

Robert M.

La Follette School of Public Affairs

at the University of Wisconsin-Madison

Working Paper Series

La Follette School Working Paper No. 2010-017

<http://www.lafollette.wisc.edu/publications/workingpapers>

Improving Education and Employment for Disadvantaged Young Men: Proven and Promising Strategies

Carolyn J. Heinrich

Professor, La Follette School of Public Affairs, University of Wisconsin-Madison

cheinrich@lafollette.wisc.edu

Harry J. Holzer

Georgetown Public Policy Institute, Georgetown University

hjh4@georgetown.edu



**ROBERT M. LA FOLLETTE
SCHOOL OF PUBLIC AFFAIRS**
University of Wisconsin-Madison

1225 Observatory Drive, Madison, Wisconsin 53706

608-262-3581 / www.lafollette.wisc.edu

The La Follette School takes no stand on policy issues; opinions expressed
in this paper reflect the views of individual researchers and authors.

Improving Education and Employment for Disadvantaged Young Men: Proven and Promising Strategies

Carolyn J. Heinrich*

University of Wisconsin-Madison
La Follette School of Public Affairs
1225 Observatory Dr.
Madison, WI 53706
cheinrich@lafollette.wisc.edu
(608)262-5443

Harry J. Holzer

Georgetown University
Georgetown Public Policy Institute
3520 Prospect St., NW, 4th Floor
Washington, DC 20007
hjh4@georgetown.edu

*Corresponding author

Keywords: youth development, training, employment, interventions, effectiveness

Bios

Carolyn J. Heinrich is director of the La Follette School of Public Affairs, professor of public affairs and affiliated professor of economics, Regina Loughlin Scholar, and affiliate of the Institute for Research on Poverty at the University of Wisconsin–Madison. Her research focuses on social welfare policy, public management, and social-program evaluation. She works directly in her research with governments at all levels, including with the federal government on evaluating workforce development programs, the state of Wisconsin on child-support programs, school districts in evaluating supplemental educational services, and with other governments on their poverty reduction programs. Other ongoing projects include the study of labor market intermediaries and labor market outcomes for low-skilled and disadvantaged workers.

Harry J. Holzer is professor of public policy at the Georgetown Public Policy Institute and a faculty director of the new Georgetown Center on Poverty, Inequality and Public Policy. He is also an institute fellow at the Urban Institute, senior affiliate of the National Poverty Center at the University of Michigan, national fellow of the Program on Inequality and Social Policy at Harvard University, nonresident senior fellow at the Brookings Institution, and affiliate of the Institute for Research on Poverty at the University of Wisconsin–Madison. His research focuses primarily on the low-wage labor market, and particularly the problems of minority workers in urban areas. He has worked on the quality of jobs as well as workers in the labor market, and how job quality affects the employment prospects of the disadvantaged, worker inequality, and insecurity. He has also written extensively about the employment problems of disadvantaged men, advancement prospects for the working poor, and workforce policy more broadly.

Abstract

Low high school graduation rates and sharply declining employment rates among disadvantaged youth have led to increasing numbers of youth who are disconnected from both school and work. What programs and policies might prevent these disconnections and improve educational and employment outcomes, particularly among young men? We review the evidence base on *youth development* policies for adolescents and young teens; programs seeking to improve educational attainment and employment for *in-school* youth; and programs that try to “reconnect” those who are *out of school* and frequently out of work, including public employment programs. We identify a number of programmatic strategies that are promising or even proven, based on rigorous evaluations, for disadvantaged youth with different circumstances, and conclude that policy efforts need to promote a range of approaches to engage and reconnect youth, along with ongoing evaluation efforts to improve our understanding of what works, including which program components, for whom.

INTRODUCTION

It is increasingly well known that employment rates among less-educated young men, especially young African American men, have declined sharply in recent years. Sum et al. (2008) point out that there was no net gain in employment for U.S. teens and young adults over 2000-2007, and they have been the largest net losers of jobs in the labor market downturn that began in 2007. At the same time that their labor force participation rates have dwindled, incarceration rates among young men have risen dramatically. At any point in time, large numbers of these young men are “disconnected” from both school and work (Edelman, Holzer, and Offner 2006).

What programs and policies might be undertaken that could prevent this disconnection from occurring and improve the educational and employment outcomes of these young men? Some experts (e.g., Heckman 2008) have grown very skeptical about the cost-effectiveness of educational and workforce development policies for disadvantaged youth as well as adults. Indeed, while some youth advocates claim that we have a strong knowledge base on what “works” for disadvantaged youth (e.g., Bowles and Brand 2009), the evidence from rigorous evaluation efforts has been much less positive. For example, the evaluation of the Job Training Partnership Act (JTPA) in the 1990s showed positive impacts for adult men and women, while those for youth generally ranged from zero to negative (Holzer 2009), and the tendency of short-term positive effects in the Job Corps and other studies to fade with time has become increasingly clear (Schochet, Burghardt, and McConnell 2008; Bloom 2009).

On the other hand, a careful review of the evidence in a range of areas indicates somewhat more positive impacts, at least in the short run, than have widely been recognized. And many programs that are not yet *proven*—in terms of rigorous evaluation evidence—seem at least to be quite *promising*, on the basis of their positive outcomes for participants, while

achieving at least some substantial level of scale. Given the enormous social costs associated with low employment and high incarceration for this population, it is very important that we identify and then invest in cost-effective strategies to improve youth outcomes.

In this paper, we review what we know to date about programs to improve educational and employment outcomes for disadvantaged youth. In particular, we review *youth development* policies aimed at adolescents and young teens; efforts aimed at improving educational attainment and employment for at-risk youth *in school* (high school or community college); and programs that try to “reconnect” those who are *out of school* and frequently out of work. We also briefly consider public employment programs for youth. We focus the discussion most heavily on efforts proven to be effective (or ineffective) through rigorous evaluation, while also highlighting some promising programs that still require more evaluation.

After reviewing the evidence, we consider some practical proposals for implementing effective programs for youth, despite our imperfect base of knowledge about what works. A variety of important issues—such as the scale at which these efforts should be administered, the level of government that would be responsible for implementation, and how to ensure accountability and performance incentives—are considered here. We conclude with a summary of what we have learned in this investigation and what we recommend going forward.

A REVIEW OF THE CURRENT EVIDENCE BASE ON YOUTH DEVELOPMENT, IN-SCHOOL AND OUT-OF-SCHOOL YOUTH PROGRAMS

A key objective of this research was to undertake a comprehensive review of programs that target disadvantaged youth, particularly males at risk of dropping out of school or out of school

and without a job, and to identify programs or aspects of these interventions that suggest promise for improving the educational and employment trajectories and longer-term labor market outcomes of young men. In this review, we distinguish four types of programs aimed at improving the chances of stable employment for young men:

- Youth/adolescent development programs, including mentoring, holistic education/services and afterschool programs;
- Programs targeting in-school youth that emphasize dropout prevention, work-based learning and strategies to promote access to higher education;
- Those targeting out-of-school youth or young men that focus on dropout recovery, education and training, as well as service employment; and
- Public employment programs for youth.

An on-line appendix to this chapter lists many of the most promising or proven programs in each of these areas (at least in our view), for which at least some outcome or impact analysis has been done in each case. Across and within program types, these diverse interventions share some common goals and mechanisms by which they expect to improve opportunities and outcomes for young men, but there are also important differences in their approaches and emphases.

Youth Development Programs

Youth development programs, such as Big Brothers/Big Sisters, Boys and Girls Clubs of America and Harlem Children's Zone, typically place emphasis on the following primary components: mentoring through supportive relationships with adults and/or older peers; case management and individual assessments, with referrals to outside services as necessary; tutoring and homework assistance; engagement in daily club activities, arts and drama and/or sports, and

in a few programs, health education and health care utilization efforts. In Big Brothers/Big Sisters, for example, the matching of a youth with an adult or older youth mentor who will serve as a positive role model and the cultivation of a relationship between the pair through regular meetings and participation in activities is the core component around which other facets of the program (e.g., social and cultural enrichment, homework help and tutoring, recreation) are built. Community service projects are an additional element of Boys and Girls Clubs, although games, arts and crafts, and recreation are the primary activities of youth in these clubs.

In other examples, these approaches are part of broader and more comprehensive strategies involving local schools and neighborhoods as well as family members. For instance, the Harlem Children's Zone (HCZ), which aims to reach children as early in their lives as possible and create a "critical mass of adults" to guide them through a holistic system of education (e.g., preschool, charter schools, after-school activities), social services based in the community, and job training and college preparation programs in their later years, is among the most comprehensive of these programs. And an array of efforts generally referred to as "expanded learning opportunities" (ELOs) provide a range of academic and social services to youth in the afterschool and weekend/summertime periods (Bowles and Brand 2009).

Program evaluations and related literature correspondingly explore the effects of youth development programs in a wide range of areas, including behavioral and social outcomes, such as social engagement, school attendance/absences and delinquent behavior, sexual knowledge and activity, and alcohol and drug use, in addition to examining academic outcomes and impacts such as student grades or grade point average, effort, and schoolwork quality and completion. Rhodes and DuBois (2008) report that recent meta-analyses of mentoring program evaluations find effects of participation in social/psychological, behavioral and academic areas. The Big

Brothers/Big Sisters programs have been among the most rigorously evaluated of this type, and multiple experimental studies report effects in increasing academic performance and college expectations, reducing school infractions and unexcused absences, and other positive social effects. In general, the meta-analyses and experimental evaluations suggest that, while statistically significant, the magnitudes of the youth development program impacts are typically small and often do not persist. In contrast, recent evidence on the Harlem Children's Zone (Dobbie and Fryer 2009) suggests large effects on student test scores, which persist at least through graduation from middle school. Of course, since this program combines intensive classroom instruction with a variety of family and community-oriented services, it is hard to tell exactly which components of the intervention generated the impacts, and whether some or all are really needed for these effects.¹ And whether HCZ can be replicated on a broader scale remains to be seen as well, with the Obama Administration proposing to generate 10-20 "Promise Neighborhoods" around the country as part of a replication effort.

One key feature of youth development programs that appears to increase program effectiveness is the frequency and intensity with which these programs engage youth in activities (academic and non-academic), particularly in their relationships with mentors. Although the experimental evaluations do not allow for the identification of specific components that contribute to the academic and behavioral/social impacts, the quality and length of relationships that youth develop with their mentors is cited as an important factor in studies of Big Brothers/Big Sisters, the Boys and Girls Clubs of America and Children's Aid Society/Carrera programs, as well as in the meta-analyses of mentoring programs (Rhodes and DuBois 2008; Herrera et al. 2007; Anderson-Butcher, Newsome, and Ferrari 2003). Theoretical models of mentoring in youth programs (Rhodes 2005) describe the strong bonds that youth forge with

their mentors—based on trust, empathy and shared experiences that come with regular time spent together—as the critical mechanism through which social-emotional and cognitive effects are achieved. Youth in the Big Brothers/Big Sisters programs who had mentoring relationships that lasted at least a year and grew stronger (or more structured) over time were more likely to realize social and academic benefits from participating (Herrera et al. 2007). Unfortunately, high attrition in the second year diluted the average academic impacts for participants.

A probable factor limiting the effectiveness of this and other youth development programs, such as those offering afterschool tutoring and remediation services outside of the regular school day, is a lack of engagement and regular participation. A meta-analysis by Lauer et al. (2006) of 35 peer-reviewed studies of out-of-school-time programs that used control or comparison groups to estimate effect sizes (specifically, gains in academic achievement test scores) explored the relationship of program focus, duration, timeframe, student grouping and grade level to program outcomes. They find that these programs can have a positive effect on student achievement, with effect sizes larger for programs of longer duration (more than 45 hours), although diminishing returns set in for the longest. In a random assignment study of a national after-school program, Dynarski et al. (2004) found no effects on reading test scores or grades for elementary or middle school students, and a follow-up study using these same data by Vandell et al. (2005) reported positive effects on test scores only for elementary school students highly active in high quality programs. Perhaps the stronger effects of HCZ on test scores reflect the consistency and continuity of the intervention over several years, as well as its comprehensiveness.

In-School Youth Programs

The programs that target in-school youth—especially those who are risk of dropping out and engaging in other problematic behaviors—are quite diverse in their goals. Generally, they aim to:

- improve cognitive achievement;
- reduce high school dropout rates;
- raise postsecondary attendance and completion; and
- improve post-school employment and earnings.

Some programs focus primarily on one of these goals, while others aim to generate improvements on some or all of these dimensions. For instance, the Multiple Pathways to Graduation (MPG) programs of New York City primarily focus on improving achievement and reducing dropout rates. Achievement Via Individual Determination (AVID), GEAR UP and Upward Bound target high school students and seek to raise their awareness of and preparation for postsecondary education, while Opening Doors (OD) is a multi-site demonstration project at community colleges that tests four different interventions—including financial assistance, small “learning communities,” and various supports and remediation efforts—to improve attendance and completion of low-income students.² In contrast, the Career Academies, which number over two thousand nationwide, are a form of career and technical education (CTE) in which a sector-specific “academy” exists within a broader high school, with students taking courses in both areas and supplementing their classroom education with summer and year-round employment. Other forms of CTE include Tech-Prep, which combines the last two years of high school and two years of community college, as well as various apprenticeship models (Lerman 2007).

Despite the wide range of goals and interventions that appears in these programs, some commonalities are also evident. Mentoring and individualized attention and counseling are important elements of in-school and out-of-school youth interventions, although these activities

may be more likely to take place in the context of (or in combination with) more formal activities, such as developing an individual education plan and providing career counseling and case management to assess individual supportive service needs. A primary focus of the in-school youth programs is on helping youth to stay engaged in and complete high school, which they aim to accomplish through varying approaches, some involving broader school-level efforts and others more individually targeted. Earlier identification of youth at risk for dropping out is an increasingly common feature; once identified, programs typically take multi-pronged approaches to increase students' chances of graduation (New York City Department of Education 2006). Some programs, such as Multiple Pathways and Quantum Opportunities, emphasize supplemental education activities and accelerated learning or time to credentialing, including after-school programming, virtual, evening and summer schooling, and other approaches to compressing time to earn a diploma. Another approach adopted by Multiple Pathways, Career Academies, Opening Doors and other programs is to create smaller "learning communities" within schools that aim to engender a more supportive, personalized learning environment, where students may take blocks of classes with the same peers and receive more customized instructional support and academic advising that is intended to foster stronger interpersonal and peer supports.

Other important goals of in-school youth interventions are to increase youths' awareness of career and college and post-secondary training opportunities and to more closely tie the knowledge and skills they gain in high school to work and study options available to them after graduating. Many of the well-known or widely-adopted program models—Multiple Pathways, Career Academies, Opening Doors and Quantum Opportunities, for example—include work-based learning components, such as curriculums tightly linked with work/skills training or career

themes and partnerships with employers to facilitate job-shadowing, on-the-job training, and summer jobs. Additional features in programs such as Career Academies include career fairs, guest speakers and career guidance, while programs such as AVID, GEAR UP and Upward Bound emphasize college-readiness counseling, pre-college course-taking, college field trips and parent education about access to higher education opportunities. A number of these programs also incorporate financial incentives for youth to reach behavioral, learning and other educational or career milestones. Among the most far-reaching of these was the combination of stipends, accrual account deposits and bonuses developed in the Quantum Opportunities program to encourage youths' attendance and participation in program activities, their attainment of a high school diploma or GED, and enrollment in college, a certified apprenticeship program, an accredited vocational or technical training program, or the armed forces. The scholarship incentives offered by the Louisiana site of the Opening Doors program, on the other hand, more explicitly encourage college attendance and progression by rewarding *college* course grades and completion.

The primary or most prevalent features of in-school youth interventions described above do not represent the full inventory of program elements and innovations that have been implemented and investigated in the growing literature on the effectiveness of promising programs for in-school youth.³ Yet it is clear that a majority of these programs employ a comprehensive approach to addressing youth needs, which also complicates efforts to understand which program features contribute to youth outcomes. Focusing on the Career Academies, Opening Doors, Upward Bound and Quantum Opportunities programs that have been experimentally evaluated, one finds that each of these programs sought to increase high school graduation rates, with Quantum Opportunities having a modest impact on graduating with a

diploma for the entire treatment group (increasing the likelihood by 7 percentage points).⁴ And, the evaluations of Opening Doors, Upward Bound and Quantum Opportunities all reported positive effects on youths' continuing (post-high school) education; of these, Opening Doors (Louisiana) and Upward Bound, both of which were more strongly oriented toward encouraging college attendance, also significantly increased college attendance (by approximately 6 percentage points), course credits earned and/or performance in college coursework.

The results of Opening Doors and the other programs suggest, more broadly, the important potential role of community colleges in our efforts to improve education and employment outcomes for disadvantaged youth. Econometric results consistently show strong returns for low-income youth or adults who complete at least a year of community college, if not an associate degree (Lerman 2007). Jacobson and Mokher (2009) also find strong returns for low-income youth who can complete certificate programs in high-demand occupations and sectors, especially if they involve at least some technical training.

Pell grants are the primary vehicle through which the federal government encourages low-income youth and adults to attend community college. To date, the empirical evidence suggests Pell grants are more successful at encouraging attendance for adults than for youth (Turner 2007), although reforms to simplify the Pell grant process and improve funding would likely help in this regard (Dynarski and Scott-Clayton 2007; Haskins, Holzer, and Lerman 2009). Furthermore, a broad range of programs are being piloted and even administered on a larger scale in community colleges across the country to improve the access of disadvantaged young people through financial assistance, supports and counseling about opportunities. The "Achieving the Dream" program funded by several foundations in a variety of states is one such example; the various "Career Pathway" programs at the state and local levels, that seek to

establish well-designed combinations of classroom curricula and work experience that place individuals in high-paying jobs, are another.⁵ Of course, not all disadvantaged youth are ready for successful program completion at community college and instead enter remedial courses at community colleges from which they never emerge to take coursework for credit. Reforms in this process might include a better integration of remedial and occupational training, as is now done in the I-BEST program in the state of Washington with promising results.⁶

As success at community college is more likely for those who successfully complete high school, more attention must be paid to what works at this level of schooling as well. In this regard, the Career Academies (CA) clearly emerge as the most effective intervention for at-risk youth, especially young men, to date. An eight-year evaluation of CA reported no significant effects on high school completion for the overall sample of participants, but it generated notable reductions in dropping out for at-risk youth. Furthermore, participants (primarily males) self-reported significantly higher monthly earnings, months worked, hours worked per week, and hourly wages than control youth (Kemple and Willner 2008). In the 8 years that these youth were tracked following their scheduled high school graduation, they realized an 11 percent increase in monthly earnings over the control (non-Academy) group, or an additional \$2,088 in earnings per year (in 2006 dollars); for males, the increases were 17 percent. It is plausible that the differing emphases on career awareness and work-based learning vs. college and post-secondary education opportunities in these programs explains their varying impacts on continuing education vs. labor market outcomes, but it is not possible to assert this with confidence based on the currently available evidence. Importantly, Career Academies did not produce results through “tracking” students into nonacademic paths; the tendency of youth to

attend postsecondary schools was no lower for students in the Career Academies than in the control groups.⁷

Other efforts show some successes in specific locations, though efforts to replicate them and bring them to scale have not succeeded. The report on the Quantum Opportunities program short-term impacts (Maxfield, Schirm, and Rodriguez-Planas 2003) compared its features to those of other youth programs supported by the U.S. Department of Labor or Department of Education in the effort to better understand why it generated impacts in some areas but not others, despite the intensity of services offered and relatively high per-enrollee costs (\$25,000 on average). They argue that Quantum Opportunities was more comprehensive than most other federal youth programs, including attention to physical and mental health, nutrition, substance abuse, conflict resolution, gang membership and delinquent behavior, dysfunctional, abusive, or unsupportive family situations, and personal finances, in addition to its academic, basic education and work/career skills components. They also suggest it likely enrolled less motivated youth than most programs because Quantum Opportunities did not limit participation and explicitly targeted youth with lower grades than other programs, and accordingly, it placed greater emphasis on mentoring than other federal youth programs. Unfortunately, while impacts at a few early sites were quite positive, those of the broader replication effort were by and large disappointing, with no effects on in-school academic performance or risky/delinquent behaviors and only small impacts on high school graduation and enrollment in postsecondary education or training. Once again, a lack of youth engagement and regular participation in program activities was cited as an important limiting factor, with enrollees coming up far short of annual hours goals and average time spent in activities declining steadily over time.

Finally, we note a few other categories of programs that have generated at least some successful impacts in at least moderately rigorous evaluations. First, the Youth Incentive Entitlement Pilot Project (YIEPP) of the late 1970s guaranteed summer and year-round minimum wage employment to low-income and mostly minority students in urban areas as long as they did not drop out of school. Experimental evaluations of YIEPP showed enormous impacts on short-term employment; indeed, white-minority gaps in employment disappeared almost completely in these sites. There were also positive impacts on post-school earnings for at least a year.⁸ These results, along with those of Career Academies and other forms of CTE, suggest the potential of stipends and paid employment to attract and engage young people in a range of programmatic efforts.

In addition, a variety of “whole school reforms,” including the Talent Development High Schools, High Schools that Work, and Early College High Schools, might be promising at large urban schools with high dropout rates. The first two of these rely on small learning communities and other curricular and governance changes in these schools; the latter combines the late high school and community college years into programs on community college campuses. Thus far, the Talent Development model has generated some positive impacts in rigorous evaluations (Kemple, Herlihy, and Smith 2005), though more evidence on all of these is clearly needed.⁹

Finally, another set of efforts target entire low-income communities, and both in-school and out-of-school youth within these communities, for a comprehensive set of educational and employment interventions. One such effort was the Youth Opportunity Program, which provided grants to 36 low-income communities through a competitive process in 2000.¹⁰ Statistical evidence comparing outcomes in these sites relative to similar ones showed improvements in school enrollments and in overall employment and wage rates, especially among minorities and

teens, although full-time employment declined as school enrollments rose (Decision Information Resources 2008).

Out-of-School Youth Programs

Out-of-school youth programs, which typically target youth who are not working or enrolled in high school, college or other post-secondary education or training and who may or may not have completed high school, tend to be more work-oriented than in-school youth interventions, and many also include a more intensive focus on vocational and/or on-the-job training. Employer involvement in designing training and arranging job placements is common. The Job Corps program, for example, has developed vocational curricula in more than 75 trades with the input of business and labor organizations.

As deficiencies in cognitive and noncognitive skills are often greater among those who have already failed at school, more intensive remedies might be needed before these young men can complete secondary school, attain postsecondary education and/or succeed in the labor market. The types of supportive services offered must also recognize the differential needs of an older youth population that is attempting to move toward self-sufficiency, such as assistance with housing, referrals for substance abuse treatment and other health/mental health issues, and “life-coping” skills. Two prominent programs, Job Corps and the National Guard ChalleNge program, include residential components, in which youth reside at a center where intensive vocational/job and other life skills training are provided. In Job Corps and the Center for Employment Training programs, the training offered is frequently individualized, self-paced and competency-based to prepare youth to work in a specific trade. Most out-of-school youth programs also offer those who dropped out of high school the opportunity to earn a GED

credential. An alternative model stressing service employment and efforts to improve education as well as civic values and leadership skills is most prominently represented by YouthBuild and the Youth Service and Conservation Corps (Edelman, Holzer, and Offner 2006).

In a recent review of out-of-school youth programs, Bloom (2009) points out that the distinctions between in-school and out-of-school youth interventions are fading, as school districts have expanded the range of options they offer to keep youth in school and progressing toward graduation with a diploma. The Career Academies, for example, establish partnerships with local employers to provide work-based learning opportunities for high school students, and central goals of the program include improving students' preparation for the labor market and promoting successful school-to-work transitions as well as college attendance. At the same time, out-of-school youth programs like YouthBuild and the Youth Services and Conservation Corps are focusing more on opening youth pathways to postsecondary education, which have shown to generate payoffs for those holding a GED as well as for those with a high school diploma if they complete the program of study (Tyler and Lofstrom 2009).¹¹

We focus on reviewing the results from experimental evaluations and/or studies of larger publicly funded programs, including Job Corps, the Center for Employment Training, and ChalleNge; other employment programs, such as the Job Training Apprenticeship program and YouthBuild, have not undergone serious evaluation to date. A GAO (2007) report on YouthBuild studies and program performance information concluded that, although a number of smaller-scale evaluations suggested promising findings of increased employment, wages and educational attainment and reduced delinquent behavior or recidivism for those with correctional system involvement, these studies did not have sufficient follow-up data or adequate comparisons (with other programs or nonparticipants) to merit confidence in the results.¹² The report also stated, in

a comment that applies to nearly all of the youth programs discussed in this paper, that it is difficult to generalize results from a specific program evaluation to the universe of programs of the same type (given heterogeneity in implementation), or to rigorously identify which elements of a particular intervention are contributing to observed outcomes or impacts.¹³

Illustrating both of these points, the early (1990s) success of the San Jose, California Center for Employment Training (CET) in generating statistically significant and unprecedented earnings impacts over 30- and 60-month follow-up periods (totaling \$2,062 per enrollee in the first 30 months and subsequently averaging close to \$100 per month) led to a 12-site, U.S. Department of Labor-funded replication and experimental evaluation of the program's impacts (Miller et al. 2005). The core CET feature was the opportunity to participate in employment and training services that mirrored the workplace (occupational, basic skills, full-time and competency-based on an open-entry, open-exit basis), with the close involvement of industry in both program design and operation. The final 12-site evaluation report presented disappointing findings, however: aggregating across all sites, the program had no effect on youths' employment and earnings. The study uncovered difficulties in a majority of the sites in implementing the San Jose-CET approach (particularly the job development component) and concluded that only four sites replicated the original model with high fidelity. An analysis of just the four high-fidelity sites showed some early impacts on time spent in education and training activities and receipt of training credentials, although these impacts faded substantially by the end of the follow-up period.¹⁴ Once again, low intensity of participation was a factor in more poorly performing sites, where many students failed to attend regularly or dropped out before completing competencies and receiving job placement assistance.

Still, some successes can be found and some generalizations drawn. Job Corps is the largest publicly-funded program providing academic and vocational education and training to economically disadvantaged out-of-school youth, serving approximately 60,000 new participants each year at a per participant cost of approximately \$24,000.¹⁵ The most recent experimental evaluation completed by Mathematica Policy Research, Inc. (Schochet, Burghardt, and McConnell 2008), involving over 15,000 youth in 1994-1995 and using four years of survey data and nine years of administrative records on earnings (after Job Corps exits), showed that Job Corps was successful in substantially increasing education and training among participants, with the impact equal to approximately one high school year and reflected in significant increases in receipt of GED and vocational certificates (21 and 31 percentage points, respectively). The evaluation design also allowed for subgroup impact estimation, and these analyses showed larger, statistically significant earnings impacts for older youth ages 20-24 (vs. those 16-19) years (of \$4,500 in total earnings over 1998-2003). The study authors noted that these older youth participated for 1.3 months longer on average and were “more highly motivated and well behaved” as reported by program staff. The program also significantly reduced arrest and conviction rates as well as time spent incarcerated for participants.

One might view many of the above reported Job Corps impacts as encouraging, although a corresponding cost-benefit analysis suggested that the benefits of the program faded out after four years, so that program costs exceeded benefits for the full evaluation sample. Still, the benefits did exceed costs for the most engaged participants (older youth), and the earnings impacts of this subgroup persisted longer. Early experimental evaluation results of the ChalleNGe program likewise report very promising trajectories for participating youth, with short-term (9-month) impacts on earning a high school diploma or GED, full-time work, self-

rated health and reductions in obesity and arrests, convictions and time incarcerated (Bloom, Gardenhire-Crooks, and Mandsager 2009). The Job Corps experience with fading longer-term impacts, however, suggests that a longer follow-up period will be essential before drawing firm conclusions about the program's effectiveness, which the ChalleNGe study authors acknowledge. Few studies conduct a full accounting and comparison of costs and benefits, as in the Job Corps evaluation or the earlier National Supported Work Demonstration. Another overarching criticism of the evidence base is that because youth program evaluations are for the most part compartmentalized and relatively few include a longer-term follow-up, we do not see studies that track youth as they enter different interventions at different stages of their progression from younger youth to young men (or women). Further information that would enable us to compare costs and benefits *across* different types of youth interventions and over time is necessary to offer more specific policy advice on how public resources should be invested to maximize the benefits realized for youth.

The above discussion also begs another question: are youth not fully engaging in and participating in these programs long enough because the interventions do not offer what they need or want, or is this problem fundamentally one of lack of motivation or other individual barriers to participation that even the most supportive and comprehensive interventions are not able to address? For some programs, such as the Harlem Children's Zone that attempts to reach children early in preschool and to provide holistic services through their early adulthood, we do not yet have enough information to answer this question, although early reports of youth outcomes look promising. The ongoing Career Academies evaluation includes a plan to compile data across programs in the effort to identify specific program components that appear to be working most effectively in engaging youth and contributing to program impacts. Clearly, this is

an area where additional research would be beneficial, along with a careful examination of the costs of different components of these interventions, so that cost-benefit analyses might not only speak to the value of whole programs but also any specific parts that might be driving positive outcomes.

Public “Jobs of Last Resort” for Youth

Some young people with a range of barriers to employment—such as very poor skills and work experience, physical or emotional disabilities, and/or criminal records—are part of a group known as the “hard-to-employ,” for whom getting or retaining private sector employment at even the minimum wage is quite difficult (Loprest and Martinson 2008). For these individuals, another possibility remains: publicly-funded “jobs of last resort” in the public or private not-for-profit sectors. Danziger and Gottschalk (1995) endorsed such a program, in which individuals would obtain time-limited community service jobs.

This category of programs would differ significantly from those described above, such as YIEPP, YouthBuild, and the Youth Service and Conservation Corps, as the latter are really employment-based *training* programs, whose post-program impacts on participant earnings are judged relative to costs like any other training program. Another employment-based training approach is the “transitional job” (or TJ) for ex-offenders, where individuals get several months of paid employment plus supportive services to help them transition to private sector jobs. Evaluation evidence for those with criminal records suggests little impact on post-program earnings but reductions in recidivism for some subsamples of these men.¹⁶

In contrast, efforts to create “jobs of last resort” would not necessarily be judged by their post-program impacts, but rather by their ability to generate net new employment (plus public

services) while they are in place. As such, they are work-based “safety net” programs rather than training. Furthermore, an ongoing program of public employment would differ from the publicly-funded job creation efforts of the American Recovery and Reconstruction Act (ARRA), which are temporary countercyclical measures designed to provide employment only during a period of severe recession.¹⁷

Gottschalk (1997) and Ellwood and Welty (2000) review the U.S. experience with public employment programs for the disadvantaged. Some programs they review have successfully created *net* new employment for the disadvantaged by carefully targeting those who are unsuccessful in gaining such employment in the private sector or elsewhere in the public sector; some have also generated services that the public actually values.

However, even when successful, such programs are very expensive. For instance, a minimum wage job at 30 hours per week for a year (plus administrative expenses) would likely cost about \$15,000; creating 1 million of these jobs would therefore cost \$15B per year. And allowing for at least some displacement of private employment or “fiscal substitution” in the public sector would reduce the net amount of employment generated with these funds. Given the extremely tight federal and state budgetary environments of the coming years, such expenditures would be very difficult to sell politically. Cheaper efforts that provide some income or employment support, like those outlined by Loprest and Martinson (*op. cit.*), seem more plausible in this fiscal environment.

HOW TO MOVE FORWARD WITH THE MOST PROMISING/PROVEN INTERVENTIONS

In light of the above findings on promising programs for cost-effectively improving educational attainment and employment outcomes for disadvantaged youth, what policies for youth seem most appropriate, and by how much would more optimal policies differ from the status quo? Without being overly prescriptive in terms of exactly which programmatic models to implement, it seems as though our policy efforts should encourage more of the promising or proven approaches described above, along with continuing evaluation efforts. At-risk high school students, as well as dropouts, should be able to consider a range of “pathways” to high school completion, postsecondary education and to good middle-skill careers. Different opportunities should be available to those at different levels of risk of failure and with different underlying skills and track records. Secondary schools, community colleges and local employers should be more engaged in local youth “systems” that integrate educational and employment opportunities for them, with fewer “silos” separating the relevant youth populations, institutions and policies.

Unfortunately, our current policies fall well short of these goals. Programs funded and administered by the U.S. Departments of Education and Labor operate in almost complete isolation from one another. A jointly administered program to encourage more integration of these youth programs in the 1990s, known as the School to Work Opportunity Act, provided very modest (and not well-targeted) seed money to school districts around the country but ultimately was not reauthorized. The Department of Education funds CTE through the Perkins Act, though most such efforts are funded by states and localities. Dropout prevention efforts receive some funding from the Elementary and Secondary Education Act (ESEA), while Pell

grants and other services for those in college are funded through the Higher Education Act (HEA) independently of local workforce development efforts.

The Department of Labor funds youth services through the Workforce Investment Act, with funds dispersed through local Workforce Investment Boards (WIBs) and their Youth Councils. But representation by the leaders of local educational agencies on these Councils is usually quite limited, except in a few well-known cases (such as the Philadelphia Youth Network and the San Francisco Youth Council), while links between “One-Stop” centers and community colleges are quite limited, too (Edelman, Greenberg, and Holzer 2009). Little is currently known about how WIA youth funds are spent and how effective they are, as there has been no national evaluation since the JTPA effort two decades ago, and the performance measures used by WIA for youth or adults, such as employment placement rates, likely lead to “cream-skimming” and other manipulative efforts by program operators (Barnow and Smith 2004).

Funding remains very limited as well. Youth services under WIA receive less than \$1 billion per year in general funds, in addition to dedicated funds for the Job Corps (\$1.2 billion) and YouthBuild (\$60 million) (Holzer 2009). Given that roughly one million young students drop out of high school every year (Heckman and Lafontaine 2007), and given the costs per participants of programs identified above (from \$5,000 in YO to about \$15,000 for ChalleNGe and YouthBuild or \$20,000 for Job Corps), it is clear that very few of these young people can be reached with this level of funding. For instance, it would require \$5 billion annually to provide moderately intensive services to half of the nation’s dropouts each year—if it were, in fact, possible to engage them on such a large scale.¹⁸

These deficiencies could at least potentially be corrected through some changes in federal youth policy that have been outlined elsewhere (Edelman, Greenberg, and Holzer 2009). A new

youth title of WIA, or perhaps a separate piece of youth legislation, could create a program administered jointly by the Departments of Education and Labor. Formula funding to localities would provide greater support for paid work experience and work-based learning through high-quality CTE efforts, like Career Academies. High schools and community colleges, along with employer associations, would face incentives to develop new “career pathways” for both in-school youth and also for those currently out-of-school who might be “reconnected” with community colleges. Funding would also be available for intensive academic remediation and other services that prepare youth to finish high school and obtain postsecondary education down the road. Some existing strands of federal policy, like the current youth funding under WIA as well as Perkins and ESEA, could be brought together under this approach and made more effective. The Obama Administration’s new community college initiative, which provides competitive grants to states to invest more in these systems, could be part of this effort as well.

Importantly, any new legislation in this area should strongly incent more comprehensive and integrated youth “systems” to be built at the local level. Of course, it is hard to make such systems work, given the differing vested interests and incentives that local agency officials often face in their frequently conflicting jurisdictions. The new incentives might include a much greater reliance on bonus payments to localities that achieve these goals operationally, as well as competitive grants (like Youth Opportunity) to those who convincingly propose to do so. The competitive grants might include some matching funds to encourage states and localities to leverage other resources (public and private) in their youth efforts.¹⁹ Renewal of these competitive grants would be contingent on having achieved some significant scale in these efforts, as well as on performance measures (described below). States would also play a role in the use of both formula and competitive funds, by building systems in smaller towns and rural

areas, analyzing data on trends in local labor demand (to identify the occupations and sectors with greatest growth potential), and setting policies for their educational institutions and workforce boards to follow at the local level.

Performance measurement and accountability in the formula-funded programs should also be revamped. One option is to rely on population-wide measures of education and employment outcomes, rather than those of program participants, to diminish incentives to “cream,” but this might require new data collection at the local level and would likely reflect economic and demographic trends in states that are beyond policymakers’ control. Alternatively, data on participants could be used to track *changes* rather than levels in education and labor market certifications over time, as well as improvements in work experience and earnings, with significant adjustments for participants who enter programs with documented personal barriers that put them at higher risk of failure. Such analyses could also explore how type and intensity of services relate to measured outcomes and potentially identify how program differences, or differential responses by youth with varying characteristics, influence outcomes.

And given how little we know in terms of what actually works for different kinds of youth, a very strong evaluation component for both formula and competitive funds would be critically important. At least ideally, the structure of the formula and competitive grants in the future would be updated to reflect what is learned through this evaluation process.

Even if such comprehensive youth legislation is not achieved, the various pieces of youth policy under WIA, Perkins and other vehicles might create better incentives for such coordination and evaluation. Indeed, some recent proposals for new youth legislation all involve competitive grants to states and localities to fund some of the services as well as “systems” that are described above.²⁰

CONCLUSION

On the basis of the programs and evidence reviewed above, what can we say about policies and programs to reduce disconnection and improve education and employment outcomes of disadvantaged youth? While the results in every category of programs are mixed, and the exact mechanisms that generate success in some cases are not well understood, some positive findings do emerge. Investments in youth development and mentoring efforts for adolescents can be quite cost-effective, even though the impacts are modest and tend to fade over time. Paid work experience, especially when combined with high-quality career and technical education, can be quite successful for at-risk students in high school, both by effectively engaging them in the short term and giving them valuable skills and labor market experience that can improve their earnings over time. The Career Academies, in particular, are a very effective means of improving skills and earnings as well as high school graduation rates among at-risk young men. Other programs that allow for individual monitoring and case management that identify at-risk youth fairly early and provide them with intensive academic and personal services seem promising as well, as do other programs that create small learning communities.

Disadvantaged youth who finish a GED or high school diploma can also do quite well in the labor market if they can obtain an associate degree or at least a certificate in a high-demand occupation or sector. Programs to improve attendance and completion of community college in the Opening Doors demonstration show the potential impacts of efforts to improve financial aid (conditional on meeting performance standards) as well as a range of supports and services.

Programs that combine the last few years of high school with community college, such as Tech-

Prep and the Early College High School models, are promising, as are efforts to reconnect high school dropouts to alternative education efforts on these campuses.

Identifying successful programs for high school dropouts and other “disconnected” youth is somewhat more challenging. But even here, some modest successes appear. Intensive residential programs like Job Corps and ChalleNGe provide important benefits in the short term, while service employment programs like YouthBuild and the Youth Service and Conservation Corps have shown some positive outcomes and are thus promising as well. Comprehensive, community-based efforts like the Youth Opportunities program look successful, as does the Harlem Children Zones for a younger population. Publicly-funded “jobs of last resort” for the hardest-to-employ might also generate net benefits for young men, particularly if they are well-targeted, although because they are expensive, they are less likely to garner essential political support. Clearly, different programmatic strategies are promising or even proven for different populations of disadvantaged youth with different circumstances, suggesting that policy efforts should seek to promote a range of approaches for youth, along with ongoing evaluation efforts to improve our understanding of what works, and specifically, which program components, for whom.

To be successful, such efforts will inevitably require more public resources than they get right now. At the same time, incentives for leveraging private resources and for generating coherent systems that break down institutional “silos” and effectively combine education and labor market services are important, as are revamping performance standards for individual program participants. Competitive grants to states and localities can also play an important role in such efforts.

REFERENCES

- Anderson-Butcher, Dawn, W. Sean Newsome, and Theresa M. Ferrari. 2003. Participation in Boys and Girls Clubs and relationships to youth outcomes. *Journal of Community Psychology* 31 (1): 39-55.
- Arbreton, Amy J. A., and Wendy S. McClanahan. 2002. *Targeted outreach: Boys & Girls Clubs of America's approach to gang prevention and intervention*. Public/Private Ventures.
- Balfanz, Robert, Ruth Curran Neild, and Liza Herzog. 2007. An early warning system. *Educational Leadership* 65 (2): 28-33.
- Barnow, Burt, and Jeffrey Smith. 2004. Performance management of U.S. job training programs. In *Job training policy in the United States*, edited by C. O'Leary, R. Straits, and S. Wandner. 21-56. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.
- Berik, Gunseli, and Cihan Bilginsoy. 2000. Do unions help or hinder women in training? Apprenticeship programs in the United States. *Industrial Relations* 39 (4): 600-24.
- Bilginsoy, Cihan. 2003. The hazards of training: Attrition and retention in construction industry apprenticeship programs. *Industrial and Labor Relations Review* 57 (1): 54-67.

Bloom, Dan, Alissa Gardenhire-Crooks, and Conrad Mandsager. 2009. *Reengaging high school dropouts: Early results of the National Guard ChalleNGe Program evaluation*. MDRC, New York.

Bloom, Dan. 2009. Out-of-school youth and the transition to adulthood. Working paper, MDRC, New York.

Bowles, Anne, and Betsy Brand. 2009. *Learning around the clock: Benefits of expanded learning opportunities for older youth*. Washington, DC: American Youth Policy Forum.

Chicago Public Schools. 2007. *The 2007 Supplemental Educational Services Program: Year 4 summative evaluation*. Chicago Public Schools Office of Extended Learning Opportunities, Research, Evaluation and Accountability.

Cohen, Mark, and Alex Piquero. 2008. *Costs and benefits of a targeted intervention program for youthful offenders: The YouthBuild USA Youthful Offender Project*. Unpublished report, Vanderbilt University, Nashville, TN.

Consortium on Chicago School Research. 2007. *What matters for staying on-track and graduating in Chicago public high schools: A close look at course grades, failures, and attendance in the freshman year*. Chicago, IL.

- Cunningham, Alisa, Christina Redmond, and Jamie Merisotis. 2003. *Investing Early: Intervention programs in selected U.S. states*. Millennium Research Series.
- Danziger, Sheldon, and Peter Gottschalk. 1995. *America unequal*. New York: Russell Sage Foundation.
- Decision Information Resources, Inc. 2008. *Youth Opportunity grant initiative: Executive summary*. Houston, TX.
- Dobbie, Will, and Roland Fryer. 2009. Are high-quality schools enough to close the achievement gap? Evidence from a bold social experiment in Harlem. Unpublished paper, Harvard University, Cambridge, MA.
- Dynarski, Susan, and Judith Scott-Clayton. 2007. *College grants on a postcard: A proposal for simple and predictable federal student aid*. The Hamilton Project, Brookings Institution, Washington, DC.
- Dynarski, Mark, Susanne James-Burdumy, Mary Moore, Linda Rosenberg, John Deke, and Wendy Mansfield. 2004. *When schools stay open late: The national evaluation of the 21st Century Community Learning Centers program: New findings*. U.S. Department of Education, National Center for Education Evaluation and Regional Assistance, Washington, DC: U.S. Government Printing Office.

Edelman, Peter, Mark Greenberg, and Harry Holzer. 2009. *The administration and Congress should adopt a comprehensive approach to youth education, employment and connection*. Georgetown Center on Poverty, Inequality and Public Policy, Georgetown University, Washington, DC.

Edelman, Peter, Harry Holzer, and Paul Offner. 2006. *Reconnecting disadvantaged young men*. Washington, DC: Urban Institute Press.

Ellwood, David, and Elisabeth Welty. 2000. Public service employment and mandatory work: A policy whose time has come and gone and come again? In *Finding jobs: Work and welfare reform*, edited by D. Card and R. Blank. New York: Russell Sage Foundation.

Finch, Nicole L., and Kimberley S. Cowley. 2003. *Fairmont State College GEAR UP Project: Year 4 baseline seventh-grade survey and tenth-grade follow-up survey*. AEL, Inc., Charleston, WV.

Gottschalk, Peter. 1997. The impact of changes in public employment on low-wage labor markets. In *Generating jobs: How to increase demand for less-skilled workers*, edited by R. Freeman and P. Gottschalk. New York: Russell Sage Foundation.

Government Accountability Office. 2007. *YouthBuild: Analysis of outcome data needed to determine long-term benefits*. GAO-07-82.

- Guthrie, Larry F., and Grace Pung Guthrie. 2001. *Longitudinal research on AVID, 1999-2000: Final report*. Burlingame, CA: Center for Research, Evaluation and Training in Education.
- Hahn, Andrew. 1994. *Evaluation of the Quantum Opportunities Program (QOP). Did the program work? A report on the post-secondary outcomes and cost-effectiveness of the QOP Program (1989-1993)*. Waltham, MA: Brandeis University, Center for Human Resources.
- Harris, Linda, and Evelyn Ganzglass. 2008. *Creating post-secondary pathways to good jobs for young school dropouts: The possibilities and the challenges*. Washington, DC: Center for American Progress.
- Haskins, Ron, Harry Holzer, and Robert Lerman. 2009. *Promoting economic mobility by increasing postsecondary education*. Economic Mobility Project, Pew Charitable Trusts, Washington, DC.
- Heckman, James. 2008. Schools, skills and synapses. Working Paper 14064, National Bureau of Economic Research, Cambridge, MA.
- Heckman, James, and Paul Lafontaine. 2007. The American high school graduation rate: Trends and levels. Working Paper 13670, National Bureau of Economic Research, Cambridge, MA.

Heinrich, Carolyn J., Robert H. Meyer, and Greg Whitten. Forthcoming. Supplemental education services under No Child Left Behind: Who signs up, and what do they gain? *Educational Evaluation and Policy Analysis*.

Herrera, Carla, Jean Baldwin Grossman, Tina J. Kauh, Amy F. Feldman, Jennifer McMaken, and Linda Z. Jucovy. 2007. *Making a difference in schools: The Big Brothers Big Sisters school-based mentoring impact study*. Public/Private Ventures, Philadelphia, PA.

Holzer, Harry. 2007. *Better workers for better jobs: Improving worker advancement in the low-wage labor market*. The Hamilton Project, Brookings Institution, Washington, DC.

Holzer, Harry. 2009. Workforce development as an antipoverty strategy: What do we know? What should we do? In *Changing Poverty, Changing Policies*, edited by M. Cancian and S. Danziger. New York: Russell Sage Foundation.

Jacobson, Louis, and Christine Mokher. 2009. *Pathways to boosting the earnings of low-income students by increasing their educational attainment*. Hudson Institute and CNA, Washington, DC.

Jackson, Russell H., R. Malené Dixon, Ann McCoy, Carol Pistorino, Paul Zador, Cynthia Thomas, John Lopdell, et al. 2007. *Youth Opportunity Grant Initiative: Impact and synthesis report*. Houston, TX: Decision Information Resources, Inc.

- Jastrzab, JoAnn, Julie Masker, John Blomquist, and Larry Orr. 1996. *Evaluation of national and community service programs. Impacts of service: Final report on the evaluation of American Conservation and Youth Service Corps*. Abt Associates, Washington, DC.
- Jenkins, Davis, Matthew Zeidenberg, and Greg Kienzl. 2009. *Educational outcomes of I-BEST, Washington state community and technical college system's Integrated Basic Education and Skills Training program: Findings from a multivariate analysis*. Unpublished report, Community College Research Center, New York.
- Kemple, James J. and Cynthia J. Willner. 2008. *Career academies: Long-term impacts on labor market outcomes, educational attainment, and transitions to adulthood*. MDRC, New York.
- Kemple, James, Corinne Herlihy, and Thomas Smith. 2005. *Making progress toward graduation. Evidence from the Talent Development High School model*. MDRC, New York.
- Lauer, Patricia A., Motoko Akiba, Stephanie B. Wilkerson, Helen S. Athorp, David Snow, and Mya L. Martin-Glenn. 2006. Out-of-school-time programs: A meta-analysis of effects for at-risk students. *Review of Educational Research* 76 (2): 275-313.

- Lerman, Robert. 2007. Career-focused education and training for youth. In *Reshaping the American workforce in a changing economy*, edited by H. Holzer and D. Nightingale. Washington, DC: Urban Institute Press.
- Loprest, Pamela J., and Karin Martinson. 2008. *Supporting work for low-income people with significant challenges* (New Safety Net Paper 5). Washington, DC: The Urban Institute.
- Martin, Nancy, and Samuel Halperin. 2006. *Whatever it takes: How twelve communities are reconnecting out-of-school youth*. American Youth Policy Forum, Washington, DC.
- Maxfield, Myles, Allen L. Schirm, and Nuria Rodriguez-Planas. 2003. The Quantum Opportunity Program demonstration. ETA Occasional Paper, 2003-05, U.S. Department of Labor, Employment and Training Administration, Washington, DC.
- Miller, Cynthia, Johannes M. Bos, Kristin E. Porter, Fannie M. Tseng, Yasuyo Abe. 2005. *The challenge of repeating success in a changing world: Final report on the Center for Employment Training Replication Sites*. MDRC, New York.
- Myers, David, and Allen Schirm. 1999. *The impacts of regular Upward Bound: Results from the third follow-up data collection*. Washington, DC: Mathematica Policy Research, Inc.
- National Guard Bureau. 2005. *National Guard Youth ChalleNGe program: 2005 performance and accountability highlights*. Arlington, VA.

- Neild, Ruth Curran, and Robert Balfanz. 2006. *Unfulfilled promise: The dimension and characteristics of Philadelphia's dropout crisis, 2000-2005*. Philadelphia Youth Network, Johns Hopkins University and University of Pennsylvania.
- New Jersey Commission on Higher Education. 2005 *Preparing New Jersey students for college and careers: Evaluation of New Jersey GEAR UP*. Trenton, NJ.
- New York City Department of Education. 2006. *Multiple pathways research and development: Summary findings and strategic solutions for over-age under-credited youth*. Office of Multiple Pathways to Graduation.
- Philliber, Susan, Jacqueline Williams Kaye, Scott Herrling, and Emily West. 2002. Preventing pregnancy and improving health care access among teenagers: An evaluation of the Children's Aid Society-Carrera Program. *Perspectives on Sexual and Reproductive Health* 34 (5): 244-51.
- Redcross, Cindy, Dan Bloom, Gilda Azurdia, Janine Zweig, and Nancy Pindus. 2009. *Transitional jobs for ex-prisoners: Implementation, two-year impacts, and costs of the Center for Employment Opportunities (CEO) Prisoner Reentry Program*. MDRC, New York.

- Richburg-Hayes, Lashawn, Thomas Brock, Allen LeBlanc, Christina Paxson, Cecilia Elena Rouse, and Lisa Barrow. 2009. *Rewarding persistence: Effects of a performance based scholarship program for low income parents*. New York: MDRC.
- Rickles, Jordan H., and Melissa K. Barnhart. 2007. *The impact of supplemental educational services participation on student achievement: 2005-06*. Report of the Los Angeles Unified School District Program Evaluation and Research Branch, Planning, Assessment and Research Division Publication No. 352.
- Rhodes, Jean E., and David L. DuBois. 2008. Mentoring relationships and programs for youth. *Current Directions in Psychological Science* 17 (4): 254-58.
- Rhodes, Jean E. 2005. A model of youth mentoring. In *Handbook of youth mentoring*, edited by D. L. DuBois and M. J. Karcher, 30-43. Thousand Oaks, CA: Sage.
- Rhodes, Jean E., Jean Baldwin Grossman, and Nancy L. Resch. 2000. Agents of change: Pathways through which mentoring relationships influence adolescent's academic adjustment. *Child Development* 71 (6): 1662-71.
- Schochet, Peter Z., John Burghardt, and Sheena McConnell. 2008. Does Job Corps work? Impact findings from the National Job Corps Study. *American Economic Review* 98 (5): 1864-86.

- Spielman, Seth E., Cynthia A. Golembeski, Mary E. Northridge, Roger D. Vaughan, Rachel Swaner, Betina Jean-Louis, Katherine Shoemaker, et al. 2006. Interdisciplinary planning for healthier communities: Findings from the Harlem Children's Zone Asthma Initiative. *Journal of the American Institute of Planners* 72 (1): 100-108.
- Standing, Kim, David Judkins, Brad Keller, and Amy Shimshak. 2008. *Early outcomes of the GEAR UP Program*. U.S. Department of Education.
- Sum, Andrew, Joseph McLaughlin, Sheila Palma, Jacqui Motroni, and Ishwar Khatiwada. 2008. Out with the young and in with the old: U.S. labor markets 2000-2008 and the case for an immediate jobs creation program for teens and young adults. Working paper, Northeastern University, Boston, MA.
- Tierney, Joseph P., Jean Baldwin Grossman, and Nancy L. Resch. 1995. *Making a difference: An impact study of Big Brothers Big Sisters*. Philadelphia: Public/Private Ventures.
- Turner, Sarah. 2007. Higher education policies generating the 21st century workforce. In *Reshaping the American workforce in a changing economy*, edited by H. Holzer and D. Nightingale. Washington, DC: Urban Institute Press.
- Tyler, John H., and Magnus Lofstrom. 2009. Finishing high school: Alternative pathways and dropout recovery. *The Future of Children* 19 (1): 77-103.

- Uggen, Christopher. 2000. Work as a turning point in the life course of criminals: A duration model of age, employment and recidivism. *American Journal of Sociology* 65 (4), 529-46.
- U.S. Department of Education. 2004. *The impacts of regular Upward Bound: Results from the third follow-up data collection*. Policy and Program Studies Service.
- Vandell, Deborah L., Elizabeth R. Reisner, B. Bradford Brown, Kimberly Dadisman, Kim M. Pierce, Dale Lee, and Ellen M. Pechman. 2005. *The study of promising after-school programs: Examination of intermediate outcomes in Year 2*. Wisconsin Center for Education Research, Madison, WI.
- Van Kannel-Ray, Nancy, Warren E. Lacefield, and Pamela J. Zeller. 2008. Academic case managers: Evaluating a middle school intervention for children at-risk. *Journal of MultiDisciplinary Evaluation* 5 (10): 21-9.
- Walsh, Stephen, Deana Goldsmith, Yasuyo Abe and Andrea Cann. 2000. *Evaluation of the Center for Employment Training Replication Sites: Interim report*. Prepared for the U.S. Department of Labor, Employment, and Training Administration, Office of Policy Research, Washington, DC.

Watt, Karen M., Darlene Yanez, and Griselda Cossio. 2002. AVID: A comprehensive school reform model for Texas. *National Forum of Educational Administration and Supervision Journal* 19 (3): 43-59.

Yastrzab, JoAnn, Julie Masker, John Blomquist, and Larry Orr. 1996. *Evaluation of national and community service programs. Impacts of service: Final report on the evaluation of American Conservation and Youth Service Corps*. Cambridge, MA: Abt Associates, Inc.

Youth Development Institute. 2008. *What works for young adult learners*. Unpublished report, New York, NY.

Zimmer, Ron, Brian Gill, Paula Razquin, Kevin Booker, and J. R. Lockwood III. 2007. *State and local implementation of the No Child Left Behind Act: Volume I—Title I School Choice, supplemental educational services, and student achievement*. Report to the U.S. Department of Education, Office of Planning, Evaluation and Policy Development, Washington, DC.

APPENDIX: Summary of Youth Development, In-School Youth and Out-of-School Interventions				
Program	Study Description	Authors, Study Year	Program mechanism	Outcomes examined (*=experimental impact)
Youth/Adolescent Development Programs				
Big Brothers Big Sisters	Two random assignment impact evaluations and qualitative and quantitative studies observing the intervention, analyzing program variations, and examining recruitment and screening procedures	Herrera et al., 2007; Rhodes, Grossman, and Resch, 2000; Tierney, Grossman, and Resch, 1995	Mentoring through supportive relationships with adults and/or older peers; academic and non-academic activities and supervision and training to support relationship development	Overall academic performance*, assignments completed*, coursework quality*, GPA*, scholastic efficacy*, skipping school*, unexcused absences*, serious school infractions*, classroom effort*, teacher-student relationship quality, academic self-esteem, college expectations*, substance use, misconduct, pro-social behavior and acceptance*, emotional support from peers, self-worth, assertiveness, relationship w/parents/family/peers
Boys and Girls Clubs of America	Nonexperimental studies examining participation, motivation for attendance, attrition, quality of support, drug problems and prevention, and impacts on academic achievement, school engagement and substance use	Anderson-Butcher, Newsome, and Ferrari, 2003; Arbreton and McClanahan, 2002	Individualized case management (relationship with supportive adults), mobilization of community resources (e.g., referrals for drug treatment, job training, educational services), daily club activities, drug use prevention	Gang involvement, contact with criminal justice system, delinquent behaviors (stealing, drug use), use of leisure time, social relationships, school attendance and grades
Children's Aid Society/Carrera	Random assignment study, including surveys and interviews, to assess the effects of program participation on current sexual activity, contraceptive use, pregnancy and health care access	Philliber et al., 2002	Job club, tutoring, individual assessment, test preparation, assistance with college applications, family/sexuality education, reproductive health counseling, art, drama and writing workshops, individual sports engagement, mental health care, medical care	Sexual activity/pregnancy*, contraceptive use* (impacts on females only), receipt of health care*, age-appropriate sexual knowledge*, pregnancy*

Harlem Children's Zone	Nonexperimental studies with pre- and post-intervention measures of health, contraceptive use, school absences, student achievement test scores	Dobbie and Fryer, 2009; Spielman et al., 2006	Holistic system of education (preschool, charter schools, after-school activities), community-based social services, job training and college preparation programs, home visits and health care programs	Educational/cognitive achievement, school absences, social/emotional and life skills, behavioral problems, engagement in risky behaviors, physical and mental health, preventative health care, contraceptive use
Supplemental educational services/after-school tutoring	Random assignment study of a national after-school program, nonexperimental studies of supplemental educational services, and meta-analyses of out-of-school time programs using comparison or control groups to assess impacts on student achievement	Dynarski et al., 2004; Vandell et al., 2005; Chicago Public Schools, 2007; Rickles and Barnhart, 2007; Zimmer et al., 2007; Heinrich, Meyer, and Whitten, forthcoming	Additional (out-of-school) academic instruction to supplement in-school instruction and strengthen skill sets in key areas of reading and mathematics and contribute to improved learning and higher scores on state academic achievement assessments	Academic achievement (test scores), grades
In-School Youth Interventions				
Early Indicators	A nonexperimental, longitudinal study of 13,000 students to assess the effectiveness of an early identification and intervention system for middle-grades schools to combat student disengagement and increase graduation rates	Balfanz and Neild, 2007	School district data, including test scores, report card grades, behavior marks, attendance records, special education status, English language learner status, and demographic categories, are examined to empirically identify early signals of students at risk of disengaging and dropping out of school	Four indicators reflecting poor attendance, misbehavior, and course failures in sixth grade can be used to identify 60% of the students who will not graduate from high school: a final grade of F in mathematics, a final grade of F in English, attendance below 80 percent for the year, and a final "unsatisfactory" behavior mark in at least one class

Multiple Pathways/ Alternative Pathways	Primarily qualitative and process studies on profiles of the target population, the challenges of identifying effective options and alternative pathways, and analyses of educational outcomes, including graduation and dropout rates	New York City Department of Education, 2006; Neild and Balfanz, 2006; Consortium on Chicago School Research, 2007; Harris and Ganzglass, 2008	Early identification, credit recovery, accelerated learning and time to credential, curriculum linked to work/skills training, re-enrollment in alternative education/multiple pathways programs (GED, small/transfer schools, learning to work), work-based learning, wrap-around supportive services, tangible rewards (including pay) for learning	Four-year graduation and dropout rates
Career Academies	Random assignment study with 1,400 students in nine high schools across the United States, including medium- and large-sized school districts and schools confronting educational challenges found in low-income urban settings, with an 8-year follow-up period	Kemple and Willner, 2008	Small learning communities to create supportive, personalized learning environment, academic/career/technical curricula around career themes to enrich teaching and learning, interpersonal and peer supports, partnerships with local employers to provide career awareness and work-based learning opportunities (e.g., job shadowing, work-based learning activities, career fairs, guest speakers, and career-related guidance)	Staying in school through 12th-grade year, attendance, credits earned toward graduation, standardized test scores, average monthly earnings*, months employed during follow-up period,* hours worked per week,* hourly wages*, high school completion, postsecondary program enrollment, marital status*, parenting status*, living arrangements*, public assistance receipt, access to health insurance, voter registration, involvement with the criminal justice system
Job Training Apprenticeship	Nonexperimental studies on the use of apprenticeships to train workers, federal and state resources used in administering apprenticeship programs, representation of minorities and women in programs, and program retention and attrition	Berik and Bilginsoy, 2000; Bilginsoy, 2003	On-the-job training and formal instruction to teach practical and theoretical aspects of a skilled occupation; mentoring by a fully trained worker (journey worker)	Retention rate, completion rate

Quantum Opportunity	Two random assignment impact evaluations, 3-year follow-up periods in 5 sites and 5-year follow-up period in 7 sites, including a cost-benefit analysis	Maxfield, Schirm, and Rodriguez-Planas, 2003; Hahn, 1994	After-school programming, intensive case management, mentoring, supplemental education/tutoring, developmental and community service activities, supportive services (referrals to community health/mental health services, summer jobs programs, housing, food, income support, child care); financial incentives (stipends, accrual accounts, enrollee and staff bonuses)	High school grades, achievement test scores, risky behaviors (substance abuse, gang activity, crime, sexual activity and teen parenting), high school graduation (with diploma)*, GED, enrollment in postsecondary education or training*
Opening Doors	Random assignment impact study of effects of supplemental financial aid with incentives	Richburg-Hayes et al., 2009	Financial support, including scholarships up to \$2,000 (in incentive monies), curricular and instructional innovations, e.g., "learning communities," customized instructional support, academic instruction, enhanced orientation courses and student services	College registration*, college credits attempted and accumulated*, grades in college courses (GPA)*, degree attainment, transfer to 4-year college, course withdrawal, cumulative academic achievement over 7 semesters*, student-reported effort (number of hours studying, % of classes attended), self-reported optimism, goal engagement, life engagement, self esteem, sense of self*, general social support, political engagement*, mental/physical health
Advancement Via Individual Determination (AVID)	Nonexperimental, longitudinal (pre-/post-) and mixed methods studies of AVID effects on high school performance, educational aspirations	Cunningham, Redmond, and Merisotis, 2003; Watt, Yanez, and Cossio, 2002; Guthrie and Guthrie, 2001	Rigorous curriculum with extra academic support, tutoring, college preparation, motivational activities, parent education and advising services; participation in at least one AVID class every day; partnerships and close working relationships cultivated with postsecondary institutions	College attendance rates*, retention rates and college completion, high school dropout rates

Gear Up - Gaining Early Awareness and Readiness for Undergraduate Programs	Nonexperimental studies using survey and longitudinal data (pre- and post-measures) and a matched comparison group in one study to assess academic performance, attendance and dropout, college readiness and student behavior	Standing et al., 2008; Van Kannel-Ray, Lacefield, and Zeller, 2008; New Jersey Commission on Higher Education, 2005; Finch and Cowley, 2003	Tutoring, mentoring, college field trips, career awareness, college-readiness counseling, classes, meetings, parent education about access to higher education, curriculum reform, and teacher training	Interim outcomes include increased knowledge, improved behavior, increased expectations; GEAR UP students had not yet completed high school, so longer term outcomes of increased postsecondary enrollment and completion could not be measured
Upward Bound	National, random assignment impact evaluation involving 67 projects and 2,800 students and a meta-analysis	US Department of Education, 2004; Myers and Schirm, 1999	Counseling, academic enrichment support, personal enrichment/social integration, mentoring, pre-college courses and activities and 6-week intensive academic program, financial assistance and scholarships	Total credits*, AP and honors credits*, GPA, high school status (graduation, GED, dropout), postsecondary school status*, 4-year college attendance*, credits earned at postsecondary schools* (2-yr., 4-yr., vocational schools), worked for pay and hours
Talent Development High schools	Random assignment evaluation of impacts on academic achievement of 9th grade students in seven Philadelphia inner-city high schools	Kemple, Herlihy, and Smith, 2005	Small learning communities within high schools, accelerated math and English homework, intensive remediation for students, staff development, parental involvement	Attendance*, test scores, courses completed and credits earned*, algebra pass rate*, and promotion rates of 9th grade students to 10th grade*
Youth Opportunity Grant Initiative	Nonexperimental analysis of education and employment outcomes for youth in 36 grantee neighborhoods compared to a set of low-income neighborhoods	Jackson et al., 2007	Comprehensive services provided to both in-school and out-of-school youth (ages 14-21) to encourage schooling and employment	School enrollment, full-time and part-time employment, wages

Out-of-School Youth Interventions				
Job Corps	Random assignment study of over 15,000 youth in 1994-1995, including 4 years of survey data and 9 years of administrative records on earnings; nonexperimental analysis of data on 15,386 participants	Schochet, Burghardt, and McConnell, 2008	Intensive vocational/job and life skills training through residential component; vocational curricula with business and labor organization input to prepare youth for work in a specific trade; basic skills training to earn a GED; assistance with housing, referrals for substance abuse treatment and other health/mental health issues	Enrollment in education and training programs (increases in receipt of GED and vocational certificates*), wages, earnings (older youth* and younger youth), occupation, and crime/arrest rates
American Conservation and Youth Service Corps	Random assignment impact evaluation and cost-benefit analysis of national and community service programs of American Conservation and Youth Service Corps, including 8 programs and 2,382 participants over 15 months	Yastrzab et al., 1996	Full-time, team-based residential program for men and women ages 18–24; team-based national and community service in partnership with nonprofit, state and local, faith-based and other community organizations; training in CPR, first aid, public safety, and other skills	Participants more likely to have worked for pay and worked more hours. Not significant results: participants less likely to be arrested and earn a technical degree (Corps was a substitute for enrollment)
ChalleNGe (National Guard)	Random assignment impact evaluation of 3,000 participants in 10 programs, and program annual reports of outcomes for cadets (graduation rates, academic achievement, job placements)	Bloom, 2009; National Guard ChalleNGe Program, 2005	17-month program: 2-week Pre-ChalleNGe orientation and assessment, 20-week Residential Phase, one-year Post-residential Phase; Residential Phase curriculum w/core components on leadership, citizenship, community service, life-coping skills, fitness/health/hygiene, job skills, and academic excellence; post-residential placements in employment, education, and military service	Earned high school diploma or GED*, working full-time*, in high school or GED prep, enrolled in college courses*, enrolled in job-training*, arrested, convicted*, in jail, prison or detention center*, self-rating of health, BMI (overweight, obese*), self-efficacy

Center for Employment Training	Random assignment impact evaluation with 1,136 participants and 30- and 54-month follow-up, and study of implementation experiences in 12 sites	Cynthia Miller et al., 2005; Walsh et al., 2000	Employment and training services that mirror the workplace (occupational, basic skills, full-time; self-paced, competency-based, and operated on an open-entry, open-exit basis); close involvement of industry in program design and operation	Ever worked during follow-up period* (positive for women), number of months worked in 6-mos. intervals, average annual earnings, average wage at most recent job*, hours worked at most recent job*, household structure/living arrangements/size/status, child care/Head Start*, alcohol use*, marijuana use*, arrests
YouthBuild	Nonexperimental studies including a review of literature on YouthBuild programs, comparisons with other youth programs, an examination of HUD records, site visits to 20 YouthBuild grantees, and cost-effectiveness analyses	GAO, 2007	Alternative school w/small classes for work toward GED or high school diplomas; job training and pre-apprenticeship program, incl. training in construction skills; leadership development and civic engagement; community service through construction of affordable housing; personal counseling, peer support groups, life planning processes and YouthBuild Alumni Association	Percentage of youth in employment (including the military) or enrolled in postsecondary education and/or advanced training or occupational skills training; percentage of participants who attain a diploma, GED or certificate; percentage of youth who increase their basic educational functioning level in literacy or numeracy; average cost per participant

¹ This study used a lottery to generate random admissions to the HCZ charter school, as well as instrumental variable methods, to measure HCZ's impact.

² The four sites in the Opening Doors demonstration include one in Kingsborough (Brooklyn) that created small learning communities; another in Louisiana that primarily focused on financial supplements of \$2,000 per year and Pell grants; two in Ohio that provided supplemental services and a very modest (\$300 per year) stipend; and two programs in southern California that provided remedial services for those on probation. While all sites generated at least some modest short-term impacts on enrollments and credits earned, the largest and most lasting impacts seem to be generated by the financial supplements in Louisiana and mandatory participation in remedial programs for probation students in California.

³ See, for example, the Youth Development Institute (2008) for a broader list of programs — including Dare to Dream, First Things First, I Have a Dream, and Project Grad — that rely on many of the same approaches described in this section. Most of these have not been rigorously evaluated or scaled up in any major way.

⁴ Some smaller programs that use these strategies and have been evaluated, like one known as Check and Connect, have generated impacts on dropout rates as well (Tyler and Lofstrom 2009).

⁵ “Achieving the Dream” is setting up programs in 83 community colleges in 15 states. These programs focus heavily on advising and counseling for low-income students, curricular changes, and other institutional reforms. “Career Pathways” programs now operate statewide in at least a half dozen states.

⁶ I-BEST fully integrates remedial and occupational training by co-assigning teachers for each to every course taken by students. An econometric analysis by Jenkins, Zeidenberg, and Kienzl (2009) suggests positive impacts on test scores and credits earned for enrollees.

⁷ A recent econometric analysis of Tech Prep also indicates that it reduces dropping out and improves enrollments in two-year colleges but has modest negative impacts on enrollments in four-year college (Lerman 2007).

⁸ The YIEPP was cancelled in 1981 before there was a chance to see whether or not impacts on employment or earnings would persist over time. See Bloom (2009).

⁹ The Talent Development evaluation focused on seven low-income high schools in Philadelphia. In addition to small learning communities, this program emphasizes a heavy focus on English and math classes, intensive

remediation, staff development and parental involvement. Positive impacts on attendance, credits attained, promotions to 10th grade and algebra pass rates were observed there.

¹⁰ The evaluation compared outcomes of *all* youth living in these 36 neighborhoods to those residing in comparable low-income neighborhoods not participating in the program. The fact that outcomes are measured for all residents rather than only program participants directly reflect the fact that the program was designed to “saturate” a neighborhood with services and thus change local behavior and norms regarding schooling and employment.

¹¹ A range of local efforts to reconnect high school dropouts to schools and employment are described in Martin and Halperin (2006). Another promising effort is the Gateways Program, which began at Portland Community College, and attempts to “reconnect” high school dropouts to high school completion efforts on community college campuses, with the hope that some might seamlessly begin enrolling in community college courses once they achieve their high school diplomas.

¹² Cohen and Piquero (2008) provide some econometric evidence of significant positive impacts on educational attainment as well as reduced recidivism for a small sample enrolled in a special YouthBuild program for ex-offenders.

¹³ Jastrzab et al. (1996) report impressive 15-month impacts on employment and reduced behavioral problems from a random assignment evaluation of a small number of Youth Service and Conservation Corps sites. A larger random assignment evaluation focusing on more sites and longer term impacts is now underway.

¹⁴ Community college attendance at the “high-fidelity” sites in California was unusually high for control group members, which likely generates a negative bias in impact estimates.

¹⁵ Cost figure is for 2007; see <http://www.whitehouse.gov/omb/expectmore/detail/10002372.2007.html>.

¹⁶ See Redcross et al. (2009), which presents evaluation evidence on the Center for Employment Opportunities in New York City. These findings are fairly consistent with those on the National Supported Work (NSW) program. While the early evaluation evidence suggested no impacts, Uggen’s reanalysis of the data (2000) shows that the program reduced recidivism for men in their late 20’s or older.

¹⁷ As we write in December 2009, another emergency jobs bill has passed in the U.S. House of Representatives but not yet in the Senate.

¹⁸ These calculations assume that we would provide relatively intensive services (averaging \$15,000 per year) to some students and less intensive ones (averaging \$5,000) to equal numbers of others.

¹⁹ For a proposal of a competitive grant program for states to build systematic “advancement” systems for disadvantaged adults and youth alike, see Holzer (2007).

²⁰ Other recent proposals in Congress to create competitive grant programs for education and training of disadvantaged youth include the Graduation Promise Act, which would provide grants to states for dropout prevention; and Promoting Innovations to 21st Century Careers for grants to states to build partnerships between employers and community colleges that generate more “career pathways.”