumbent worker training is redundant or props up inefficient firms, Hollenbeck argues that it can avert the social cost of unemployment, ensure entry level workers receive training, provide more general training than firms are willing to fund.

Spaulding, S., Freely, J. & Maguire, S. 2009. "A Foot in the Door: Using Alternative Staffing Organizations to Open Up Opportunities for Disadvantaged Workers." Philadelphia, PA: Public/Private Ventures. (55 p.) http://www.ppv.org/ppv/publications/assets/266_publication.pdf
Alternative staffing organizations (ASOs) place disadvantaged workers in jobs in a way similar to traditional temporary employment agencies, however, they also provide social services such as basic job readiness workshops, counseling, and child care. The authors argue that the ASO could become an important

model: temporary work has become more common at the bottom of the labor market, funding for workforce development has dwindled and policymakers have increasingly called for workforce programs to focus on the needs of both workers and employers. This paper describes the characteristics of four ASOs. The agencies studied successfully placed workers with a range of barriers to employment, and their wraparound services seemed helpful. However, temporary to permanent conversions were "not the norm."

Lerman, Robert. 2010. "Expanding Apprenticeship: A Way To Extend Skills and Careers." Urban Institute, Washington, DC. (9 p.) http://www.urban.org/uploadedpdf/901384-Expanding-Apprenticeship.pdf

Lerman argues for the expansion of apprenticeships in the U.S., a policy goal that federal tax credits for employers who hire new apprentices could support. Apprentices are employees of the organizations where they are training, but produce work while they learn technical and professional skills and earn a wage for three to four years. In the U.S., most apprentices work in construction and manufacturing trades, though the system is also used in fields such as child care and long term care. Lerman writes that apprenticeships have high rates of return compared to other training methods for middle skilled jobs; smooth the transition from school to work; provide students recognized credentials, even if they prefer to "learn by doing;" and present an opportunity to lower youth unemployment rates and engage disconnected minority young men.

Earnings supplements/short time compensation/work supports

Michalopoulos, C. 2005. "Does Making Work Pay Still Pay? An Update on the Effects of Four Earnings Supplement Programs on Employment, Earnings, and Income." New York: MDRC. (46 p. plus appendices) http://www.mdrc.org/publications/414/full.pdf

Michalopoulos reviews random assignment evaluations of four programs implemented in the early 1990s that supplemented the earnings of low-income adults and/or welfare recipients. The programs—the Minnesota Family Investment Program, Jobs First (in Connecticut), SSP (a Canadian program) and New Hope (in Milwaukee)—used enhanced earnings disregards for welfare receipt or supplemented full time workers' earnings. All four program increased participants' earnings, employment and income compared to their respective control groups, but these impacts faded out after several years—in other words, they did not appear to help participants advance to higher-paying jobs in the long term. Michalopoulos highlights several lessons: programs should not only help people find work, but help them keep their jobs and advance in the labor market; programs should maintain earnings supplements for as long as possible to keep families out of poverty; and providers must balance concerns about costs and equity when considering whether to limit earnings supplements to full-time workers.

Miller, C., Tessler, B. & Van Dok, M. 2009. "Strategies to Help Low Wage Workers Advance Implementation and Early Impacts of the Work Advancement and Support Center (WASC) Demonstration." New York: MDRC. (203 p., summary 23 p.) http://www.mdrc.org/publications/519/overview.html

The Work Advancement Support Center (WASC) demonstration project aimed to increase low wage workers' incomes—in the short term by helping them obtain financial supports such as food stamps and child care subsidies, and in the long term by offering career coaching and connections to/funding for training. Notably, WASC sites offered all services in a single location and required workforce development and social service staff to work closely together. This paper presents one-year results from two sites in the random assignment evaluation of WASC. After a year, WASC participants were 10 to 20% more likely to receive food stamps and/or public health insurance than the control group, a significant, moderate difference. One site also increased enrollment in vocational training and college courses, as well as receipt of licenses/certificates. No employment or earnings impacts were apparent, but a final report due in 2012 will cover three- and four-year findings from three sites.

Abraham, K., & Houseman, S. 2012. "Short-Time Compensation as a Tool to Mitigate Job Loss? Evidence on the U.S. Experience during the Recent Recession." Upjohn Institute Working Paper 12-181. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research. (30 p.) http://research.upjohn.org/up_workingpapers/181/

Under short time compensation (STC) and work sharing systems, workers can receive pro-rated unemployment insurance (UI) benefits if their employers temporarily reduce their hours during economic downturns, rather than laying them off. The system can preserve jobs and help employers retain trained workers, but if offered outside of recessions or without appropriate time limits, it could bolster unproductive industries. During the Great Recession, STC appears to have averted layoffs, but its take-up was so low in most U.S. states that its impact on total unemployment was minor. Prior to the Great Recession, 17 states offered STC; several others have adopted the policy since, and in 2012, the federal government will begin funding a large portion of STC UI benefits in order to promote the policy.

Expanding the Earned Income Tax Credit

Edelman, P., Greenberg, M., et al. 2009. "Expanding the EITC to Help More Low-Wage Workers." Washington, DC: Georgetown Center on Poverty, Inequality and Public Policy. (12 p.) http://www.urban.org/uploadedpdf/1001341_eitc.pdf

The EITC can motivate entry into the labor force and raise low-wage workers' incomes. But under the current federal earned income tax credit (EITC): (1) adults with children residing in their homes receive much larger credits and remain eligible at higher income levels than single adults or noncustodial parents; (2) jointly-filing married couples' combined earnings may disqualify them from receiving the benefit; and (3) childless workers under age 25—a group with low labor force participation—are not eligible. The authors call on Congress to significantly increase the maximum benefit for childless adults and raise their eligibility threshold so it is equivalent to full-time work at minimum wage, disregard some of lower-earning spouses' income for married couples; and reduce the age of eligibility for workers without qualifying children from 25 to 21.

Wheaton, L. & Sorenson, E. 2010. "Extending the EITC to noncustodial parents: Potential impacts and design considerations." *Journal of Policy Analysis and Management*, 29(4): 749-68. (20 p.) Abstract available at: http://onlinelibrary.wiley.com/doi/10.1002/pam.20533/abstract

The authors estimate the benefits of expanding the federal EITC for noncustodial parents (NCPs) who work full time and pay their full child support, under the current "NCP EITC" policies in New York State and Washington, D.C., and a federal proposal, discussing several design and implementation issues. Only 1 to 5% of NCPs (162,000 to 645,000 people) could qualify under the three scenarios, but recipients would see an average benefit between \$500 and \$1,900, or 6 to 12% of income after taxes and child support payments. An NCP EITC could encourage disconnected low-income men to work, increase their incomes and increase their ability to pay child support.

Sorensen, E. 2010. "Initial Results from the New York Noncustodial Parent EITC." Washington, DC: Urban Institute. (9 p.) http://www.urban.org/UploadedPDF/412222-ny-noncustodial-parent.pdf

Sorenson describes the design, administration and initial results of New York State's NCP EITC, enacted in 2006. While implementation went smoothly, less than 25% of eligible NCPs (5,280) received the credit in its first year. Sorenson recommends that New York State and other jurisdictions implementing NCP EITCs increase their outreach efforts.

IV. Programs for Youth

Failing to complete high school has serious, long-term labor market consequences. Labor market programs for youth seek both to reduce the risk of dropout and re-engage youth who are disconnected from school and work. Career academies seek to reduce dropout and prepare youth for careers by making school curricula work-relevant; they appear modestly to increase students' future employment and earnings. However, it is not clear that efforts to integrate high school and community college have a positive impact. Evidence on "second chance" programs for dropouts is mixed: they may help students earn credentials, increase their employment in the short term and modestly reduce behavioral problems, but long-term studies have not found lasting employment impacts. For example, National Guard ChalleNGe, an intensive, rigorous residential program, had positive short-term impacts, but some students struggled after leaving the residential component. Year Up, a sectoral program for youth recently evaluated, had very positive short-term results, but its long-term results remain to be seen.

Overview

Heinrich, C. & Holzer, H. 2010. "Improving Education and Employment for Disadvantaged Young Men: Proven Promising Strategies." National Poverty Center Working Paper #10-04. (44 p.) http://npc.umich.edu/publications/u/working-paper10-04.pdf

The authors review programs to address low graduation rates and declining employment among disadvantaged youth, particularly young men. The authors conclude that youth development and mentoring programs (such as Big Brothers/Big Sisters) are generally cost-effective, even though their impacts are modest; and that work experience, particularly when paid, can engage at-risk students in high school and strengthen skills that boost their future earnings (see the evaluations of career academies and the Quantum Opportunity program below).

However, it is more difficult to identify proven strategies for youth who are already disconnected from school and work (see the Job Corps, National Guard Youth ChalleNGe evaluations below).

In-school programs

Career academies

Kemple, J. & Willner, C. 2008. "Career Academies: Long-Term Impacts on Labor Market Outcomes, Educational Attainment, and Transitions to Adulthood." New York: MDRC. (47 p.) http://www.mdrc.org/publications/482/overview.html

Career academies are "schools-within-schools" whose curricula focus around specific careers, combining academic coursework and internships/work experience. A 12-year random assignment evaluation found that career academies increased students' employment, hours and wages to produce annual earnings that averaged 11% higher than those of their control group peers. These impacts were concentrated among young men of color—though few interventions have been shown to improve this group's labor market prospects. The academies neither improved nor reduced students' prospects of earning postsecondary credentials, showing that workforce preparation and college readiness need not be mutually exclusive. Kemple and Willner argue that these findings corroborate other evidence that "work-related experiences" during high school can help smooth the transition to adulthood.

Integrating high school and community college

Kisker, C.B. 2006. "Integrating High School and the Community College: Previous Efforts and Current Possibilities." *Community College Review*, 34(1): 68-86. (12 p.)

Kisker discusses for three similar initiatives to integrate high school and community college: (1) Koos' 6-4-4 plan, conceived in the 1930s to combine the last two years of high school with the first two years of college; (2) Middle College High School (MCHS), which locates high schools on college campuses, and (3) early college, which lets students complete two years of college credit or an associate degree within five years of entering 9th grade. All three initiatives would better connect high school and college, reduce the need for students to make transitions during adolescence, offer students flexibility on when they complete coursework, and potentially reduce administrative and capital construction costs. However, these plans may have stalled when they were proposed due to institutional inertia or the structure of separate funding streams for K-12 education and community colleges.

----. 2009. "Middle College High School." What Works Clearinghouse intervention report. U.S. Department of Education & Institute of Education Sciences. (5 p.) http://ies.ed.gov/ncee/wwc/pdf/intervention-reports/wwc-mchs-031709.pdf

Middle college high schools aim to prevent high-risk students from dropping out and encourage them to attend college by locating on college campuses, using project-centered, interdisciplinary curricula and offering support services such as counseling and career experience. A small-scale random assignment study in Seattle found that 40% of MCHS students earned a high school diploma or GED within two years, but the intervention had no statistically significant impact on whether students stayed in school or graduated.

Other Programs

Schrim, A., Stuart, E., & McKie, A. 2006. "The Quantum Opportunity Program Demonstration: Final Impacts." Princeton, NJ: Mathematica Policy Research. (75 p. with appendices) http://mathematica-mpr.com/publications/PDFs/QOPfinalimpacts.pdf

The Quantum Opportunity Program (QOP) aimed to increase graduation and postsecondary engagement among at-risk youth through an intensive, five-year after-school program that provided case management, mentoring, educational and other activities, and supportive services. Five years after most participants were scheduled to graduate from high school, a random assignment evaluation found that QOP increased high school completion and postsecondary engagement among participants who entered the program at age 14 or younger. However, it did not have a statistically significant impact on outcomes among older participants. The program also did improving grades, reduce risky behavior or increase later employment in the full sample—also QOP goals. Three of seven sites achieved some of the program's goals, which is likely explained by significant variation in how sites implemented the program model.

Out-of-School Programs

Bloom, D., Thompson, S.L. & Ivry, R. 2010. "Building a Learning Agenda Around Disconnected Youth." New York: MDRC. (27 p. plus appendices) http://www.mdrc.org/publications/545/full.pdf

The authors review evidence on the high school dropout population and "second chance" programs. Based on 11 rigorous evaluations, "second chance" programs may help students earn GEDs or vocational certificates, increase their short-term employment and earnings (especially when offering subsidized jobs) and "modestly" reduce crime and other behavioral problems. However, long-term studies have not yet found lasting employment impacts. Bloom, et al. highlight effective programs for at-risk students and more-connected dropouts. They also identify areas of unmet need for less-connected youth: better links between GED preparation and postsecondary education; programs for very low-skilled dropouts that combine basic and professional skills instruction; and large-scale efforts to motivate the least connected students

Evaluations

Cave, G., Bos, H., et al. 1993. "JOBSTART: Final report on a program for school dropouts." New York, NY: MDRC. (280 p.) http://www.mdrc.org/publications/337/full.pdf

The JOBSTART demonstration, implemented in the mid-1980s, provided academic and vocational instruction, support services and job placement assistance to low-skilled, 17- to 21-year-old high school dropouts from low-income families. A random assignment study that followed participants for four years after completing the program found large earnings impacts among young men with criminal records and lesser, but still significant, impacts for youth who had left school due to educational difficulties. One site, the Center for Employment and Training (CET, discussed below) led to very large, significant earnings gains in the last two years. Across all sites, though, JOBSTART's costs outweighed its benefits.

Miller, C., Bos, J. et al. 2005. "The Challenge of Repeating Success in a Changing World Final Report on the Center for Employment Training Replication Sites." New York: MDRC. (105 p., summary 9 p.) http://www.mdrc.org/publications/453/overview.html

The Center for Employment Training (CET)—a full-time job training program for out-of-school youth noted for offering training in a work-like setting and engaging with local employers—was shown to have large positive effects on employment and earnings in two studies in the 1980s. However, when replicated in 12 sites in the 1990s, the program did not increase employment or earnings during a 4.5 year follow-up period. The authors attribute this outcome to poor fidelity to the model in some sites, as well as the fact that program and control group members were highly motivated, and internal and external conditions that improved control group members' labor market prospects may have made it more difficult to see statistically significant impacts from CET.

Millenky, M., Bloom, D., Muller-Ravett, S. & Broadus, J. 2011. "Staying on Course: Three-Year Results of the National Guard Youth ChalleNGe Evaluation." New York: MDRC. (55 p. with appendices, summary 9 p.) http://www.mdrc.org/publications/599/overview.html

National Guard Youth ChalleNGe is an intensive, residential second-chance program for high school dropouts. Most participants live on a military base for 22 weeks, during which they attend GED preparation, life and job skills classes, and are also subject to military-style discipline. Afterward, they move to a job, educational or military placement and receive a year of mentoring. The program increased high school credential attainment, the likelihood of earning college credits, employment and earnings in the first year and a half after program completion. However, many participants reported struggling to "maintain momentum" after leaving the residential program.

Roder, A. & Elliott, M. 2011. "A Promising Start: Year Up's Initial Impacts on Low-Income Young Adults' Careers." New York: Economic Mobility Corporation. (16 p.) http://www.yearup.org/pdf/emc_study.pdf

Year Up, a sectoral career training program for low-income, mostly minority 18- to 24-year-olds, focuses on information technology and business operations jobs. Year Up combines technical and soft/professional skills training, opportunities to earn college credit, job search assistance, mentoring and other support services to train participants, and gives them stipends. A short-term random assignment evaluation found that in the year after completing the program, participants averaged earnings 30% higher than the control group, due to their greater likelihood of obtaining high-paying jobs in Year Up's targeted fields. However, the program's long-term impacts remain to be seen. Qualitative research identified the program's strong connections to employers, high standards, strong supports and attention to professional skills as key to its success.

V. Demand-Side Strategies

Numerous researchers argue that training and job placement are insufficient to help low-wage workers become financially secure because the structure of the low-wage labor market makes advancement so difficult. They recommend a range of public policy interventions on the demand side of the labor market: public funding to increase the availability of jobs, through direct job creation, subsidies or tax credits; policy efforts (such as increases in the minimum wage) and direct collaborations with employers to improve low-wage workers' access to training and advancement potential (such as sectoral strategies and career ladders). Sectoral strategies, or systemic efforts to tie workforce development to demand

in local labor markets and involve employers in determining the type of training participants receive, seem to improve earnings, at least when participants are excited about the fields in which they are training. Career ladders are similar programs through which workforce development providers seek to collaborate with employers to build pathways through which low-wage workers can advance. In addition, some workforce development agencies seek to work with local economic development agencies, for example, helping to bring new businesses to areas by offering to train their workers or improving the local labor force. Rigorous evidence on these efforts is thin, but descriptive papers abound.

Public Service Employment and Wage Subsidies: Programs to Increase the Quantity of Jobs

Ellwood, D. & Welty, E. 1999. "Public Service Employment and Mandatory Work: A Policy Whose Time Has Come and Gone and Come Again?" In Card, D. & Blank, R., eds., *Finding Jobs: Work and Welfare Reform.* New York: Russell Sage Foundation, 299-370. (45 p. plus tables) An earlier version of this paper is available online at:

http://www.ipr.northwestern.edu/jcpr/workingpapers/wpfiles/ellwood-welty.pdf

The authors review public service employment (PSE) programs from the Great Depression onward. PSE programs must balance the value of the work experience and outputs they provide against their potential to displace private sector jobs, but those that provide only short-term, project-based jobs and target workers different from the traditional workforce can minimize substitution. Programs that offer more intensive work experience tend to have a greater impact on participants' later earnings—however, these programs tend to be more expensive to administer. Specific examples discussed include the Comprehensive Employment and Training Program (CETA), Youth Incentive Entitlement Pilot Project (YIEPP), the Summer Youth Employment Program (SYEP), the New Hope project in Milwaukee and Work Experience Programs for welfare recipients. The authors argue that PSE could be necessary to employ the most disadvantaged welfare recipients.

Bartik, T. 2002. "Poverty, Jobs and Subsidized Employment." Challenge, 45(3), 100-111. (11 p.)

Bartik argues that the U.S. lacks a sufficient number of jobs to employ poor and less-educated workers—he places the shortage (as of 2002) at 5 to 9 million jobs. As a result, he proposes that the federal government subsidize job creation. He argues that work experience helps people develop skills to find jobs on their own, and that allowing local control of job subsidies would prevent subsidized jobs from displacing existing private sector workers.

Hamersma, S. 2005. "The Effects of an Employer Subsidy on Employment Outcomes: A Study of the Work Opportunity and Welfare-to-Work Tax Credits." Institute for Research on Poverty Discussion Paper #1303-05. (43 p.) http://www.irp.wisc.edu/publications/dps/pdfs/dp130305.pdf
The federal Work Opportunity Tax Credit (WOTC) and Welfare-to-Work Tax Credit (WtW) encourage employers to hire welfare recipients, young food stamp recipients and members of other disadvantaged groups by reimbursing part of the cost of their wages for their first year or two of work. By comparing subsidized workers in Wisconsin to similar welfare recipients, Hamersma finds that these credits may modestly increase employment and wages in the short term, but that these gains do not persist over time. She notes that this

finding is consistent with other evaluations that find wage subsidy programs do not increase employment or job tenure in the long term, and have limited impacts on wages.

Bartik, T. 2010. "A Proposal for Early Impact, Persistent, and Cost-Effective Job Creation Policies." *Employment Research*, 17(1), 1-4. (4 p.) http://research.upjohn.org/empl_research/vol17/iss1/1/

Responding to massive job losses during the Great Recession, Bartik argues that the U.S. should adopt a policy of direct job creation to avert the long-term costs of unemployment to unemployed people and society as a whole. He asserts that targeted job creation policies cost less per job than "traditional" fiscal stimulus because they directly increase jobs relative to GDP. Such a policy could take the form of tax credits for employers, payments to employers for work sharing or public service employment.

Programs to Increase the Quality of Jobs

Osterman, P. 2008. "Improving Job Quality: Policies Aimed at the Demand Side of the Low-Wage Labor Market." In Bartik, T. & Houseman, S., eds., *A Future of Good Jobs? America's Challenge in the Global Economy*. Kalamazoo, MI: W.E. Upjohn Institute, 203-244 (41 p.) http://research.upjohn.org/up_bookchapters/10

Osterman discusses policies to improve firms' treatment of their workers, which can either improve jobs or create more "good" jobs, through "standard-setting" (e.g. minimum wage increases and unionization) or "programmatic" means (e.g., sectoral programs and career ladders). He argues that these policies are necessary because employers have discretion over job characteristics such as wages, benefits, training opportunities and receptivity to unionization, and these characteristics affect not only workers' present economic status but also their future earnings. Osterman reviews several promising programs and calls for a federal framework to support and encourage innovation in programmatic interventions, as well as an increase in the minimum wage, pro-union policies such as card check rules, and the use of economic development incentives to create "good jobs."

Sectoral strategies

Oldmixon, S. 2006. "State Sector Strategies: Regional Solutions to Worker and Employer Needs." National Governor's Association for Best Practices, National Network of Sector Partnerships and Corporation for a Skilled Workforce. (18 p.)

http://www.nga.org/files/live/sites/NGA/files/pdf/06STATESECREG.PDF

This brief provides an overview of sectoral strategies intended for governors and other high-level state staff. It reviews the benefits of these initiatives from a state perspective: by making workforce development more responsive to business needs, directing workers to in-demand jobs and overcoming employer reluctance to provide general training, sectoral strategies can enhance regional competitiveness. Oldmixon suggests that states can support workforce development by identifying skill gaps, developing funding streams and aligning missions and encouraging collaboration across relevant state agencies.

Conway, M., Blair, A. et al. 2007. "Sectoral Strategies for Low-Income Workers: Lessons from the Field." Aspen Institute, Workforce Strategies Initiative. (87 p.)

http://dev.aspenwsi.org/wordpress/wp-content/uploads/07-0141.pdf

This paper discusses the state of the sectoral strategies field—offering a definition and several policy rationales—and provides brief overviews of numerous local sectoral initiatives, as well as practical advice for practitioners. The authors define sectoral strategies as system-level efforts at workforce development, tailored to the skill needs of local workers and competitiveness needs of local businesses. They note that these efforts usually help low-income workers by improving their access to jobs, though a few address job quality.

Maguire, S. et al. 2010. "Tuning In to Local Labor Markets: Findings from the Sectoral Employment Impact Study." Philadelphia, PA: Public/Private Ventures. (72 p. plus appendices) http://www.ppv.org/ppv/publications/assets/325 publication.pdf

This random assignment evaluation of three sector-focused training programs found that 24 months from the beginning of the experiment, the programs significantly increased participants' earnings, employment and likelihood of having a job that paid at least \$11/hour or had benefits. The programs differed but all offered skills training and links to employers, focused on a particular industry or occupation, and were run by nonprofits. The programs all screened applicants for their interest and ability, and focused on particular subgroups within the low income population, so these programs might not yield equally large impacts (an 18% increase in earnings over 24 months) for all low-income workers. The authors raise questions about long-term impacts, scalability and the optimal strategies to help different subgroups.

Strawn, J. 2010. "Shifting Gears: State Innovation to Advance Workers and the Economy in the Midwest." Chicago, IL: Joyce Foundation. (25 p.) http://www.shifting-gears.org/images/PDF/ProjectResources2/shiftinggearsstateinnovationstoadvanceworkersandtheeconomyinthemidwest0710.pdf

Shifting Gears is a Joyce Foundation initiative to help adult workers the Industrial Midwest earn postsecondary credentials more efficiently, with the ultimate goal of promoting regional economic growth. This paper details the rationale for the program and provides an update on each state. Specific interventions include breaking diploma and degree programs into shorter certificate modules, "bridge" programs that combine basic skills and work readiness instruction, and classes offered at more convenient times and locations. Shifting Gears has focused on industries and occupations that offer jobs with advancement opportunities, and it has worked to engage with states' adult education, workforce development and postsecondary education systems.

Edelman, P., Holzer, H. et al. 2011. "State Workforce Policy: Recent Innovations and an Uncertain Future." National Skills Coalition and Georgetown Center on Poverty, Inequality and Public Policy. (17 p.) http://www.nationalskillscoalition.org/assets/reports-/state-workforce-policy-2011.pdf
This brief summarizes efforts in several states (including Michigan and Pennsylvania) to focus workforce development efforts on training and education—rather than immediate job placement—and implement sectoral strategies. The authors characterize these initiatives as an appropriate response to the economic downturn. With an eye toward WIA reauthorization, they call for the federal government to support these efforts by: (1) restoring cuts to flexible WIA administrative funds; (2) reforming WIA to direct more money

to career pathways, sectoral strategies and integrated education and training (e.g., through the Workforce Investment Fund); (3) de-emphasize short-term job placement; and (4) better link community colleges and the unemployment insurance system with workforce development agencies.

Career ladders/pathways & integrated education & training

Gash, A. & Mack, M. 2010. "Career Ladders and Pathways for the Hard to Employ." Oakland, CA: Social Policy Research Associates. (8 p.)

http://www.spra.com/admin/PDFFile/wired%20issue%20brief%20career%20ladders%20for%20the%20hard%20to%20serve.pdf

Career ladder programs aim to help low-income workers advance within particular sectors or fields, creating clear pathways through which workers can advance through a combination of experience and training. The authors offer several principles for career ladder programs for low-income clients: involve employers in designing programs and promote partnerships between training providers and social service organizations, involve employers in program design, make training schedules and locations convenient for participants, integrate basic skills and career content, and frequently evaluate performance. While career ladder programs that focus on incumbent workers usually have clear benefits for both workers and employers, the value proposition is less clear for programs that attempt to bring new low-skilled workers into the workforce.

Alssid, J. Goldberg, M., et al. 2010. "Building a Higher-Skilled Workforce: Results and Implications from the BridgeConnect National Survey." Barrington, RI: Workforce Strategy Center. (13 p. plus appendices)

http://www.workforcestrategy.org/images/pdfs/publications/bridge connect report 2010-11.pdf

This report provides descriptive information on "bridge" programs (also called "integrated education and training" or "contextualized learning") collected through a nationwide survey of 920 programs. These programs provide low-skilled adults with GED preparation, ESL courses, developmental education or WIA-supported career preparation, allowing students to move at their own pace, using "learning-by-doing" formats and/or offering classes during non-work hours. The authors recommend working to connect programs to allow them to learn from each other and formally evaluating their results.

----. 2011. "ISIS Overview." Cambridge, MA: Abt Associates. (1 p.) http://www.projectisis.org/documents/ISIS_overview.pdf

This brief provides an overview of Innovative Strategies for Increasing Self-Sufficiency (ISIS), a 10-year initiative funded by the U.S. Department of Health and Human Services to rigorously evaluate several career pathways programs across the country. The evaluation is underway.

Integration with economic development

Bartik, T. & Erickcek, G. 2008. "The Local Economic Impact of 'Eds & Meds': How Policies to Expand Universities and Hospitals Affect Metropolitan Economies." Washington, D.C.: Brookings Institution. (22 p.) http://www.brookings.edu/research/reports/2008/12/10-metropolitan-economies-bartik-erickcek

Expanding universities and hospitals ("eds and meds") within cities can increase the earnings of local residents, including less-skilled workers. Both types of institutions are large and immobile, employ workers throughout the skill spectrum, and can offer less-skilled workers relatively high wages. In addition, they each have spillover effects: universities increase the skill level of the local workforce and produce transferrable technologies; hospitals' higher-than-average wages can drive wages up throughout local economies. However, the magnitude of eds' and meds' economic effects depends on the nature of the local economy, and on average, these institutions appear to raise metropolitan residents' earnings by roughly the same amount as tax incentives intended to promote economic development.

Bartik, T. 2011 (June 1). "What Works in Job Creation and Economic Development." Presented at Transforming Communities Conference of the National Employment Law Project, Flint, MI. (9 p.) http://research.upjohn.org/cgi/viewcontent.cgi?article=1023&context=presentations

When measured by their ability to increase local residents' earnings per capita, general business tax cuts and most business tax incentives are not cost-effective economic development issues. Tailored services for small- and medium-sized businesses, such as customized job training, are more cost effective. So are well-targeted wage subsidy programs for hiring unemployed or disadvantaged residents, such as the MEED program in Minnesota in the 1980s. Bartik argues that by increasing the quality of the entire workforce in the long term, high-quality early childhood programs are the most cost-effective economic development interventions.

Carlson, P., Holm, R. & Uhalde, R. 2011. "Building Regional Partnerships for Economic Growth and Opportunity." Boston: Jobs for the Future. (10 p.)

http://www.jff.org/publications/workforce/building-regional-partnerships-economic-/1041

This brief discusses several issues related to policies intended to promote economic growth and improve the prospects of disadvantaged workers, as well as strategies to address these issues. In addition to regional fragmentation and declining leadership from the business community, policymakers struggle to find ways to increase the skill level of the workforce. Sectoral strategies offer a promising opportunity to align workforce and economic development incentives, but currently, these two policy areas often do not coordinate closely.

Table 1. Selected Topics Not Covered by Section Headings, and Studies that Address Them

Topic	Studies (page #s)
Gender differences	Autor 2010 (p. 6)
	Blank 2009 (p. 8)
	Dolfin & Berk 2010 (p. 14)
	Heinrich et al. 2011 (p. 11)
	Jacobson, LaLonde & Sullivan 2004 (p. 13)
	Orr et al. 1996 (p. 11)
Immigration	Goldin & Katz 2009 (p. 8)
Incarceration	Autor 2010 (p. 6)
	Blank 2009 (p. 8)
	Tyler & Berk 2009 (p. 17)
Other safety net programs	Abraham & Houseman 2012 (p. 20)
	Edelman, Golden & Holzer 2010 (p. 5)
	Hamersma 2005 (p. 25)
	Miller, Tessler & Van Dok 2009 (p. 20)
	O'Leary & Eberts 2010 (p. 5)
Earned Income Tax Credit	Blank 2009 (p. 8)
	Edelman et al. 2009 (p. 20)
	Holzer & Martinson 2005 (p. 16)
	Sorenson 2010 (p. 21)
	Wheaton & Sorenson 2010 (p. 21)
Employment programs and	Blank 2009 (p. 8)
the welfare system	Dyke, et al. 2006 (p. 12)
	Hamersma 2005 (p. 25)
	Hamilton 2001 (p. 12)
	Hendra, et al. 2010 (p. 16)
	Michalopoulos 2005 (p. 19)
	Orr et al. 1996 (p. 11)
	Osterman 2007 (p. 3)
	Wavelet, Martinson & Hamilton 2010 (p. 16)
Community colleges	Furchtgott-Roth, Jacobson & Moker 2009 (p. 12)
	Jenkins & Cho 2012 (p. 13)
	Jacobson, LaLonde & Sullivan 2004 (p. 13)
	Kisker 2006 (p. 22)
	"Middle College High School" 2009 (p. 22)
	Uhalde 2011 (p. 4)
	Van Noy & Jacobs 2012 (p. 13)
	Zeidenberg, Cho & Jenkins 2010 (p. 15)