

Developing Skills

What We Know About The Impacts of American Employment and Training Programs on Employment, Earnings, and Educational Outcomes

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SUMMARY AND CONCLUSIONS

This paper summarizes the best quantitative evidence that is available from the evaluation literature on the impacts of American labor market services on such tangible outcomes as employment, earnings, and educational achievement. The focus is on programs for the economically disadvantaged, ranging from disadvantaged teenagers having difficulty entering the labor market for the first time, to dislocated workers, who may have a long history of work but are facing difficulties after the loss of a long-term job.

Below, we present some basic findings for the various populations examined, followed by some conclusions on the effects of the various types of programs we have investigated.

Impacts By Target Population

Disadvantaged youth are difficult to assist, although some programs have succeeded. In general, programs serving disadvantaged youth under 21, especially those who have already dropped out of high school, have been less successful than programs for other populations. It appears that training programs must be either highly intensive and/or quite well implemented to be successful with this population. This finding underscores the importance of improving secondary school retention among these young people. Dropout prevention programs for these youth have had a high variance in their level of success; there have been some notable successes but many failures. The reasons for this are not completely understood, but it accords with the general finding that programs for this population are particularly challenging.

Programs which offer government jobs to disadvantaged youth do appear to be successful in improving youth employment rates among during the subsidy period, but there is little or no evidence of long-term effects after the subsidy period is completed.

Poor adults – especially single parents seeking to leave welfare – appear to respond well to training programs, especially those with a subsidized employment focus. However, poverty rates remain quite high after program participation. Voluntary training programs for poor adults have typically produced substantial earnings gains and high benefit-cost ratios. This is true even of relatively short-term and inexpensive training programs like the Job Training Partnership Act, which was successful for both men and women. Programs that emphasized subsidized employment and on-the-job training have been particularly successful with women seeking to leave welfare for work. Welfare to work programs emphasizing job search have consistently produced moderate gains in earnings and employment rates. However, the low base level of earnings among disadvantaged adults in the U.S. leads to very high poverty rates even for participants in successful programs. This indicates that additional assistance may be necessary to substantially reduce poverty rates among this population.

Programs that encourage additional job search assistance for dislocated workers appear to work well. The impacts of training programs for this population have not

been well researched; results have been mixed. Workers who have lost their jobs appear to benefit by being required to search actively for new work. This is especially true for those who are predicted to have a long duration of unemployment, as in the profiling and job search assistance experiments. Training programs for this population have had mixed results. Government run training programs have generally not been found to be effective, but there are only limited studies available and long-term followup is lacking. Classroom training in community colleges has been found to have significant positive effects in comparison group studies, but these effects may vary considerably based on the courses that are taken. There are no large-scale random assignment studies in this area; this would be a useful area for further research.

Impacts By Type of Program

Job search assistance reliably speeds the return to work and saves government money; however, earnings impacts tend to be moderate at best. Many government programs have mandated intensive job search efforts on the part of their clients, generally assisted by program personnel with good labor market contacts. The record for such efforts is consistent and clear: on average, they lead to a faster return to work. This tends to lead to somewhat higher earnings for participants due to slightly increased employment rates, and saves government such transfer costs as Unemployment Insurance or welfare payments. Because these programs are quite inexpensive, they bring net benefits to government. However, the earnings gains by participants are generally small and often temporary, with little impact on income or poverty from such programs.

Earnings supplements, hiring subsidies, and subsidized employment produce employment and income gains for the disadvantaged. This finding has been repeated in examinations of broad wage subsidy programs like the Earned Income Tax Credit (EITC), targeted programs of subsidies to employers for hiring disadvantaged individuals, experiments where earnings supplements were provided for long-term recipients exiting welfare, and offers of government-created jobs for poor youth. All have been found to increase employment rates during the period when the actual subsidy is offered. When combined with training or job search assistance, these programs also tend to produce markedly greater increases in total income than training alone.

Subsidized employment and on-the-job training appear to be quite effective training methods for disadvantaged adults. But the record for disadvantaged youth has not been as positive. Disadvantaged adults, especially women leaving welfare for work, have been shown to experience long-lasting and substantial earnings gains from programs that provide temporary subsidized employment combined with some training and support. That is, adult trainees in such programs show higher employment and earnings well after the subsidized employment period is over. But the limited evidence that is available indicates that programs that provide government jobs or employment subsidies for disadvantaged youth have not seemed to produce long-term (post-program) gains in earnings or employment. However, additional research would be helpful here.

INTRODUCTION

The purpose of this paper is to summarize the best of the large body of quantitative literature on the effectiveness of American training and employment services in improving labor market outcomes. What kinds of positive impacts (if any) can we expect from such interventions? Which approaches have worked and which have not?

The Organization of the Paper

This paper defines training and employment services in a broad manner. In general, all special efforts to improve the labor market outcomes of populations that are not well served by the traditional educational and labor market system are included. These efforts range from training programs for unemployed workers, to dropout prevention efforts targeted at teenagers who are on the edge of failure in traditional secondary schools. They also include programs that attempt to improve employment outcomes by shifting the incentives in transfer programs such as unemployment insurance and welfare; strictly speaking, these programs do not directly improve skills at all, but may have a positive effect on employment rates.

The broad sweep of the paper and the need for brevity makes it necessary to present findings in summary form. However, we have attempted to provide some detail on most of the programs covered.

In addition to this introduction, the paper includes four sections:

Executive Summary: This section provides a brief summary and overview of key findings. It also serves as a conclusion.

Education and Jobs For Disadvantaged Youth Aged 14 to 21: This section examines programs that aim to facilitate young people's movement into their first jobs. It focuses on disadvantaged youth, who face special problems in entering the labor market (e.g. due to lack of a high school diploma, a criminal record, or single parenthood). The section examines two types of programs: those that attempt to assist young people who are still enrolled in school but are at risk of dropping out before obtaining their high school diploma, and also those efforts targeted at young people who have already dropped out of high school.

Programs For Disadvantaged Adults: This section examines training programs for adults over the age of 21 who have little labor market experience and who are experiencing long term poverty. These adults are often involved with the welfare system, so this section includes all those programs that have attempted to encourage welfare recipients to work, either through financial incentives or training.

Programs For Dislocated Workers: This section examines programs aimed at adults who have lost their jobs after extensive employment experience. Since dislocated workers generally receive unemployment insurance, this section includes a discussion of

programs that attempt to shift incentives in the unemployment insurance system to encourage faster reemployment.

Background: General Evidence on the Returns to Education

Most (though certainly not all) of the programs presented here attempt to provide some sort of education or training to their clients. The evaluations discussed here are generally randomized experiments seeking to provide education specifically to the disadvantaged or unemployed. However, there are also a very large number of papers in labor economics which attempt to estimate the returns to education for the general population. Knowing something about the results of such studies is a useful background.

The general consensus among labor economists is that the average year of education produces gains in earnings of roughly 6% to 10%.¹ In one sense, this is a large return; over the course of a career, it is generally sufficient to justify the costs of education. But the amount is perhaps smaller than the expectations of training program results that are sometimes held by observers. For example, if we took these findings as a guide than a three to six month training program conducted at the intensity of the typical year of college would lead to earnings gains of 3% to 5%. In general, the results of previous economic research on education in general leads us to expect moderate earnings impacts from training, even when it is as successful as the average form of schooling.² This should be kept in mind when analyzing the results in this paper.

The Nature of the Evidence

There are many ways of looking at the effectiveness of employment and training programs. One can examine how they were implemented, qualitative descriptions of their effect on participants, their effect on some measure of participant skills (such as test scores), client satisfaction with the program, etc.

This report focuses on one particular measure of effectiveness -- the measurable impact of the program on the future success of its participants. That is, do those who participate in the program find employment more easily than they would have if they hadn't participated? Are their earnings higher? What are the magnitude of these changes? Do other positive outcomes with clear social benefits result from the services they have received -- higher educational attainment, less welfare dependency, less participation in

¹ For a recent summaries of the evidence behind this finding, see Ashenfelter, Orley, and Cecilia Rouse, Schooling, Intelligence, and Income in America, Princeton University Working Paper, March, 1996, or Card, David, The Causal Effect of Education on Earnings, Center For Labor Economics, University of California, Berkeley, Working Paper #2, May, 1998. This is an average estimate, so the results of specific educational interventions may be much larger or smaller depending on the characteristics of the students and/or the intervention itself.

² This is true if one believes that the training program works by imparting skills in a manner analogous to conventional schooling, and that trainees respond to it in a manner typical of ordinary students. If one feels that training programs operate in another way – for example, by breaking down particular institutional or informational barriers to entering the labor market that are faced by disadvantaged people – findings on conventional schooling may not be a good guide.

crime? Even if positive outcomes do not result, this is valuable evidence as well, since it teaches us what doesn't work for a particular population.

Note that these questions are different than asking whether graduates of the program do well or badly. Graduates who do well may be no better off than they would have been without the program. Similarly, even if many graduates do badly, more might have failed without the intervention. Assessing impacts requires comparing program participants to a group of similar individuals who did not participate in order to determine the difference made by the program.

One of the best methods of making this comparison is an experimental design which randomly assigns individuals to a treatment group which can receive services from the program under study and a control group which cannot. The impact of the program is then assessed by comparing the earnings and employment of the treatment group to those of the control group. If these differences are statistically significant, they are ascribed to the effects of program participation.

When these experiments are well designed and implemented, on average the only difference between the experimental and the control group will be that the former are eligible to receive program services and the latter are not. Thus, the difference between the labor market success of the two groups can reliably be ascribed to the effect of the program being evaluated. Wherever possible, the evidence presented in this paper comes from experimental designs using random assignment.

But conducting a good random-assignment experiment involves a great deal of difficulty and expense, and it is often not possible to evaluate programs using such experiments. Where this type of evidence was not available, we have used well designed "quasi-experimental" studies as a second best option. These studies use a carefully matched "comparison group" rather than a randomly assigned control group to determine treatment effects. That is, a group of people who appear to resemble the program participants in as many observable ways as possible (age, income, race, geographic location, etc.) are selected and tracked. If the labor market success of program participants differs from that of comparison group members, the difference is presumed to result from the program. Due to the inherent uncertainties of using a non-randomized comparison group, even the best of these studies have some uncertainty in their findings.

No methodology is foolproof, though, and even well-designed randomized studies are no exception. Such studies often produce somewhat conservative estimates of the total impacts of education and training. One major reason why is that members of the control or comparison group often receive some education and training services themselves from other programs besides the one that is being evaluated. Thus, the evaluation results show only the additional impact of the particular training program being evaluated beyond any other services that are available in the community. This means the impacts from these studies are often a low estimate of the total effects resulting from participation in employment and training programs. This conservatism should be kept in mind throughout the paper.

There are several other issues that stem from the inability of experimental and quasi-experimental studies to measure the indirect effects of programs on those who do not participate in them. One is potential displacement effects -- the possibility that successful program graduates take jobs away from other persons who would have received them, so that the positive effects of the program are offset by job losses among non-participants. Not including these displacement effects leads studies to overstate the benefits of the program. However, there is another error that causes studies to understate the positive outcomes of interventions, and this is the presence of neighborhood effects. Improving the employment outcomes of some persons within a community can lead to "spillover effects" as other people in the neighborhood imitate the positive actions of their peers. For example, researchers have found that youth are more likely to work if a large proportion of their peers also work³.

Perhaps the most serious shortcoming of depending solely on the best quantitative impact studies, though, is that so few are available. Of the thousands of local training programs active in America over the last decade, only a few dozen have been the subject of rigorous impact evaluations. Because of this, it is almost certain that many successful and unsuccessful programs will escape our attention in this review.

Finally, it should be understood that no single study can provide us with all the evidence we need to understand how a program works. It takes an accumulation of evidence from many sources to allow us to fully judge success, and to determine the reasons why a program succeeds or fails. These sources should include not only quantitative evidence on impacts, but qualitative descriptions of the way the program works.

Special Note

All dollar figures cited in this paper are in inflation-adjusted 1993 dollars, unless otherwise noted. This corresponds to a CPI-U deflator of 144.5. The current year CPI-U deflator can be used to adjust these figures if desired (e.g. the 1997 deflator is 160.5, so multiplying by 1.11 adjusts figures to 1997 dollars). In some cases, it was impossible to fully adjust reported costs or impacts, since the report did not make clear exactly which year dollars were reported for. For this reason I have tried to report impacts as approximate figures, rounded to the nearest hundred or fifty dollar unit. This is sensible given the fact that there is in any case random variation in all estimated impacts.

³ Case, Anne and Lawrence Katz, The Company You Keep: The Effects of Family and Neighborhood on Disadvantaged Youth, National Bureau of Economic Research Working Paper #3705, 1991; Mayer, Susan "How Much Does a High School's Racial and Socioeconomic Mix Affect Graduation and Teenage Fertility Rates?" In C. Jencks and P. Peterson (eds), The Urban Underclass, Washington, D.C.: The Brookings Institution, 1991.

SECTION 1: PROGRAMS FOR DISADVANTAGED YOUTH

In America, the standard educational credential for young people entering the job market is a high school diploma. Specialized programs for disadvantaged youth have historically focused on young people who are either high school dropouts or are still enrolled in high school but at serious risk of dropping out.

Programs for In-School Youth

In-school programs for young people at risk of dropping out are critical because the evidence shows that it is very difficult to help young people once they have dropped out of high school. As discussed below, few training programs for high school dropouts have been effective. These discouraging results make it very important to help young people before they drop out.

Only a few of the many dropout prevention programs existing in high schools have been rigorously evaluated.⁴ It is likely that many successful programs have escaped the attention of reviewers because of the lack of good evaluations.

Fortunately, better information on such programs is gradually becoming available. The available random assignment studies are summarized below. When interpreting the findings from these studies, it is useful to remember that the control group is receiving services as well. Because the youth targeted by these programs are school age, most of the control group will also be going to school as well. Thus, it is especially important to remain aware of the fact that the program impacts represent the difference between services received by the control group and those received by the treatment group, not the difference between the services received by the treatment group and no assistance at all.

Two general observations emerge from the existing studies:

- o Dropout prevention efforts can and do work, but they are not easy to operate effectively. A number of programs have been reliably evaluated and found to substantially reduce high school dropout rates. But many attempts at preventing high school dropout have not been successful. Results in this area tend to show a high variance. This may be due to the highly decentralized nature of the locally controlled U.S. educational system, and the resulting high variance in the quality of the education received by the control group in these studies.
- o It is difficult to make short-term gains last. Several programs have shown a pattern of large improvements in attendance and academic achievement during the first year of the program. But these initial gains often disappear over the next few years.

⁴ Adelman, Nancy, Description and Research Findings About Education Programs for Adults and At-Risk Youth, Policy Studies Associates, 1991; Grossman, Jean, What We Know About Youth Programming, Public/Private Ventures, Draft, August 1993. Both of these papers review existing evidence and conclude that there is little quantitative evidence available on the long-term impacts of remedial education.

Academic/Educational Programs

The School Dropout Demonstration Assistance Program (SDDAP) is a large and recent random assignment evaluation of high school dropout prevention efforts.⁵ Funded by the U.S. Department of Education, it includes 16 sites testing a variety of different program models. Eight of the programs focused on youth in middle school (7th or 8th grade), while the other eight focused on students in high school or those who had recently dropped out of high school. In most programs (12 out of 16) the great majority of enrollees were at-risk youth, defined as those who were below grade level academically and/or had a history of discipline problems, extensive absences, or dropout. The other four programs assisted a more mixed clientele, although all served students experiencing difficulties in traditional education. The 16 programs included sites with majorities of African-American, Hispanic, and white students. Two-year impacts are now available for all sites, and three-year impacts for many.

In the case of middle school programs, three out of the four intensive programs succeeded in significantly improving grade promotion and two succeeded in reducing dropout rates. These intensive programs enrolled students in small classes with an accelerated curriculum for the full school day. After two years, students in the three intensive programs that improved grade promotion had completed from .3 to .7 additional years of schooling, while dropout rates were cut significantly in two programs (from 14% to 6% in one case and from 9% to 2% in another). However, even in these intensive programs reading and math test scores did not improve relative to controls, and neither did classroom grades or absenteeism. The less intensive middle school programs – which were mostly limited to counseling and tutoring for only a small part of the school day or after school – had no statistically significant effect on grade promotion, dropout, test scores, or absenteeism. The results of the intensive middle school programs are mildly encouraging, but unless improvements in grade promotion are eventually reflected in academic achievement it is difficult to know how important they are. There is apparently no impact of low intensity middle school programs.

Three of the high school programs were comparatively short programs (about 9 to 24 months) which attempted to help students obtain either their General Equivalency Diplomas (GEDs) or conventional high school diplomas. The other five were alternative schools; smaller, more intensive high schools designed to help at-risk students obtain traditional high school degrees. Both sorts of programs offered smaller class sizes, counseling, and various social services.

One clear finding was that GED programs were successful in increasing GED completion. After three years, 31% of all students enrolled in the three GED focused programs had received their equivalency degrees, as compared to only 19% of control group students, a significant increase. Other measures of success, such as test scores, employment outcomes, or college entrance, were not available. This makes the finding

⁵ Dynarski, Mark, et. al. Impact of Dropout Prevention Programs: Final Report, Mathematica Policy Research, Princeton, N.J., June 1998.

somewhat difficult to evaluate, since some observers have questioned the effectiveness of GED completion alone in improving labor market outcomes (see subsection below).

Looking at completion of conventional high school diplomas, about 18% of all enrollees in the 7 dropout prevention programs with completion data available had received diplomas by the end of the study period, while 11% of control group students had. This difference is statistically significant. High school degree completion was higher among the treatment group in all 7 sites. However, GED completion rates were somewhat lower among treatments than controls in the alternative high schools that focused on obtaining conventional high school degrees. Overall, about 38% of all treatment group members across the 7 sites had received a high school credential (diploma or GED), and 31% of control group members did, with credential completion higher in 5 of 7 sites. This difference is not statistically significant.⁶

The high school programs produced no effect on arrest rates among males or pregnancy rates among females. At this time, information on long-term success of program enrollees (e.g. college entrance, employment success) is not available. Academic test scores are also not available for high school students.

In all 8 sites, about 44% of treatment group students had dropped out, vs. about 48% of control group students, a statistically insignificant difference, with dropout rates higher among the control group in just 4 of 8 study sites.⁷ Thus, in total the programs appear to have had at best a quite modest effect on overall high school dropout rates. However, there does appear to have been some increases created in the fraction of students receiving high school diplomas, and GED focused programs were successful in increasing GED attainment.

The limited sample sizes and short followup period currently available in this study makes the results somewhat difficult to interpret. Many students are still in school, and a full estimation of the impact of the programs must wait until the study population have either completed school or dropped out. There is little followup data on employment. As always in the case of programs for in-school youth, an important additional issue is that the control group also received substantial educational services, so that the SDDAP programs often did not create a large increment in time spent in school.

The Quantum Opportunities Program (QUOP) is one of the more encouraging educational efforts to be evaluated in recent years.⁸ The program is managed by

⁶ These findings are a mix of second and third year results from the various programs, drawn from Table III.3 in the report cited above. I have dropped one program – the Chicago site – since its target population were all too young to have completed school successfully by the time of the study's completion. The statistics reported are based on weighting each site result by sample size to simulate a single large experiment (the study report does not do this). The estimation of statistical significance adjusts for different variances in the 7 study sites.

⁷ The discrepancy between the findings on completion rates and dropout rates is caused by the fact that more members of the control than treatment group are still in school.

⁸ Hahn, Andrew, et. al. Evaluation of the Quantum Opportunities Program: Did the Program Work?

community non-profit organizations, and offers extensive academic assistance (tutoring, help with homework, etc.), consistent adult mentoring over a multi-year period, career planning, and small stipends for participation. Students also received payments into a trust fund set aside for college. QUOP was provided to children in welfare families starting in the ninth grade and continuing throughout high school. Over four years, the average QUOP student participated in 1,290 hours of additional educational activities due to the program and accumulated \$2,300 in their post-secondary account. Average four-year costs per QUOP enrollee were \$10,600. The program was offered to young people who were randomly selected from a list of children in AFDC families living in five poor communities. Control groups were randomly selected from the same lists as well.

The evaluation compared 100 participants at four sites to a 100 student control group. At the end of the demonstration period, 63% of QUOP students were high school graduates as opposed to 42% of control group members. And many QUOP students who hadn't yet graduated high school were still enrolled and working toward their diplomas – just 23% of QUOP students were classified as high school dropouts, while 50% of control group students were. QUOP students were less likely to have had children while in high school (24%, vs. 38% for the control group) and more likely to continue for additional education (42% of QUOP students were enrolled in college, vs. 16% of the controls). All of these differences were statistically significant. The success of the program varied widely by site.

The QUOP experience is promising, but the small size of the trial points to a need for further research. The U.S. Department of Labor has funded a considerably larger randomized trial of the QUOP concept in a number of sites.

A series of U.S. Department of Education demonstrations has produced reliable evaluation evidence on a number of high school dropout prevention programs.⁹ All of the sites discussed here were evaluated using random assignment techniques, and all used dropout prevention models with a vocational education dimension. All sites enrolled students beginning in the tenth grade or after. Most combined vocational counseling and skills training with individualized tutoring and academic help.

The sites can be separated into two groups. One set of four sites was located on Indian reservations in North Dakota and enrolled exclusively Native Americans. Programs at these sites faced very depressed economic conditions, often with unemployment rates of 75% or more, and experienced severe resource shortages which prevented them from fully implementing their intended models. The programs generally did include individual tutoring, some skills training and vocational guidance, and payments for school

Brandeis University, Waltham, MA: June, 1994.

⁹ Hayward, Becky and G. Tallmadge, Evaluation of Dropout Prevention and Reentry Projects in Vocational Education, Draft Final Report, Research Triangle Institute, November, 1993. Rossi, Robert et. al. Evaluation of Projects Funded By the School Dropout Demonstration Assistance Program, Draft Final Evaluation Report, American Institutes for Research, March, 1994.

attendance. When findings from the four sites are grouped together, the results indicate no significant impact on dropout rates.

The other five sites were located in settings that ranged from urban schools in Detroit, Michigan to rural areas in Oconee, South Carolina. The models used in these sites varied, but they all included a strong vocational dimension (including vocational courses), and academic assistance. When results from these five sites are grouped together, the evidence shows that a statistically significant reduction in dropout was achieved. Over a two year follow-up period the programs reduced the average dropout rate from 29% for the control groups to an average of 20% for the combined treatment groups. This is strong evidence of the success of these programs in improving school retention rates.

Turning to specific programs, three of the sites appeared to be successful in sharply reducing the dropout rate over the evaluation period. These sites cut the dropout rate roughly in half, from 25-30% for the controls to 10-15% for the treated students. Two other sites were not able to produce reductions in dropout rates for their students by the end of the two to three year evaluation period.

It is difficult to generalize about the reasons why some of these programs succeeded and others did not. There was some tendency for programs which served more at-risk populations to have more difficulty in improving retention rates in high school. Also, a number of the more successful programs used models that had already been operating in their local school district for some time. Experience with running the program may have led to better results.

The Alternative Schools Demonstration Program, funded by the U.S. Department of Labor, set up separate experimental high schools to enroll youth who had not been successful in obtaining high school degrees in conventional school settings.¹⁰ These schools issued standard high school diplomas, but offered intensive remedial education, on-site day care, flexible educational methods, and smaller class sizes combined with more intensive counseling by teachers and staff. Each site received a total of \$1.3 million over two years from both the Department of Labor and the local school district to set up the alternative school; the local district took over full funding after the second year. Sites generally enrolled roughly 300 to 600 students; students volunteered to participate and were then randomized into a treatment or control group.

These schools enrolled students who were considerably more disadvantaged than typical youth enrolled in high school dropout prevention programs. At the time of enrollment, the typical student in these programs was roughly 17 years old and had completed about 9½ years of education and had academic achievement levels comparable to a seventh to eighth grade student. In fact, about 55% of enrollees had already dropped out of conventional high school by the time of entry into the program. In this sense, the target population for this program was more similar to the out-of-school youth served in the

¹⁰ Dynarski, Mark, and Robert Wood, Helping High-Risk Youths: Results From the Alternative Schools Demonstration Project, Mathematica Policy Research, April, 1997.

programs discussed in the next section. Dropout rates for both the treatment and control groups were quite high at all sites. This reinforces the message in the next section about the difficulty of assisting older youth who have already dropped out of school.

Three of the sites successfully implemented random assignment evaluation. One site, in Stockton, California, was somewhat successful in improving outcomes. After four follow-up years, 15% of the treatment group had graduated from high school vs. 7% of the control group, a significant effect.¹¹ Average high school credits earned increased by 25%. There was no significant impact on any other outcomes, including crime, employment rates, or college entry. A second site, in Wichita, Kansas, was not successful in improving outcomes. Graduation rates did not improve, and basic skills scores actually declined as compared to the control group (probably due to the heavily remedial curriculum in the school). A third site in Cincinnati had only a two year followup period, which was too brief to show impacts on high school graduation. However, after two followup years 17% of treatment students vs. 12% of control students were still pursuing a high school degree, which was a significant difference (this does not include students enrolled in a GED program).

The Summer Training and Employment Program (STEP) provides remedial academic education, sex education, and summer jobs to disadvantaged youth aged 14 to 15. It is a large-scale demonstration program run in tandem with the Summer Youth Employment Program, serving as an academic component which youth participate in when they are not working at their summer jobs. STEP lasts for 2 summers. Each summer session lasts for 2 months and includes 110 hours of classes and 90 hours of part-time work. Over half of STEP enrollees report having failed one or more grades in school, and on average their reading skills are about one to two years behind their actual grade in school.

The academic impacts of STEP have been rigorously evaluated using an experimental design¹². Short-term results for academic achievement were quite positive. After two summers in STEP, students had gained an average of seven-tenths of a grade in reading and four-tenths of a grade in math more than their non-STEP counterparts. These strong academic gains were achieved at a modest cost. For each student, STEP cost just \$600 more than the already existing summer jobs program. Total expenditure for the summer job and the STEP curriculum was about \$1,600 per student per summer.

But these positive STEP impacts did not seem to translate to improved school performance over the long run. STEP graduates were examined again at age 17 to 19, two to three years after leaving the program. By this time, they did not have higher graduation rates or grades than the control group. They were also no more likely to be working than control group members. Girls enrolled in STEP were just as likely to have

¹¹ This statistic refers to traditional high school degrees. An additional fraction of respondents to a questionnaire (about 20% of both the treatment and control groups) reported receiving a GED degree.

¹² Grossman, Jean Baldwin and Cynthia Sipe, The Long-Term Impacts of the Summer Training and Education Program, Public/Private Ventures, 1992.

had a child by age 17-19 as control group girls were, despite the sex education component of STEP.

STEP is successful in that it produces short-term academic gains at a low cost and prevents summer learning loss, but short-term programs such as STEP do not seem to be sufficient to improve the long-range educational prospects of disadvantaged students. Looking back at the experience, researchers felt that the lack of effective school-year followup to the summer STEP experience was a major weakness in the program.¹³

Employment Programs

The Department of Labor's Summer Youth Employment and Training Program (SYETP) provides minimum wage summer jobs and some remedial education to hundreds of thousands of disadvantaged young people aged 14 to 21.

Research indicates that SYETP is successful in greatly increasing the total summer job opportunities available to disadvantaged minority youth¹⁴. That is, public summer jobs do not simply attract youth who would have found other employment in the private sector. Using data on minority employment and SYETP placements in various states, researchers estimate that for every 3 SYETP jobs provided, 2 youth are employed who would otherwise not have worked that summer.

Little is known about the effect of temporary employment on academic achievement or future employment success. We do know, though, that subsidized work experience alone has generally not been particularly successful in improving the employability of out-of-school disadvantaged youth once the subsidized work had ended.

The Youth Incentive Entitlement Pilot Project (YIEPP) was a demonstration active from 1978 to 1981 which guaranteed full-time summer jobs and part-time school year jobs to disadvantaged youth provided that they stayed in school. Disadvantaged youth aged 16 through 19 who had not graduated from high school were eligible for the program. All the jobs offered were at the minimum wage.

Like Summer Youth Employment, YIEPP seems to have greatly increased the total job opportunities available to disadvantaged youth. The evaluation estimated that employment rates among 16-18 year old disadvantaged African-Americans at program sites increased dramatically compared to what they would have been without YIEPP.¹⁵

¹³ Walker, Gary and Frances Vilella-Velez, Anatomy of a Demonstration: The Summer Training and Education Program from Pilot through Replication and Post-Program Impacts, Public/Private Ventures, 1992. This post-program study stated that STEP "had weak or non-existent reinforcement mechanisms to connect the summer experience to the school year, or to other key aspects of [the students] lives."

¹⁴ Crane, Jon and David Ellwood, The Summer Youth Employment Program: Private Job Supplement or Substitute, Harvard University, March, 1984.

¹⁵ Farkas, George et. al., Post-Program Impacts of the Youth Incentive Entitlement Pilot Projects, Manpower Demonstration Research Corporation, 1984.

School year employment doubled from about 20% to about 40%, while summer employment increased from about 35% to about 45%. These minority employment rates under YIEPP were equal to those of whites in the same areas.

This dramatic increase in employment is encouraging. It indicates -- as does the evidence from the Summer Youth Employment Program -- that government programs can be successful in dramatically improving attachment to the workforce among poor youth, traditionally a group with extremely low levels of employment. Furthermore, there was some evidence that the program may have led to a lasting increase in employment even after the subsidy ended, although this evidence is uncertain.¹⁶

But the evaluation also found that YIEPP was unable to achieve one of its major goals -- increasing school enrollment. Researchers estimated that there was little improvement in school enrollment or high school graduation at program sites.

Programs for Out-of-School Youth

Skills Training Programs

Training programs for disadvantaged youth appear to be successful only when they are skillfully implemented or highly intensive. Most short-term training programs for youth have not appeared to produce positive labor market effects.

JTPA Title II and CETA

Important evidence in this area comes from evaluations of the Job Training Partnership Act (JTPA) and the Comprehensive Employment and Training Act (CETA). CETA was the major Federal job training initiative in the 1970s. In the peak year of 1979, CETA programs spent about \$6 billion annually on public service jobs and training for youth 16 to 21 years old. The major studies of the program's effects agree that CETA youth trainees had no post-program earnings advantage over comparable non-trainees¹⁷. A few studies even found that CETA training seems to have had a negative impact on youth earnings. These disappointing results were found for both male and female youth.

In 1982 JTPA Title II replaced CETA as the major government training program. In 1992, JTPA enrolled 125,000 out-of-school youth aged 16 to 21.¹⁸ Slightly more than

¹⁶ A total weekly earnings gain of 39% was found at program sites for the 6 months after the program ended, but the short length of the follow-up combined with questions about the quasi-experimental design left many doubts about the validity and likely duration of the effect.

¹⁷ These studies are reviewed in Barnow, Burt, "The Impact of CETA Programs on Earnings", The Journal of Human Resources, Spring, 1987. Note that these CETA studies did not use random assignment, and their reliability has been questioned by many researchers.

¹⁸ U.S. Department of Labor, 1993. 110,000 in-school youth are also enrolled in JTPA each year, but the evaluation findings discussed here relate only to out-of-school youth.

half of these were high school dropouts, and the vast majority were economically disadvantaged (under 125% of the poverty line).¹⁹ The average length of time in the program for youth was 5 months, and an average of \$2,800 was spent per youth enrollee. Training methods included classroom instruction and on-the-job training, which is a combination of a brief period of subsidized employment and job search assistance.

Results were recently released from a major experimental evaluation of JTPA. Between 1987 and 1989, over 20,000 applicants to the program at 16 sites were randomly assigned to either a treatment group which could make use of JTPA services or a control group which could not (but which could make use of non-JTPA training services).²⁰ The post-program earnings of the treatment group were compared to those of the control group in order to determine the labor market impacts of JTPA.

JTPA produced no statistically significant positive effects for out-of-school youths, either male or female. This finding held true over a two and a half year follow-up period, and for all the different service strategies that were used -- classroom training, on-the-job training/job search assistance, or a mix of less intensive services. In addition, no reduction in youth crime rates or welfare receipt was found.

The one exception to this picture was a pattern of slowly increasing earnings gains for female youth recommended for classroom training. This gradual increase in earnings over time is a pattern that is expected for classroom training. Over the year beginning 18 months after enrollment in JTPA, female youth referred to classroom training earned over \$700 more than control group members, a difference that was nearly statistically significant. This may indicate that classroom training was successful for female youth. However, issues in evaluation design make the impacts of particular training strategies less trustworthy than the overall impacts (which were not positive for female youth).

It is important to qualify the JTPA youth findings by noting that the control group sought out and received substantial educational services. Thus, the evaluation measures the incremental effect of the JTPA program alone, not the general effectiveness of classroom training for youth. Typically, the additional impact on services actually received of enrolling in JTPA was roughly six to eight weeks of full time educational services; this is not necessarily long enough to create substantial results.²¹ Nevertheless, training programs for adults have created clear and measurable impacts with service increments as

¹⁹ U.S. Department of Labor data.

²⁰ Bloom, Howard S. et. al. The National JTPA Study: Overview of Impacts, Benefits, and Costs of Title II-A, Abt Associates, February, 1994; Bloom, Howard S. et. al. "The Benefits and Costs of JTPA Title II-A Programs", Journal of Human Resources, Summer, 1997.

²¹ Some researchers have used statistical techniques to adjust for the fact that large amounts of training were received by the control group. They estimated that classroom training as a general strategy for youth may well have been successful. See Heckman, James, et. al. Substitution and Dropout Bias in Social Experiments: A Study of An Influential Social Experiment, Mimeo, University of Chicago, June, 1997. Professor Heckman uses the JTPA results to estimate the general effect of classroom training on youth who received it in both the control and treatment groups, from both JTPA and non-JTPA sources.

small as this (see the JTPA adult results discussed in the next section). Thus, the JTPA youth results do provide evidence that disadvantaged youth are a particularly difficult group to assist with training programs.

Finally, it is also worth noting that a limited follow-up study found some evidence for a growing effect of the JTPA program on the wages of youth during the third to the fifth year after program participation. This may indicate some delayed effect of the program. However, doubts about the size and construction of the sample limit the reliability of this study.²²

The Job Corps

A youth training program that uses a very different model than the rather inexpensive, fairly short-term one used in JTPA Title II is the Job Corps. The Job Corps is by far the most intensive Federal training provided to any civilian population. The severely disadvantaged nature of Job Corps students and the residential nature of the program make expenses of \$21,000 per service year (or an average per-student cost of \$15,000) necessary to implement the model.²³

As of 1993, Job Corps enrolls about 62,000 new youth a year, with total outlays of approximately \$970 million. The full Job Corps program usually takes about a year to complete. However, the difficulty of the training and the strict code of conduct enforced in Job Corps centers cause a third of enrollees to drop out or be dismissed within the first 3 months.

Job Corps youth are more disadvantaged than the out-of-school youth in JTPA Title II. Over 80% of Job Corps enrollees are high school dropouts, and about three-quarters have never worked before coming to the Corps.²⁴ Job Corps is a highly intensive, residential ("boarding-school" type) program that provides basic education, vocational skills, and a wide range of supportive services. Job placement services are also provided after completion of the program.

To examine the effectiveness of the Corps, a study of over 5,000 youth was completed in the early 1980s.²⁵ The earnings, educational achievement, criminal records, and welfare dependency of Job Corps enrollees were compared to the records of a demographically

²² Job Training Partnership Act: Long Term Earnings and Employment Outcomes, United States General Accounting Office, March, 1996.

²³ The divergence between the costs comes from the program's high dropout rates. Students who complete the program take about a year at a cost of \$21,000, but the \$15,000 average includes those students who drop out.

²⁴ House Ways and Means Committee, 1993 Green Book, U.S. Congress, Washington, D.C. 1993.

²⁵ Mallar, Charles et. al., Third Follow-Up Report of the Evaluation of the Economic Impact of the Job Corps Program, Mathematica Policy Research, 1982.

similar comparison group who had not enrolled in the Job Corps²⁶. These experiences were tracked for a period of four full years after graduation.

The evaluation found that Job Corps participation significantly increased earnings and educational attainment, while reducing welfare dependency and the incidence of serious crime among graduates. Over the four years after graduating from the program, Corps enrollees earned on average over \$1,300 more per year than comparison group members, a difference of 15%. Corps participants were employed on average over 3 weeks more per year than comparison group members. Job Corps enrollment was also found to reduce the incidence of serious (felony) crime among participants.

The intensive nature of the Job Corps program leads to high up-front costs, but the resulting benefits are estimated to substantially exceed the costs. When such benefits as the value of output produced at Job Corps centers, reduced government assistance, increased earnings, and reductions in serious crime are summed up, the study estimated that lifetime benefits to society from Job Corps training are about 45% greater than program costs.

JOBSTART

JOBSTART was an attempt to replicate the successes of the Job Corps in serving severely disadvantaged high school dropouts, but in a much less intensive, non-residential setting.²⁷

Although some of the techniques and curricula used in the program were similar to those used in Job Corps, the program was considerably less expensive. The average expenditure per program participant was about \$5,900, which is more than the \$2,800 per participant cost of JTPA youth programs but less than half the per-participant cost of Job Corps. On average, students spent just 60 hours per month in JOBSTART training, considerably less than the residential Job Corps sites are able to provide.

The 13 JOBSTART sites enrolled about 1,000 economically disadvantaged high school dropouts with low reading skills. This population is among the hardest to serve, and is considerably more disadvantaged than JTPA youth enrollees. The program provided a

²⁶ This study did not randomly assign participants to a treatment (Job Corps) and control (non-Job Corps participant) group. However, every effort was made to match Job Corps and comparison groups carefully on demographic and geographic variables, and to control for both observed differences and unobservable motivational differences between the groups. Because of this, the evaluation is generally accepted as reliable scientific evidence that Job Corps works.

²⁷ Cave, George, et. al., JOBSTART: Final Report on a Program For High School Dropouts, Manpower Demonstration Research Corporation, October, 1993. This document includes both a program description and evaluation results for all sites.

mixture of basic skills education, vocational training, some support services, and job search assistance after the end of the program. Average duration in the program was about 7 months.

The employment results from JOBSTART were generally disappointing. Participants were tracked for a four-year period after enrollment in the program. There was no significant increase in overall employment rates or earnings for the total period or any individual year.²⁸ Furthermore, the program does not appear to have reduced welfare receipt for participants.

The program did have some successes, though. It raised the educational attainment of its enrollees somewhat, as measured by the receipt of GEDs and vocational licenses. JOBSTART participation roughly doubled the chance of receiving such certifications, from about 15-20% for controls to roughly 35-40% for experimentals.²⁹

In addition, JOBSTART showed some ambiguous evidence of success in reducing crime rates. The full sample showed a small but significant reduction in the probability of arrest during the first year of the program, when participants were actually enrolled in training while controls were not. During this initial year 10.1% of JOBSTART participants were arrested, as opposed to 12.6% of the control group. But this effect rapidly faded out after they left the program. Over the full four year observation period the likelihood of arrest was essentially identical for both program participants and controls.

One key subgroup, men with an arrest prior to entry into the program, also showed some evidence of a positive employment effect. Earnings for these men were an average of almost \$2,000 higher in the fourth year after program entry, and their probability of arrest appears to have dropped slightly due to JOBSTART.³⁰

But the most striking bright spot in the program's results was the performance of one of the program's 13 sites -- the Center for Employment and Training (CET) in San Jose.

The CET Project

Founded in 1968, the CET provides 3-6 months of vocational training to disadvantaged youth and adults. CET's headquarters and largest site is in San Jose, but it currently operates training centers in 25 sites in three western states, with the majority in

²⁸ Earnings gains of over \$400 were found during the fourth year of the follow-up. However, these gains were not enough to counterbalance the earnings losses that occurred during the first year of the program, when participants had to forego work in order to engage in training.

²⁹ The bulk of this increase came through greater receipt of GEDs. Some researchers feel that GED receipt alone is not very helpful in the labor market -- see below for a discussion of this issue.

³⁰ JOBSTART earnings impacts are presented in current year dollars, which could be any year from 1989 to 1992. The costs of the program are in 1993 dollars.

California. The program serves a fairly disadvantaged population; 65% of their 1991-1992 students were high schools dropouts, and over half were limited in their ability to speak English³¹.

The JOBSTART study found that youth at the San Jose CET site showed sustained average annual earnings gains of over \$3,000. Combining earnings gains from the third and fourth years after entry into the program, young CET participants earned over \$6,000 more than control group members, which was a 40% earnings increase. These are among the largest training effects ever recorded in a youth training program. When combined with CET's impressive performance in training minority single parents (see below), this program has an excellent record of achievement.

It is not known exactly how these results were achieved at CET. In terms of the length and cost of the program, CET was one of the shortest and cheapest of the JOBSTART sites. Youth were enrolled for an average of 4.1 months and spent 335 hours in training. Total costs per enrollee were \$4,200. However, the comparatively short stay in the program may have made CET a more intensive experience -- participants spent over 80 hours per month in training, well above average for all the JOBSTART sites.

The basic element that sets CET apart from other training programs is its strong focus on employment, a focus which is integrated into every element of their program. CET is distinguished by³²--

- o Close connections to the labor market. CET staff have extensive knowledge of local labor markets, which they use to determine which technical skills will be taught in their courses. In each new community CET enters, an industrial advisory board is set up to assist in skill selection and curricular review. CET courses are taught by experienced technicians from industry. Program staff use their many employer connections to help place their students after training is completed.

- o Integrated basic education and vocational skills training, with an emphasis on the latter. CET emphasizes job skills training over learning basic skills. The basic education provided is tightly connected to skills training. At entry trainees immediately begin vocational training designed to simulate a real job situation. If trainees have difficulty with basic reading or math during this training, they are given individual assistance on the spot by basic skills tutors present during the training. Instead of being taught academic skills through classroom instruction, students learn them in the context of job training.

³¹ 25th Anniversary Annual Report, Center for Employment Training, 1993.

³² Personal communications with CET and Rockefeller Foundation staff.

- o An individualized, open-entry open-exit program. The CET curriculum is tailored specifically to the needs of each individual student. Students are accepted on an open-entry basis, with no testing or other prerequisites for entry. This is similar to the Job Corps approach.
- o Highly experienced staff and extensive local knowledge. CET has been active in San Jose for over 25 years, and some of its staff have been working there for this entire period. Their long experience in the city has allowed the program to develop many contacts in the business community and earn an excellent reputation among employers.

CET training was successful not only in the JOBSTART demonstration, but in a separate evaluation of its ability to train minority female single parents, another group with serious barriers to labor market success. CET training produced annual earnings gains of over \$1,500 for these women.

Subsidized Employment Programs

Subsidized employment has positive immediate effects, but it is unclear whether subsidized employment alone is sufficient to improve long-term earnings and employment for youth after the subsidy period is over.

Many programs for disadvantaged youth provide temporary subsidized employment, either through subsidies to private employers or through direct government job creation. Besides the obvious objective of improving employment rates among this population, these programs are also inspired by the hope that work experience alone -- even without skills training -- will make disadvantaged young people more employable in the future. Based on the limited available evidence, employment subsidies do appear to improve employment and earnings of young people during the program period. To the extent that directly improving employment is the goal of the program, it appears to be achievable.³³

However, the limited evaluation evidence that is available raises questions about whether temporary employment programs without skills training brings post-program benefits to disadvantaged youth. In most of the programs that have been examined so far, the additional employment experience created by the subsidy has not been sufficient to create lasting positive effects once the subsidy period is over. In addition to the programs discussed below, the experience of the Job Training Partnership Act is also somewhat relevant here – the OJT (on the job training) segment of the program, which involved a brief period of subsidized employment, did not appear to create lasting earnings gains. But further research in this area would be helpful, especially on approaches that combine subsidized employment and job skills training.

³³ Note that besides the evidence below, this conclusion is also supported by the evaluations of subsidized employment programs for in-school youth that were discussed in the previous subsection (the YIEPP and the Summer Youth Employment Program).

The largest youth employment subsidy in the United States is the Targeted Jobs Tax Credit (TJTC), which provides a subsidy to employers who hire youth aged 18-22 who are welfare recipients or who have family incomes below the poverty line. Under program rules active in the early 1990s, the TJTC provided a tax credit equivalent to 40% of the first \$6,000 of wages paid to an employee. As of 1992, the typical TJTC recipient earned roughly \$5.00 per hour and retained their job for 6 months.³⁴

Although there has been no random assignment study of the program, researchers have examined the “natural experiment” created when 23-24 year old youth were removed from the TJTC program in 1989.³⁵ By comparing the change in employment among 23-24 year old disadvantaged youth after they were disqualified from the TJTC employment subsidy to the changes in employment among other disadvantaged individuals who did not suffer this disqualification, it is possible to estimate employment effects of the subsidy.

Using this method, research has estimated that in the late 1980s TJTC eligibility increased employment rates among disadvantaged youth by approximately 3.4 percentage points, or roughly 8%. Thus, the offer of a roughly 40% reduction in wage costs through subsidies appears to have been sufficient to create an 8% increase in employment. A rough estimate of costs per job created or transferred to low income youth is \$1600. These estimates are based on non-experimental methods, and therefore should be viewed as approximations subject to some doubt. Nevertheless, there does appear to be reasonable evidence that the TJTC succeeded in creating jobs at a moderate cost. However, as noted above, the typical TJTC recipient has low job tenure and limited wages.

An issue that can arise in the case of targeted employer subsidies such as the TJTC is a potential negative stigma for eligible individuals due to being singled out as “disadvantaged”. An evaluation of an experimental employer-based wage subsidy in the early 1980s found this result.³⁶ But this may be a less serious problem once a program becomes well-established, such as the TJTC has, and employers grow familiar with it. If subsidized employees perform well, then employers will judge new applicants by the performance of previous subsidized employees. This argues for some role for intermediary institutions in screening entrants to a subsidy program, in order to ensure that those with the programs “seal of approval” meet some minimal skill level. A useful approach might be to link employment subsidies with a training program.

³⁴ U.S. Department of Labor, Office of the Inspector General, “Targeted Jobs Tax Credit: Employer Inducement or Windfall?”, August, 1994.

³⁵ Katz, Lawrence, “Wage Subsidies for the Disadvantaged”, in R. Freeman and P. Gottschalk, eds. Generating Jobs, Russell Sage Foundation, New York, N.Y. 1998.

³⁶ Burtless, Gary, “Are Targeted Wage Subsidies Harmful? Evidence From a Wage Voucher Experiment”, Industrial and Labor Relations Review, Vol. 39, pp. 105-114.

A number of U.S. states have created community service Youth Corps programs. These programs provide government subsidized public service jobs to young people, most of whom were disadvantaged. A recent random assignment evaluation of these programs found that eligibility to participate in the program increased hours worked by 25% over the 15 months following entry.³⁷ Furthermore, based on questionnaire evidence Corps eligibility appeared to lower self-reported arrest rates (from 17% to 12%) and pregnancy rates. Effects were particularly high among young black and Hispanic men, who were considerably more likely to be economically disadvantaged than white participants. Among black males eligibility for Youth Corps employment raised employment rates over the entire follow-up period from 62% to 91%. Despite operating costs of roughly \$10,000 annually, Youth Corps were a cost-effective investment, producing returns roughly 6% higher than costs (counting the value of work performed).

However, Youth Corps eligibility does not appear to have created a lasting significant impact on employment. Fifteen months after program entry, there were apparently no significant impacts on employment rates or wages for either blacks or whites (programs lasted a maximum of about a year). Also, Youth Corps participation appears to have substituted for education to a small extent; after 15 months educational attainment was slightly lower among participants than controls.

The Supported Work Demonstration is the most extensive and well-evaluated experiment testing the effect of work experience on future employment prospects for disadvantaged youth.³⁸ The demonstration provided a year of subsidized work experience in public and private sector firms followed by job placement assistance, and enrolled very disadvantaged high school dropouts. Participants showed higher earnings than controls during the subsidized employment period, but after the employment was over their success in finding work was no greater than the control group. This indicates that increased employment created by a subsidy may not have lasting positive effects for disadvantaged youth. Crime rates among Supported Work clients did not decline, even while they were employed in subsidized jobs.

The Alternative Youth Employment Strategies demonstration tested several alternative models of service delivery for disadvantaged youths referred by the juvenile justice system. The service options included 6 months of work experience, 6 months of classroom training, and a mixed model which combined work and training.

Overall, program participants showed significant gains in employment rates compared to controls 8 months after program exit. But those youth who received work experience alone did not have significantly higher employment rates than controls after the work experience was completed.³⁹ The model which mixed work and training did have a large

³⁷ Jastrzab, JoAnn, Youth Corps: Promising Strategies for Young People and Their Communities, Abt Associates, February, 1997.

³⁸ Summary and Findings of the National Supported Work Demonstration, Manpower Demonstration Research Corporation, 1980.

³⁹ Grossman, Jean-Baldwin, What We Know About Youth Programming, August, 1993, Public/Private

and significant impact on employment for program participants 8 months after the end of the program. However, issues in the design of the evaluation, as well as the substantial number of sample members who were not located for the follow-up survey, mean that the results from this study are not definitive. Further research testing these approaches – especially the combination of work and training -- would be a worthwhile investment.

Job Placement and Job Search Assistance

There is evidence that job placement and job search assistance programs have helped youth enrollees find jobs more quickly. In the late 1970s researchers tested the impact of job search assistance for out-of-school disadvantaged youth.⁴⁰ Two programs were evaluated, Boston's Jobs For Youth program and the 70001, Ltd. program. Both created significant earnings gains of roughly \$900 annually for graduates during about the first year after intake into the program. These programs were unusually intensive for job placement programs. They included extensive counseling and up to 40 hours of job readiness classes, and in some cases provided follow-up services after youth were placed in their first jobs.

These successful job placement services accelerated the process of finding a job, but they didn't produce lasting gains in employment or earnings. One to two years after entering the program the participants' earnings were not significantly different from those of similar youth who hadn't participated.

Alternative Certification Programs (the GED)

The United States makes the General Equivalency Diploma (GED) available as an alternative certification of high school equivalency for young people and adults who have not obtained a conventional high school diploma. GED certification is based on a written test, and accounts for about 15% of the flow of new high school graduates nationally.⁴¹ Education and training programs for both youth and adults frequently have GED receipt as a major goal for their participants, and such receipt is often used as an outcome measure in evaluating these programs.

Ventures. Her conclusions are based on a reanalysis of the data in the original report by Sadd, S., et. al., Alternative Youth Employment Strategies Project: Final Report., Vera Institute of Justice, New York, N.Y., 1983.

⁴⁰ Public/Private Ventures, Longer-Term Impacts of Pre-Employment Services on the Employment and Earnings of Disadvantaged Youth, May, 1983. Betsey, et. al. Youth Employment and Training Programs: The YEDPA Years, National Academy Press, 1985.

⁴¹ Cameron, Stephen and James Heckman, "The Nonequivalence of High School Equivalents," Journal of Labor Economics, January 1993.

There is still some debate on the labor market impacts of the GED, and further research is needed. But there is some question as to whether that GED preparation serves a credentialing function rather than a training function. GED test preparation itself does not seem to meaningfully improve participants skills. This is not surprising given the low level of preparation that often goes into taking the test. A 1989 survey found that 75% of candidates spend 100 hours or less preparing for the test.⁴² Researchers have also observed that the GED curriculum appears to "teach to the test", focusing mainly on test-taking skills and other items useful mainly in passing the GED itself.⁴³

In raw earnings, GED recipients make considerably less than high school graduates, showing that the degree is not a "high school equivalency" in this sense. However, they do earn about 10% to 15% more than high school dropouts. Several researchers have found that this positive earnings effect of GED receipt comes from two factors.⁴⁴ First, GED recipients are more talented (as measured by achievement test scores and other indicators) than other high school dropouts even before they enter GED training courses. Second, the GED degree gives students access to additional education and training programs which require a high school equivalency degree. Research shows that there is a significant positive effect of GED receipt on the amount of future training received from employers and other private sources. Furthermore, additional training received by GED recipients does appear to improve their earnings.⁴⁵

After proxies for innate ability are taken into account, most current research estimates that those GED recipients who do not go on to participate in higher education have earnings that are either similar to or perhaps moderately higher than comparable high school dropouts. Thus, the GED mostly seems to certify already existing differences between GED recipients and other dropouts, and to provide access to higher education for those who receive certification. But the GED does not appear to represent education that in itself can improve labor market prospects very much. Since only about 30 to 40% of GED recipients do in fact go on to further education, it seems that the utility of the degree may be limited for many.

These conclusions are strengthened by the results of several recent randomized experiments. In both the New Chance experiment and the California GAIN evaluation,

⁴² GED Profiles: Adults in Transition, GED Testing Service of the American Council on Education, Washington, D.C., September, 1990.

⁴³ Quinn, L. The Test That Became An Institution: A History of the GED, Unpublished Paper, Employment and Training Institute, University of Wisconsin-Milwaukee, 1993.

⁴⁴ Cameron, Stephen and James Heckman, "The Nonequivalence of High School Equivalents," Journal of Labor Economics, January 1993. Cameron, Stephen, Assessing High School Certification for Women Who Drop Out, unpublished paper, 1994. For a review of research see Boesel, David et. al. Educational and Labor Market Outcomes of GED Certification, Washington, D.C.: Department of Education, 1997 Working Paper.

⁴⁵ Murnane, Richard et. al. Does Acquisition of a GED Lead to More Training for High School Dropouts?, Harvard University, December, 1993; Tyler, John et. al. Estimating the Impact of the GED on the Earnings of Young Dropouts Using A Series of Natural Experiments, Harvard University, Unpublished Paper, July, 1997.

researchers found that most of the programs which succeeded in increasing GED attainment dramatically did not succeed in improving basic skills test scores among their clients.⁴⁶ Once again, this indicates that much GED training does not substantially improve literacy skills. Earnings and employment outcomes also did not improve. This latter result is supported by findings in other experiments. The Jobstart and JTPA evaluations also found strong increases in GED attainment and no resulting increase in employment or earnings.⁴⁷

To the extent that the GED provides a less time-consuming route to high school certification, it may tempt some students to drop out of conventional high school and obtain GEDs instead. This could be, as one article put it, "a mistake with drastic consequences for future earnings."⁴⁸ The overemphasis on the GED in many education programs for the disadvantaged may in fact be harmful; many high school dropouts, especially the most disadvantaged, seem to need an education system that emphasizes different sorts of training than GED preparation typically provides.

But with that said, the GED is also an important certification which serves as a route to further education for a substantial minority of GED recipients; this education does in fact improve their labor market outcomes. The GED may also be helpful as a quick certification which allows more talented and intelligent high school dropouts to distinguish themselves from their peers. Balancing these advantages and disadvantages of the GED is an important future issue for youth education programs in the U.S.

Programs for Young Single Parents

A number of programs have been specifically targeted at helping (or requiring) young single parents on welfare to complete their education. The impacts of such programs have been small at best, and overall levels of poverty and welfare receipt remain disappointingly high after program participation. The low impacts of the programs are probably more due to the lack of success in getting teen mothers to commit to additional education than to low impacts of educational services once provided.

The Teenage Parent Demonstration operated on a large scale and required all teen parents entering the AFDC program in the demonstration sites to enroll in school, job training, or find a job.⁴⁹ Additional case management and support services were provided to

⁴⁶ Martinson, Karin and Daniel Freedlander, GAIN: Basic Education in a Welfare-to-Work Program, Manpower Demonstration Research Corporation, January, 1994; Quint, Janet, et. al. New Chance: Interim Findings on a Comprehensive Program for Young Mothers and Their Children, Manpower Demonstration Research Corporation, June, 1994; Riccio, James et. al. GAIN: Benefits, Costs and Three-Year Impacts of A Welfare to Work Program, Manpower Demonstration Research Corporation, 1994.

⁴⁷ Bloom, Howard S. et. al. The National JTPA Study: Overview of Impacts, Benefits, and Costs of Title II-A, Abt Associates, February, 1994; Cave, George, et. al., JOBSTART: Final Report on a Program For High School Dropouts, Manpower Demonstration Research Corporation, October, 1993.

⁴⁸ Murnane et. al., op cit.

⁴⁹ Maynard, Rebecca, ed. Building Self-Sufficiency Among Welfare-Dependent Teen Parents: Lessons from

participating mothers. Those who did not participate could be sanctioned by reducing the AFDC grant by the amount normally allocated to the needs of the mother (about \$160 monthly in the demonstration sites) until they agreed to participate. However, the evidence indicates that such sanctions were actually applied in less than half the cases. Individuals were randomly assigned to participation or a control group by using random assignment from the entire pool of eligible welfare recipients, making it a good test of the effect of such a program on a cross section of welfare recipients.

The program did produce a small short term impact on moving teenage mothers into school or employment while the threat of sanctions was active. However, no long term positive impacts were found – which is not too surprising given the fairly modest short term impacts on educational services actually received. Two years after entering the program 79% of the program participants were in school, job training, or employment as compared to 66% of the control group; annual earnings were \$300 higher among the treatment group and welfare receipt was lower. Compared to controls, participants spent on average of one additional month in school during the first two years of the program. However, when participants were followed for six years, until after the welfare sanctions had expired, no lasting effects on educational attainment or employment rates were found.⁵⁰ The short term program results (apparently due to the threat of sanctions) did not appear to create lasting improvements in outcomes.

Ohio's Learning, Earning and Parenting (LEAP) also works by reducing the basic AFDC grant of teenage single mothers who do not attend either high school or an adult basic education program. (However, as in the Teen Parent Demonstration such sanctions were fully applied in only a minority of cases). The AFDC grant of mothers who do attend is increased. Case managers work closely with LEAP teens to monitor school attendance and help them with problems that arise. Like the Teen Parent Demonstration, LEAP was evaluated using random assignment from the entire welfare population.

The basic LEAP results were quite similar to those of the Teen Parent Demonstration.⁵¹ During the first year of the program, it increased the average time spent in schooling or a GED program by a modest amount – experimentalists spent an average of 1.1 additional months in education programs as compared to controls. Again, long-term results (after 3 years) showed little significant difference in employment rates, earnings, or high school graduation. However, there was a slight (5%), statistically significant decline in welfare receipt among the treated group, as well as a small increase in total educational attainment. Half of women enrolled in LEAP had completed grade 11, as opposed to 45% of the controls.

the Teenage Parent Demonstration, Mathematica Policy Research, 1993.

⁵⁰ Long-term results quoted in Kane, Thomas, Targeting Teen Mothers: Impacts on School Enrollment, Educational Attainment, and Earnings, Draft Paper, Harvard University, November, 1997. We are indebted to Dr. Kane for much of the discussion in this section.

⁵¹ See Bos, Johannes et. al., LEAP: Final Report on Ohio's Welfare Initiative, Manpower Demonstration Research Corporation, New York, N.Y., June, 1997.

Project Redirection provided integrated educational, health, and welfare services to disadvantaged young (17 and under) single mothers⁵². The single mothers were also paired with a mentor from the community. Some 40% of program participants were still attending high school at entry into the program.

This evaluation did not use a randomly assigned control group, so effects should be viewed as only approximate. Five years after entry into the program participants showed no educational advantages over a comparison group. However, they were moderately more likely to be employed (16 weeks for project participants as opposed to 11 weeks for comparison group members). They were also somewhat less likely to be on AFDC. Their children were substantially more likely to be enrolled in Head Start. These results are positive but modest, and the overall levels of employment are still disappointing.

The New Chance demonstration was a voluntary program which enrolled 2,300 women at 16 sites, and provided 20 to 30 hours per week of basic education, job skills training, child care, GED classes, personalized case management, and in some (though not all) cases work internships.⁵³ The program model emphasized intensive participation over a long time period, an individualized approach, and a full range of integrated services. Average program costs per person were about \$9,000. New Chance participants were highly disadvantaged teen mothers, and 95% were high school dropouts.

Participants in the New Chance program remained in the program for less time than initially anticipated; absenteeism and dropout were serious problems. In addition, control group members received more services than anticipated from other sources. Nevertheless, within the 3 ½ years after program assignment New Chance enrollees spent an average of about 4 months more time in education, skills training, or job search programs than control group members did.⁵⁴

Despite this increase in services received, outcomes from New Chance participation were disappointing. The program raised the rate of GED attainment considerably, from 33.4% for controls to 45.2% for experimentals, and also created a slight increase in college credits gained. However, New Chance participation did not raise scores on reading tests. It also had no effect on employment rates or earnings over the 3 ½ years following program entry. Finally, the program appeared to create a drop in conventional high school degrees received, probably due to diversion into GED programs.

⁵² Polit, Denise, et. al. The Challenge of Serving Teenage Mothers: Lessons From Project Redirection, Manpower Demonstration Research Corporation, October, 1988.

⁵³ Quint, Janet, et. al. New Chance: Final Report on a Comprehensive Program for Young Mothers and Their Children, Manpower Demonstration Research Corporation, July, 1997.

⁵⁴ Based on average of 53.1 weeks in such programs for treated individuals vs. 36.5 weeks for controls. See Quint, Janet, *op cit*.

SECTION 2: PROGRAMS FOR DISADVANTAGED ADULTS

In contrast to the results found in youth programs, training programs for disadvantaged adults have generally been successful in improving earnings. This is especially true for women, but significant gains have been found for men as well. Well-implemented adult training programs appear to be cost-effective investments for society. However, the earnings gains produced by training alone are generally not sufficient to lift participants out of poverty.

Recently in the United States and Canada, a number of incentives-based approaches to improving employment rates among disadvantaged adults on welfare have been tried. These rely on changing the financial incentives to work, and also on such approaches as mandated work in exchange for welfare and time limits on welfare. Early evidence is incomplete, but these approaches do appear to be successful in improving employment rates and reducing welfare dependency, at least among the more well prepared and job-ready welfare participants. However, whether they can be successful in actually reducing poverty – especially among the most disadvantaged welfare recipients – is still quite questionable.

Voluntary Training Programs

Comprehensive Employment and Training Act (CETA) Training for Adults

A wide variety of Federally funded employment and training programs were active over the two decades prior to the passage of the Job Training Partnership Act in 1982. The largest was the Comprehensive Employment and Training Act, enacted in 1973. The employment services provided under CETA included public service employment, subsidized on-the-job training for the disadvantaged, classroom training, and subsidized work experience for very disadvantaged clients.⁵⁵ At its peak in 1979, CETA served 3.8 million individuals (both adults and youth), at a total cost of \$18.4 billion. Roughly \$12.5 billion of this spending funded training and public service employment for adults over 21. There is some consensus among the major CETA studies on the post-program impacts of CETA public employment and training⁵⁶ :

- o Positive impacts were found for adult women trainees. During the first year after

⁵⁵ Public service employment was not a training program, but was instead intended as direct job creation for the cyclically unemployed, while on-the-job training was supposed to focus on skill development. Subsidized employment was targeted toward the most disadvantaged clients as kind of education in the basics of the work world.

⁵⁶ These studies are reviewed in Barnow, Burt, "The Impact of CETA Programs on Earnings", The Journal of Human Resources, Spring, 1987. See also Ashenfelter, Orley and David Card, "Using the Longitudinal Structure of Earnings to Estimate the Effect of Training Programs", Review of Economics and Statistics, 1985. This article analyzed CETA data using a variety of different assumptions and model specifications. The findings of gains for women are robust across models, while findings for men are not.

- exit from the program, adult women were estimated to earn roughly \$800 to \$1,500 more in annual income than they would have without CETA participation.
- o Evidence for adult men was ambiguous, but generally showed no significant earnings gains. Some (but not all) studies did estimate significant positive impacts for adult males participating in the on-the-job training component of the program, but estimated earnings gains were almost uniformly insignificant or even negative for men in other components.

It should be noted that CETA evaluation studies used methodologies that are not as reliable as experimental designs that have been used in more recent studies. For this reason, the results above should be treated as only approximate.

Job Training Partnership Act (JTPA) Title II Training for Adults

The passage of JTPA in 1983 marked a shift in the training strategy of the Federal government. Unlike CETA, JTPA has no provision for adult public service employment and de-emphasizes work experience in favor of on-the-job training. It is also funded at a much lower level and serves fewer clients. In 1993 JTPA Title II, the section of JTPA that serves the disadvantaged, enrolled about 550,000 new participants (310,000 of whom were adults) at a cost of \$1.7 billion.

Ninety percent of JTPA Title II participants must be economically disadvantaged, which is defined as having a family income (exclusive of AFDC or Food Stamp payments) that is below roughly 125% of the poverty line over the 6 months prior to program entry. Some 30% of adult JTPA trainees have not yet achieved their high school diploma, and 28% are AFDC recipients. As of 1993, the average JTPA adult trainee stays in the program for 4 months, and total training costs per adult are about \$3,300.⁵⁷

The most common primary services received by JTPA adult trainees are classroom training (46% of enrollees), job search assistance (19% of enrollees), and on-the-job training (18% of trainees).⁵⁸ On the job training (OJT) consists of subsidized training that takes place as part of a paying job, generally in the private sector. JTPA pays half of the wage for up to six months, but the job is supposed to be permanent. Classroom training includes both occupational skills training in fields like clerical, food service, electronics, or home health care, as well as training in basic academic skills.

The major evaluation of JTPA, also discussed in the Youth section above, examined the effects of the program on both youth and adults.⁵⁹ The rigorous experimental design and the large sample sizes used in the study make its findings quite reliable.

⁵⁷ U.S. Department of Labor, Employment and Training Administration, December, 1993.

⁵⁸ These are breakdowns of the primary services received. Being assigned to a primary service strategy does not preclude receiving other services as a supplement.

⁵⁹ Bloom, Howard S. et. al. "The Benefits and Costs of JTPA Title II-A Programs", Journal of Human Resources, Summer, 1997.

The results of this study for adults are encouraging:

- Higher earnings were found for adult men and women. Adult males and females who enrolled in JTPA had significantly higher earnings than those who did not. During the second year after leaving JTPA training, adult women who participated in JTPA had earnings an average of 15% higher than the non-JTPA control group, while adult males had earnings that were 10% higher. In dollar terms, this translated to annual earnings gains of over \$900 for both male and female adults, and were statistically significant. However, average post-program earnings for trainees were still well below the poverty line for a family of two or more.
- These earnings gains were still growing at the end of the thirty-month evaluation period. Earnings of JTPA participants were observed for a period of 30 months after program enrollment. But earnings gains grew steadily throughout this observation period, especially for the adult male portion of the population. This gives reason to believe that the earnings gains of JTPA participants may continue to increase in the future, and would be larger if more than a 30-month period were examined.
- Sizable average earnings gains were achieved despite only a small increment in actual educational services received by JTPA enrollees. Adult men and women in the control group also sought out and received substantial educational services. Enrollees received an estimated average of only 220 to 260 hours of additional educational services compared to control group members. This makes the earnings gains recorded by enrollees relative to the control group members especially impressive, since these gains only measure the effect of the incremental training services received through JTPA.

Estimation of the overall impact of all training services received (as opposed to simply incremental JTPA services) would certainly lead to considerably larger overall impact estimates for adult training than were cited above for the JTPA service increment alone.

- Most earnings gains resulted from increased hours of work, not increases in wage rates. Four-fifths of the earnings gains for women and three-fifths of the earnings gains for men resulted from increases in hours worked, not wages.
- The program was highly cost-effective. The total additional earnings for the participants were about 50% greater than the total additional training costs expended on that group compared to the control group. These gains were realized within 2 1/2 years after program enrollment, and would likely have been greater if a longer horizon were examined.⁶⁰

⁶⁰ A limited follow-up study to the JTPA report did in fact find that earnings gains appeared to be sustained through the fifth year after the program, although the sharp reduction in sample size in the limited follow-up caused fifth-year impacts for particular subgroups to become statistically insignificant.

- It is unclear exactly which training methods were most successful. However, there is some evidence that, for women, a combination of on-the-job training (OJT) and job search assistance was more successful than classroom training. This appeared to be especially true for welfare mothers. But the study design does not permit definitive conclusions on which service strategies were more effective.

The random assignment nature of the study and the large sample size makes its findings fairly trustworthy. The JTPA evaluation provides compelling evidence that short-term training for disadvantaged adults can be quite cost-effective, and can produce significant earnings gains. However, as is generally the case for training programs for the disadvantaged, training alone was not sufficient to lift the typical trainee out of poverty.

Voluntary Training Programs for Welfare Recipients

A number of American job training programs have been specifically targeted on female single parents receiving welfare.⁶¹ The voluntary programs which have produced the largest earnings gains for single parents have been intensive programs using subsidized employment. In subsidized employment and "supported work" models, clients are provided with up to one year of paid work experience in a productive job.

Two major social experiments -- the Supported Work Demonstration and the Home Health Aide Demonstrations -- provided about a year of subsidized employment to single parents who were long-term welfare recipients. The Supported Work demonstration included extensive support services, and was quite expensive. The Home Health Aide demonstrations placed their clients for a year of supported work with private home health aide agencies, and also provided four to eight weeks of classroom training in work skills to prepare clients for their new jobs. Support services provided in the Home Health Aide experiment were much less intensive than those in the Supported Work program, and the program was only about half the cost of Supported Work. Experimental evaluations of these demonstrations have encouraging findings:

- o Both programs produced initial earnings gains averaging about \$1,500 to \$2,000 annually. A year and a half to two years after exit from subsidized employment, participants in the Supported Work demonstration were earning on average about \$1,700 more annually than control group members did, and received about \$500 less in welfare.⁶² The Home Health Aide demonstrations produced significant

However, the possibility that the limited follow-up group is not representative is a concern here. Job Training Partnership Act: Long Term Earnings and Employment Outcomes, United States General Accounting Office, March, 1996. This report does not adjust for limited participation in JTPA, so that impacts it cites are per individual offered the program, not per individual actually enrolled as in those reported here.

⁶¹ The JTPA training program discussed above enrolls a substantial number of welfare recipients (roughly 40% of female clients), but is not specifically targeted on welfare recipients.

⁶² Gueron, Judith and Edward Pauly, From Welfare to Work, Russell Sage Foundation, 1991. Table 5.1.

earnings gains for participants in 5 out of 7 states in which they were carried out. During the first and second years after program exit these gains averaged about \$2,000 annually.⁶³ As is typically the case with training programs for the disadvantaged, though, earnings gains were not sufficient in the short run to raise the average participant out of poverty.

- o Gains are sustained over many years. A recent reanalysis of the earnings of participants in the Supported Work demonstration tracked the earnings of program participants for 8 years after exit from the program.⁶⁴ The study found that during the 6th through the 8th year after graduation annual earnings were an average of \$900 higher than they would have been without program participation. Sustained gains were also found for participants in the Home Health Aide demonstrations, who on average earned an additional \$500 annually during the fourth to fifth years after exit from the program.⁶⁵ These are substantial impacts; as discussed in the next subsection, gains from more moderate welfare-to-work programs have tended to “fade out” by this time.
- o Both programs marginally reduced welfare receipt, but overall receipt was still high. Three years after entry into Supported Work, 64% of participants were still receiving at least some welfare payments, while 71% of the control group were. Six out of the seven states in the Health demonstration showed significant welfare reductions during at least one year of the demonstration. Participants in four out of seven states reduced welfare receipt during both the post-program years examined. Reductions in average annual welfare receipt ranged from about \$500 to \$1,000.
- o The programs were cost-effective. The Supported Work program produced benefits of at least 1.5 times the cost, and the Home Health Aide demonstrations produced social benefits in 6 out of the 7 states in which they were carried out.⁶⁶

At the same time, however, the limits to these interventions are worth mentioning. The programs did not show much success in reducing the overall poverty rate among participants. In part, this was because reductions in welfare benefits accompanied increased earnings. But it was also because the average base earnings for the welfare population are so low.

⁶³ Bell, Stephen and Larry Orr, "Is Subsidized Employment Cost-Effective for Welfare Recipients?" Journal of Human Resources, Winter, 1994.

⁶⁴ Couch, Kenneth, "New Evidence on the Long-Term Effects of Employment Training Programs", Journal of Labor Economics, 1992.

⁶⁵ Unpublished analysis by economists Stephen Bell, Larry Orr, Glen Cain, and John Blomquist of Abt Associates. A five-year period was examined here.

⁶⁶ Bell, Stephen and Larry Orr, op cit.

There is also substantial evidence that on-the-job training (OJT), a less intensive form of subsidized employment than that used in the above demonstrations, produces benefits for welfare mothers. As noted, OJT produced strong earnings gains of almost \$2,000 annually for single-parent welfare recipients in the JTPA evaluation. In addition, OJT programs for AFDC recipients in Maine and New Jersey produced significant increases in annual earnings⁶⁷. Altogether, there is a compelling case for the effectiveness of a subsidized employment approach in helping this population. Note that, unlike the case of subsidized employment for youth, there is solid evidence that the benefits of subsidized employment for disadvantaged adults are sustained well after the subsidy period is over.

Another program that tested voluntary training services for single parents was the Minority Female Single Parent Demonstration. This demonstration offered job skills training, basic education, and supportive services to about 4,000 minority single parents at four sites. Two thirds of the enrollees were welfare clients.

Only one site out of the four produced consistently positive results. This was the San Jose Center for Employment and Training. The nature of the CET program, which integrates basic skills training into a vocational skills curriculum, was described in the youth section above. Women enrolled in this training had average annual earnings gains of over \$1,500 during the second year after program exit. These gains were sustained -- during the fifth year after entry into the program CET graduates were still earning an average of \$1,000, or 16%, more than control group members⁶⁸.

The other three demonstration sites were not as successful as CET in raising earnings. While some earnings gains were found, they were too small to be statistically significant. The other sites had a training curriculum which placed less emphasis on vocational skills than CET's did, and evaluators felt that this was one reason for the difference in success.

Welfare to Work

From the 1970s through the early 1990s many American states and localities operated programs that provided job search, basic education, and support services to help welfare recipients move from welfare to work. Participation in these programs was often mandated (at least technically) for individuals considered to be ready for work. This mandatory quality distinguishes them from the voluntary training programs discussed above. Also of note here are several efforts to supplement these programs and change the anti-work incentives of the welfare system by "making work pay" for low-income women leaving welfare through various sorts of wage subsidies. There is an extensive evaluation literature on these programs. We summarize the high points below.

In recent years, a new wave of employment mandates for welfare recipients has been put in place in many states. Furthermore, the welfare reform act of 1996, which replaced Aid

⁶⁷ Gueron, Judith and Edward Pauly, From Welfare to Work, Russell Sage Foundation, 1991.

⁶⁸ Fifth-Year Employment Impacts at CET, Mathematica Policy Research, 1993.

to Families with Dependent Children (AFDC) with the Temporary Assistance to Needy Families (TANF) program, radically revamped the entire Federal system of subsidies for welfare to emphasize time limits and mandatory employment. Evaluation of this wave of welfare system changes is still somewhat anecdotal and premature, however. For this reason, we have not included discussion of it below.

Welfare Reform – WIN and JOBS Programs in the 1980s and Early 1990s

During the early 1980s under the Work Incentive (WIN) program, some states provided mostly job search and unpaid work experience. The Family Support Act of 1988 expanded the welfare- to-work effort and created the JOBS program. Under JOBS basic education and training were made available to some recipients along with extensive job search assistance. JOBS also increased Federal funding for supportive services to those leaving welfare for work. The effectiveness of JOBS programs in raising earnings and reducing welfare reliance among the eligible population has been rigorously evaluated using large samples and random assignment experiments.⁶⁹ The first evaluation results from welfare to work programs instituted after the recent switch to a national time-limited welfare model under the TANF program are also becoming available now.

Generally speaking, the JOBS programs of the 1980s were intended to be mandatory for the welfare population in a given state or county. However, during this period, “mandated” programs often affected only a minority of the welfare population in a state or locality. This was partially because the programs had many exemptions to their mandates, and partially because of difficulties with implementation (e.g. the local welfare office personnel sometimes did not fully accept the concept of a mandatory work requirement). This is changing with more recent welfare reform efforts (see below).

In general, the first wave of welfare reform programs produced statistically significant but small earnings gains. A large number of programs -- the Baltimore Options program and the San Diego SWIM program during the mid 1980s, and later JOBS programs like the GAIN program in California and Florida's Project Independence -- have been found to produce modest but significant gains in earnings and employment for participants.⁷⁰

These moderate gains have been found for many populations of AFDC recipients -- long-term welfare recipients as well as those who had just entered the rolls, single mothers in their early 20s as well as older welfare recipients. But which populations are most affected tends to vary depending on program design. For example, the Baltimore Options

⁶⁹ The JTPA Title II evaluation results are also relevant here, since some JOBS training takes place in the JTPA program. As noted above, JTPA training was especially successful for AFDC women.

⁷⁰ Riccio, James et. al. GAIN: Benefits, Costs and Three-Year Impacts of A Welfare to Work Program, Manpower Demonstration Research Corporation, 1994. Kemple, James J. and Joshua Haimson, Florida's Project Independence: Program Implementation and First-Year Impacts, Manpower Demonstration Research Corporation, 1993. Friedlander, Daniel and Gayle Hamilton, SWIM: A Five-Year Follow-Up Study, Manpower Demonstration Research Corporation, 1993. Gueron, Judith and Edward Pauly, From Welfare to Work, Russell Sage Foundation, 1991.

program offered a wide menu of education and training options to welfare recipients, and did not enforce the participation mandate very strictly. This program seemed to create earnings gains that were concentrated among new entrants to AFDC, most of whom probably would not have become long-term participants. The San Diego SWIM program, in contrast, enforced a participation mandate more strictly and emphasized job search, and seemed to have created earnings impacts among more long-term welfare recipients by speeding their return to work.⁷¹

Average earnings increases usually ranged from about \$300 to \$700 per year for the entire population of eligible clients, even though only about half to two-thirds of program eligibles generally receive services.⁷² Some sites have been more successful. For example, participants in the Riverside County program in California increased their average annual earnings by over \$1,000, or 40%. These gains are mainly due to increases in employment, not to a rise in wage rates.

Longer-term studies have found that these gains generally "fade out" after about five years.⁷³ This seems to indicate that the main effects of the programs are in speeding up a return to work that would eventually have occurred even without intervention. Many of these programs should perhaps be understood as job search assistance programs rather than training programs. The subsidized employment programs discussed in the last subsection may have had a more lasting effect on job skills.

Average welfare receipt also tended to decline somewhat due to these programs. Participation in San Diego's SWIM program resulted in an average annual reduction of about \$500 to \$600 per year in transfer payments during the first three years after program enrollment. The GAIN program created an average drop in AFDC payments received of about \$350 annually in the three years after program entry. These declines were statistically significant. However, the Baltimore Options program did not create a large AFDC decline and therefore was not cost-effective for government; earnings effects seem to have been concentrated among those who would have left welfare anyway.

These welfare-to-work programs were often cost-effective. The SWIM program, for example, produced savings to government in reduced AFDC benefits and increased tax payments which totaled more than twice program costs. California's GAIN program produced mixed results -- programs in three of the six counties examined produced

⁷¹ Friedlander, Daniel and Gary Burtless, Five Years After: The Long-Term Effects of Welfare to Work Programs, Russell Sage Foundation, 1995. The limited evidence on the mechanics of these programs makes these conclusions somewhat speculative.

⁷² Those who do not receive services may also be affected by the program, though -- eligible clients may be motivated to get off welfare in order to avoid complying with mandatory welfare-to-work requirements. Also, some eligible persons don't receive services because they find work before entering the program. These persons may not need program services.

⁷³ Friedlander and Hamilton, op. cit., Friedlander and Burtless, op. cit. The one program that did not show a pattern of rapid fade-out of earnings effects was the Baltimore Options program. Long-term results from many other programs are not yet available though.

savings to government and society, while the other three counties did not. This finding applies to the first three years after program entry; a longer follow-up period may produce greater results.

Recently, a number of reports have summarized early impacts from more recent welfare to work efforts.⁷⁴ These programs were implemented in the early to mid 1990s, at a time when many states were already moving toward time limited welfare; it is likely that program personnel were more willing to implement sanctions and terminate welfare payments when clients did not cooperate with the program. Program impacts have so far been fairly similar to those found for the 1980s programs. Earnings gains over the two year period ranged from about \$360 to \$1,800, with most programs in the middle of this range. The most successful program, in Portland, Oregon, created earnings gains of about \$1,100, or slightly over 35%, during the second followup year. Employment rates in Portland during the final quarter of follow-up were increased from 35% among controls to 46% among experimentals. As in the earlier evaluations, these studies have found that earnings gains have been accompanied by moderate declines in AFDC receipt. It appears that over a reasonable time window these programs will be cost-effective for society (i.e. they will produce total earnings gains greater than their net costs, probably within three to five years).

The largest program, and perhaps the most indicative of the possibilities of large-scale welfare to work programs in the new era of welfare reform, is the LA County Jobs-First GAIN program, which was modelled after the work-first approach of the Riverside County welfare reform program referred to above. In the first half-year of followup, single parent enrollees in this program earned roughly \$375 more than the control group, implying an annual impact of \$750 on earnings.⁷⁵ In the second quarter of followup, about 43% of enrollees worked, as compared to 32% of controls. Since impacts were increasing over the course of the (brief) followup period, it is possible that future reports will find somewhat larger impacts. The early results from the LA County study provide additional strong evidence that large-scale programs will be able to consistently replicate the findings of moderate earnings and employment increases resulting from welfare to work programs.

So far, more work-oriented programs have shown somewhat better employment results than programs that focus on classroom basic education. Programs that emphasize placement into work and the immediate development of job-relevant skills through job

⁷⁴ Freedman, Stephen, et. al., The Los Angeles County Jobs-First GAIN Evaluation: Preliminary Findings on First Year Impacts, Manpower Demonstration Research Corporation, August, 1998. Hamilton, Gayle, et. al. The National Evaluation of Welfare-to-Work Strategies: Evaluating Two Welfare-to-Work Program Approaches, Two-Year Findings on the Labor Force Attachment and Human Capital Development Programs in Three Sites, U.S. Department of Health and Human Services and Manpower Demonstration Research Corporation, Washington, D.C. May, 1998. Scrivener, Susan, et. al. National Evaluation of Welfare-to-Work Strategies: Implementation, Participation Patterns, Costs, and Two-Year Impacts of the Portland (Oregon) Welfare-to-Work Program, U.S. Department of Health and Human Services and Manpower Demonstration Research Corporation, Washington, D.C. May, 1998.

⁷⁵ This impact is reported in 1996 dollars in the published report, but I have converted it to 1993 dollars for consistency with the other impacts reported in this document.

search, on-the-job training, and vocational skills training have had more success than programs that use extensive classroom basic education. For example, an evaluation of the basic education component of the GAIN program estimated that those counties which had put a priority on basic education had often not succeeded in raising the earnings, employment, or in many cases even the literacy levels of basic education participants.⁷⁶

However, the successful program in Portland, Oregon emphasized job quality as well as job placement; clients were steered to jobs with growth potential, not simply the first jobs available. Program operators in Portland also showed a willingness to refer clients with low literacy skills to educational resources if necessary. The Portland program was designed to steer clients into work relatively quickly while providing targeted educational assistance to some and emphasizing job quality. The program thus combined different elements of “work-first” and educationally oriented programs. It is noteworthy that Portland managed to create increases in GED attainment, and that it appeared to moderately increase wage rates as well as employment rates. The Portland experience shows that programs which adopt a mixed approach can also be successful; it remains to be seen whether this approach will create more lasting effects than pure job search.

In general, the Achilles heel of all welfare to work programs that have been studied is that overall levels of poverty, welfare receipt, and unemployment usually remain high even after participation in welfare to work programs. For example, three years after entry into California's GAIN program – generally conceded to be the most successful of these programs -- 80% of those who had participated had annual incomes below the poverty line.⁷⁷ This was quite close to the 83% poverty rate among the control group. Just 40% of GAIN participants worked at all during the third year after program entry. This is very similar to the Portland experience, where participants showed a poverty rate of 79% at the end of the second year after program entry – again lower than an 83% poverty rate among the control group, but still very high. The Portland finding is especially disturbing given the very tight labor market in Portland during the 1996-97 period when the program was implemented. As in Riverside, less than half of the program enrollees were working at the end of the follow-up period.

These statistics are a sobering reminder of the difficulty of helping recipients off AFDC and into jobs over an extended period of time. The general lesson from these evaluations seems to be that welfare-to-work programs must be complemented by other strategies in order to lift disadvantaged single-parent families out of poverty.

Making Work Pay: Employment Subsidies and Earnings Supplements

⁷⁶ Riccio, James et. al., *ibid.*; Martinson, Karin and Daniel Freedlander, GAIN: Basic Education in a Welfare-to-Work Program, Manpower Demonstration Research Corporation, January, 1994.

⁷⁷ Riccio, James, et. al. *ibid.* The income measurement used included Food Stamps, AFDC payments, and earnings, but not taxes or the Earned Income Tax Credit (EITC).

This period also saw several efforts to “make work pay” for single mothers exiting welfare through the use of various forms of income subsidies to those who have left welfare for work. In general, employment subsidies are a potential way to combine employment increases and reductions in poverty. However, they can also have the disadvantage of continuing individual dependence on government subsidies and potentially substantial increases in government outlays.

The largest and most significant employment subsidy instituted during this period was, of course, the Earned Income Tax Credit (EITC). This program functions through the income tax system, and provides large subsidies to income earned by poor families with children. The EITC currently provides a subsidy of roughly 35% to 40% of the first seven to ten thousand dollars of earned income, which is gradually phased out as income grows.

The EITC has never been evaluated in a formal demonstration project using random assignment, but economists have recently used the “natural experiment” created by the sizable expansion of the program in 1986 to estimate the effects of the EITC on employment.⁷⁸ (This expansion was complex, but it can be thought of as increasing the credit rate from roughly 9% to roughly 14% of the first \$6000 of income earned). Eissa and Liebman found that, after adjusting for other factors, the 1986 EITC significantly expanded labor force participation among the most affected groups (less educated women with children). Their estimates of the exact magnitude of this increase vary from a 2-3% to almost a 10% increase in labor force participation, depending on the method used.

The non-experimental nature of these findings means that they must be regarded as highly approximate. Nevertheless, the general finding that the EITC has increased labor force participation among eligible groups appears to be quite robust, and is supported by considerable evidence. Furthermore, the substantial increases in labor force participation that have occurred during the 1990s among EITC-eligible groups – single parents aged 16 to 45 have increased their employment rates from 74% to 82% between 1991 and 1996 – are likely connected to the further increases in the EITC that have occurred during the 1990s. These increases may also be associated with other efforts to “make work pay” through increases in health insurance coverage for poor families. Finally, the (more limited) available evidence also seems to find no significant effect of the EITC phaseout on labor supply.⁷⁹

Besides the research on the EITC, there have been three high-quality experimental demonstrations examining the effect of income subsidies on the progress from welfare to

⁷⁸ Eissa, Nada and Jeffrey Liebman, “Labor Supply Response to the Earned Income Tax Credit”, Quarterly Journal of Economics, May, 1996.

⁷⁹ Liebman, Jeffrey, “The Impact of the EITC on Incentives and Income Distribution”, Tax Policy and The Economy, forthcoming. This also contains a useful summary of the literature. See Meyer, Bruce and D.T. Rosenbaum, Welfare, the Earned Income Tax Credit, and the Labor Supply of Single Mothers, Northwestern University, 1997 on recent increases in employment among poor single parents.

work.⁸⁰ All of these demonstrations relied on decreasing the extent to which welfare subsidies were reduced for families who had begun to work. This represents a change from the practice in most North American welfare systems, which reduce grant levels quite sharply for families with even small levels of earned income.

The Minnesota Family Investment Program (MFIP) tested two approaches to employment subsidies. The program simplified welfare rules in a number of ways, including ways that made it easier to return to work (e.g. permitted welfare recipients to own more assets, such as cars, while remaining eligible for welfare, and simplified rules for child care payments). It offered two tracks: initial applicants to welfare were given financial incentives to return to work through rules changes that permitted increased levels of welfare payments for families that returned to work.

For example, in 1994 under old welfare rules a single parent working 20 hours per week at \$6 per hour would receive a welfare grant of \$362 per month, while a parent working 40 hours per week at this wage would receive \$128 monthly. Under MFIP in 1994, these monthly grant amounts were increased to \$599 and \$276, while the grant amount paid to a non-working family did not change. The second track of the MFIP program was for long-term welfare recipients, defined as those persons who had received welfare payments for at least two out of the previous three years. These individuals received the same MFIP financial incentives described above, and were also required to participate in job search, employment counseling, and other employment-focused activities.

The MFIP was evaluated using random assignment from the Minnesota welfare population. The initial 18-month impacts of the program show strongly positive effects for urban long-term welfare recipients.⁸¹ During the entire 18 months after random assignment, average earnings for urban MFIP long-term welfare families were over \$1,000 higher than the control group, and 76% of MFIP families worked during the period as opposed to 59% of the control group. In months 16-18 after random assignment, 52% of urban MFIP families were working as opposed to 38% of control families. But in months 16-18 MFIP families were also slightly more likely to be receiving welfare (81% vs. 77%). MFIP families also received an average of \$800 more in welfare benefits than control families over the 18 month period. The combination of higher earnings and higher welfare benefits led to a reduction in poverty from 85% among control families to 71% among these families during the 18 months after random

⁸⁰ Card, David and Philip K. Robins, "Do Financial Incentives Encourage Welfare Recipients To Work? Evidence From a Randomized Evaluation of the Self-Sufficiency Project", National Bureau of Economic Research Working Paper #5701, August, 1996; and Miller, Cynthia, et. al. "Making Welfare Work and Work Pay: Implementation and 18-Month Impacts of the Minnesota Family Investment Program", Manpower Demonstration Research Corporation, October, 1997. Hamilton, William, et. al. "The New York State Child Assistance Program: Five-Year Impacts, Costs and Benefits", Abt Associates, 1996. Impacts from these studies are reported in current (early to mid 1990s) dollars.

⁸¹ The evaluation did not find long-term impacts on employment for rural MFIP long-term welfare recipients. This is probably due to differences between rural and urban labor markets that are especially pronounced in the USA, due to the large size of rural areas. All results cited are for urban families.

assignment. It is possible that these short-term results will improve still further as MFIP recipients reap the long-term benefits to increased labor market experience.

However, the study also found that the MFIP track for new applicants to welfare mostly appeared to subsidize the work effort of those families who would have returned to work anyway. By months 16-18 after random assignment, only small increases in employment rates among new applicants had been created by the program (56% of MFIP families were working vs. 53% of the control group), and there were substantial increases in welfare subsidies that were paid. Thus, based on the MFIP results it appears that employment subsidies should be targeted on long-term recipients (as opposed to all applicants to welfare) and combined with required job search activities. Evaluators also felt that MFIP encouraged more work-focused expectations among administrators who worked with long-term recipients, and that this change in culture was an important part of its success.

A Canadian program, the Self-Sufficiency Project (SSP), provided an earnings subsidy equivalent to one-half the difference between participant earnings and a target earnings level for long-term welfare recipients who chose to leave welfare for work. Long term was defined as individuals who had been on welfare for at least 12 of the previous 13 months. Recipients were required to work 30 or more hours a week to become eligible for the subsidy; this prevented full-time workers from reducing their hours of work due to receipt of the subsidy. The target earnings level was set a level that was quite high; roughly 2-3 times earnings resulting from a full year of minimum wage work. This meant that a full-time worker would earn substantially more under SSP than under traditional welfare rules. Unlike the MFIP program for long-term welfare recipients, the SSP did not mandate additional activities for recipients such as job search assistance or training.

By the 15th to 18th month after entry into the program, employment rates among individuals eligible for the SSP were at 39.3%, as opposed to 30.6% among the control group. Average monthly earnings over the 15th to 18th months post-entry were \$359 (Canadian dollars) among eligibles, as opposed to \$255 among the control group. However, the total monthly transfer payments received (including SSP payments) were also higher among the treated group, at \$840 vs. \$753. The SSP results reinforce the conclusions from the MFIP that employment subsidies targeted on long-term welfare recipients can improve employment rates and labor market earnings. However, at least in the short term these programs appear to have achieved this result at the cost of increased transfer payments. It remains to be seen whether in the long term clients will “work their way off” transfer programs, resulting in long-term gains to government budgets.

New York State’s Child Assistance Program (CAP) apparently managed to achieve increases in work effort by clients, but without increasing transfer costs to government. The program simultaneously lowered the base welfare grant to participants and increased the amount of welfare benefit that could be retained by those participants who worked. CAP benefits are reduced by just 10 cents per dollar earned for the first few hundred dollars of earnings, and 67 cents per dollar for later earnings. This is a much lower tax

rate on earnings than the near one-for-one reduction in standard NY State welfare programs at the time. However, the base welfare grant under CAP (for clients with no earnings) was roughly one third lower than the standard base welfare grant. The combination of these provisions created a powerful work incentive under CAP.

Participation in the program was on a voluntary basis and was expected to occur when clients were already working a sufficient number of hours to benefit from CAPs financial incentives. Up to this point, clients remained in regular welfare. When compared with a simple wage subsidy offered to all welfare clients, the CAP approach greatly lessened “windfalls” to those participants who would have worked even without the program, since in order to use the program they effectively agreed to cut their base welfare grant.

In a randomized evaluation, the availability of the CAP option was found to increase annual earnings by an average of \$725, or 20%, an increase that was sustained throughout the five years of the follow-up. (This increase was measured among the entire welfare caseload for whom CAP was available, not the roughly 16% who actually participated in the program). Employment rates were increased from 26.1% to 29.4%, a small but statistically significant increase. Most of the CAP effect appears to have come from increases in hours worked, not wage growth. It is especially notable that this earnings increase was combined with a an actual decline in total government costs under CAP. Average annual total cash assistance – including all CAP benefits -- received by program participants dropped by 4% over the five year followup (for an average annual total of \$323), a statistically significant drop. Summing the earnings increase and the decline in assistance implies an income increase of \$400 annually for CAP-eligible families, a roughly 4% increase in average annual income.

CAP availability did not significantly reduce the average percentage of clients continuing to receive public assistance. Over the five year study period, monthly public assistance receipt averaged 72% in among families beginning the period on welfare in counties where CAP was available and 73% in non-CAP areas, an insignificant difference. This is likely due to the fact that the lower tax rates on earnings in the program allowed families to stay on welfare with higher levels of earned income. The structure of the CAP program implies an acceptance of some continued dependence on transfer payments in return for higher levels of work effort.

The combination of increased work effort and transfer cuts created by the CAP program shows that a carefully calibrated combination of incentives can both modestly increase the total income of welfare participants and result in stable or slightly lower costs to government. The extent to which the CAP model can be reproduced in the new welfare reform environment remains to be seen.

SECTION 3: PROGRAMS FOR DISLOCATED WORKERS

Dislocated workers are workers who have been permanently laid off and often face a difficult transition to a new job. Overall, these workers are a more job-ready population than the economically disadvantaged adults served by the other job training programs discussed previously. A 1990 Census Bureau survey found that dislocated workers had an average of 12.5 years of education, almost equal to the average population level of 12.7 years. In 1993, only 14% of participants in the Employment Dislocation and Worker Adjustment Assistance (EDWAA) program, the Federal government's major training program for displaced workers, had less than a high school education, while 30% of the economically disadvantaged adults in JTPA Title II were high school dropouts.

At the same time, while displaced workers are generally not as poor as the clients of JTPA, welfare-to-work, and other programs designed specifically for the disadvantaged, they are by no means equivalent to the general population in income or employment opportunities. Even a year after they lose their jobs, these workers have poverty and unemployment rates that are far higher than the general population. Ethnic minorities are also over-represented among displaced workers.⁸²

A variety of re-employment programs for dislocated workers have been tried, ranging from conventional training programs to bonuses paid upon receipt of a new job. Although many of these approaches are still experimental and are being used only in a few pilot programs, much reliable evaluation evidence is available. In addition, dislocated workers sometimes return to school for additional training. Some, more limited, evidence is available on the effectiveness of post-secondary schooling for older workers returning to school to change their career or update their skills.

Unemployment Insurance Reforms

Profiling and Job Search Assistance

In the late 1980s and early 1990s a series of demonstration programs in five states -- Minnesota, Nevada, New Jersey, South Carolina, and Washington -- examined the effectiveness of a two-stage combination of profiling and job search assistance in reducing Unemployment Insurance (UI) payments to displaced workers and speeding their return to work.⁸³ The profiling stage, which occurs when individuals first claim their UI benefits, uses demographic and work history information to identify those persons who are most likely to remain unemployed long-term, and thus have the greatest

⁸² U.S. Census Bureau dislocated worker survey, January, 1992; unpublished U.S. Department of Labor tabulations. For example, over a year after losing their jobs workers displaced in 1990 still had an unemployment rate of 23%, more than three times that of the general population. Their poverty rate was roughly one and a half times as high.

⁸³ For a good overview of the results of these experiments, see Bruce Meyer, "Lessons From the U.S. Unemployment Insurance Experiments", Journal of Economic Literature, pp. 91-135, March, 1995..

need for re-employment services. The identified recipients then receive intensive job search assistance and counseling from UI staff.

The five state demonstrations were conducted as random assignment experiments, making their results particularly reliable. The exact results of the experiments vary, but the general findings are similar:

- Job search assistance (JSA) clients found a new job more quickly, and receipt of UI benefits was reduced. Those receiving job search assistance found new employment an average of one-half of a week to 4 weeks sooner than similar individuals who did not receive assistance. Most states averaged around a one week reduction in the duration of UI benefit receipt.
- o The program was cost-effective for the government. In each state experiment the savings in Unemployment Insurance (UI) payments plus the increase in tax receipts due to faster re-employment were more than enough to pay for program costs. Savings to government averaged around two dollars for every dollar invested in targeted job search assistance.
- o Job search participants did not end up in lower-wage jobs than non-participants. Some have argued that mandatory job search leads to workers taking jobs that do not pay as well as jobs they otherwise would have found without the program. There was no evidence that this was the case. In the two experiments where earnings data was available, job search participants not only found work more quickly, but hourly earnings were similar to non-participant workers.

Where information on the time pattern of the earnings gains was available, job search participants earned more than controls during their first year or two after receiving help finding a job. After this period, other workers who had not received JSA began to earn similar amounts. The earnings gains produced by JSA are significant but not long-lasting.

The results of the experiments were generally similar, in that all produced significant reductions in UI receipt. However, two experiments -- in Minnesota and Nevada -- had positive results much greater than the others. Programs in these states reduced UI receipt by 4 weeks (Minnesota) and 1.6 weeks (Nevada)⁸⁴. These states provided the most intensive job search assistance services to their clients, including individual case management. This may partially account for the magnitude of the impacts in these states.

Profiling and job search assistance were mandated for all state UI programs in the Extended Unemployment Compensation legislation enacted in 1993. Some early results are available for three of the states (New Jersey, Delaware, and Kentucky) which

⁸⁴ Some part, though not all, of the very large Minnesota results are probably accounted for by selection bias in the control group. About a third of the controls were not UI eligible and thus differed from the program participants.

implemented these new systems quickly.⁸⁵ Although these studies were not random assignment, they used exceptionally good comparison group designs, which render them considerably more reliable than the typical comparison design study.

Results from these early implementations tend to confirm the more moderate findings from the state demonstrations. The duration of UI receipt was reduced by an average of about one-half to three-quarters of a week, while benefits received were reduced by about \$100. The likelihood of benefit exhaustion (i.e. receiving UI for six or more months) was reduced by 4 percentage points in New Jersey; other states had smaller and insignificant negative impacts. Results were generally statistically significant. Once again, there was no evidence found that profiling and job search assistance resulted in lower earnings in the new job; if anything, the evidence tended to show that it raised earnings.

Work Search Requirements

A recent random assignment experiment in Maryland has tested the effectiveness of work search requirements in lowering the time spent receiving UI payments.⁸⁶ Since Maryland UI recipients were already required to search for work by making two employer contacts per week, the experiment functioned by strengthening this requirement.

The basic finding from the experiment appears to be that requiring unemployed workers to contact employers and search for work significantly lowers the duration of unemployment. When individuals were required to make four employer contacts per week, as opposed to two in the control group, the duration of UI receipt was reduced by seven-tenths of a week and total payments received declined by an average of \$116. This corresponds to a decline of 6% in the duration of UI receipt.

Furthermore, improved enforcement of work search requirements appeared to lower UI receipt as well. In an alternate treatment, recipients were required to make the normal two employer contacts per week, but were informed that these contacts would be verified through random audits that involved checking with the employer. This treatment led to an average decline of nine-tenths of a week in UI received compared to the control group.

Self-Employment Assistance

Self-employment programs allow unemployed workers the option of starting a small business as an alternative to looking for wage and salary work. Unemployed workers are given training and assistance in setting up their business, and their UI payments are used as support while they do so.

⁸⁵ Dickinson, Katherine, et. al. Evaluation of Worker Profiling and Reemployment Services Systems: Report to Congress, SPR Associates, March, 1997.

⁸⁶ Benus, Jacob, et. al., Evaluation of the Maryland Unemployment Insurance Work Search Demonstration: Final Report, Abt Associates, Bethesda, Maryland, November, 1997.

In 1987, the Department of Labor launched demonstration projects in Washington and Massachusetts that added a self-employment option to the UI programs in those states. Although the details of the programs differ, they both require enrollees to participate in entrepreneurial training and make use of business counseling in order to receive self-employment allowances or (in the case of the Washington program) a lump-sum payment to help set up their business. The programs were evaluated in a random assignment experiment that compared program participants to a control group who had expressed interest in starting a business but were not allowed to participate in the program.

Self-employment is not for everyone; research indicates that only a small fraction (2% to 5%) of UI recipients are likely to enter these programs. Results from the demonstration projects also indicate that those who do try self-employment are disproportionately better educated, older, and white-collar.

Results from the evaluations were quite encouraging⁸⁷:

- o The likelihood of starting a business roughly doubled for those participating in the program. In both demonstrations about 25% of the control group managed to start their own business, whereas roughly 50% of program participants did.
- o Participant businesses were no more likely to fail over the first 18 months of operation than control group businesses were. This finding held true for both demonstrations.
- o Program participants were significantly more likely to enter any employment than control group members. Over the total 18-month followup period, the program increased the total time spent employed (either self-employed or employed by others) by two months in Washington and three months in Massachusetts.
- The demonstrations increased total earnings. Self-employment participants in Massachusetts earned over \$7,500 more than non-participants in the control group during the 18 months following entry. There were also fairly large positive earnings impacts in Washington, but they were not statistically significant.

Re-Employment Bonuses

Re-employment bonus programs pay a reward to unemployed workers who find new employment within a specified time and keep it for some minimum period. Usually the award is around 3 to 6 times the weekly UI benefit amount (which varies greatly by individual), or about \$500 to \$1,500.

Policy experiments in several states have found that this bonus offer decreases the time spent receiving UI benefits.⁸⁸ Even though only about 10% to 15% of the potentially

⁸⁷ Benus, Jacob et. al., A Comparative Analysis of the Washington and Massachusetts UI Self-Employment Demonstrations, Abt Associates, November, 1993.

eligible clients actually made use of the bonus, the average length of unemployment among the entire group of eligibles was reduced by one quarter to up to 1.1 weeks (in Illinois, the most successful experiment). There were generally significant negative effects on UI receipt in all four experiments, although they tended to be considerably smaller than those found in Illinois.

However, the experiments varied widely in their cost effectiveness to government. In Illinois, the treatment was highly cost effective for government, generating benefits of more than 2.5 times costs. But only about half of the other demonstrations found that the program was cost effective for government -- the average size of the bonus plus the administrative costs of the program exceeded the average UI benefits saved plus the additional tax receipts gained from faster re-employment. Further research has found that the effectiveness of reemployment bonuses depends strongly on the design of the bonus and the nature of the UI system. Programs tend to be more cost-effective when the UI system offers long period of entitlement to unemployment support payments, as was the case in Illinois when the program was implemented.⁸⁹ Design and targeting of the bonuses on the long-term unemployed are also quite important.⁹⁰

Several economists have also pointed out that a badly designed bonus system could draw more people into the UI system, thus driving up government costs. Some unemployed workers are eligible for UI benefits but choose not to receive them, because they expect to be recalled to their old job or find a new job soon. Unless safeguards were built in, bonuses would give these people an additional incentive to claim UI benefits so they could receive a bonus once their new job came through.

Because of problems like this, as well as the varied results of the bonus experiments, it appears that the most effective reemployment bonus system in terms of cost-effectiveness to government would be carefully targeted on those recipients most likely to remain unemployed long-term, would give a relatively low bonus amount, and require a qualifying period of unemployment before individuals became eligible.

Training for Dislocated Workers (Including Community Colleges)

There is a real lack of random assignment evidence in this area; the few randomized demonstrations that exist have design flaws that cast some doubt on their findings. However, what little evidence we do have from these studies suggests that government skills training for dislocated workers has not been particularly successful in raising earnings above what would be expected by job search assistance alone. But there is also

⁸⁸ Meyer, Bruce, "Lessons From the U.S. Unemployment Insurance Experiments", Journal of Economic Literature, pp. 91-135, March, 1995.

⁸⁹ Davidson, Carl and Stephen Woodbury, Effects of a Reemployment Bonus Under Differing Benefit Entitlements, or, Why the Illinois Experiment Worked, Upjohn Institute for Employment Research, 1991.

⁹⁰ See O'Leary, Christopher et. al. Reemployment Bonuses and Profiling, Upjohn Institute for Employment Research, Kalamazoo, Michigan, November, 1997.

some relevant evidence from non-randomized (comparison group) studies of community college education that suggests classroom training can pay off for dislocated workers. Since community colleges frequently contract with government to provide retraining to dislocated workers, these studies imply that such training can be successful. So evidence is somewhat mixed here; more research would be useful.

In three studies, two of which were randomized experiments, workers offered training plus job search assistance showed no significant increase in earnings or employment when compared to workers receiving job search assistance alone.⁹¹ This training consisted of 3 to 6 months of either classroom or on-the-job training.

However, it should be noted that design features of the experiments make it difficult to determine the effects of the training on long-term employment prospects of dislocated workers. In two of the studies the follow-up period was either 6 months or a year, not long enough for all the effects of classroom training to show up. In the third there was an exceptionally low take-up rate for training -- only 15% of workers chose to participate -- and this led to problems in determining training effects.⁹²

There has been a non-randomized study of job trainees under the Trade Adjustment Assistance Act -- a major supplier of long-term training to dislocated workers -- that found no effect of TAA training on earnings.⁹³ But again problems with this evaluation undermine its usefulness in determining the impacts of long-term training. In particular, researchers found that trainees were a self-selected group who were more likely to have made major career changes than non-trainees in the comparison group. This fact in itself could lead to lower earnings, aside from any training effects.

Evidence on returns to community colleges suggests that classroom training pays off for some dislocated workers. But there are no random assignment evaluations of government programs which provide long-term, high-intensity classroom training for dislocated workers.

There is also non-random assignment evidence available on the impacts of community college education on dislocated workers. Community colleges are a system of mostly public two-year colleges that are an important element of the American post-secondary system. Community colleges generally offer more immediately vocational courses of education -- fully two-thirds of community college students major in vocational subjects,

⁹¹ These results were found in the Texas experiments, the Buffalo Downriver training project, and the New Jersey Reemployment Demonstration project. Leigh, Duane, "An Overview of Existing Evaluation Evidence For the U.S.", in Assisting Workers Displaced By Structural Change: An International Comparison, Upjohn Institute, Forthcoming, 1994.

⁹² Corson, Walter, et. al. New Jersey Unemployment Insurance Reemployment Demonstration Project, U.S. Department of Labor, Unemployment Insurance Occasional Paper 89-3, April, 1989.

⁹³ Corson, Walter et. al. International Trade and Worker Dislocation: Evaluation of the Trade Adjustment Assistance Program, Mathematica Policy Research, April, 1993.

while just 5% of students at four-year colleges and universities do.⁹⁴ Community colleges also tend to serve older students (over a quarter are over age 25), and charge lower tuition fees. Government programs frequently supply long-term training to dislocated workers by contracting with local community colleges to provide vocational courses. In addition, many dislocated workers return to community college for additional training on their own initiative.⁹⁵

Two studies have using comparison group designs to examine the effect of community college education on adults returning to school after a period of work. One study examined workers in Pennsylvania and Washington who lost a job that they had held for three or more years and then entered community college around the time of their job loss.⁹⁶ Some of these workers were subsidized by government programs, while others were not. Typically, workers completed roughly eight months to a year of training.

The authors find that training is associated with large short-term earnings losses, as trainees presumably lessen the intensity of their job search while enrolled in training.⁹⁷ In the long term community college training did appear to produce higher earnings for these displaced workers, but these gains vary widely depending on the type of courses taken. In the long run, per year of training completed, trainees appeared to earn an average of 2% to 5% more than those who had not entered training. This is not large; some estimates for Pennsylvania workers found that these long-term gains were not sufficient to cover short-term earnings losses while in training.

But this overall average masks quite large earnings gains – some 10% to 15% in earnings per year of training – for workers who completed courses in certain technical and scientific fields, especially health-related professions. In contrast, workers who completed courses in other, non-technical fields, including basic literacy courses, were predicted to gain little or no additional earnings compared to workers who did not enter training. Courses in such non-technical fields appeared to produce a negative return.

The non-experimental nature of this study makes the specific quantitative impact estimates approximate at best. However, the finding of wide variance in returns to training is an important one. It appears that long-term training that is well attuned to the needs of employers can produce substantial returns, but courses that do not impart marketable skills can easily produce negative returns.

⁹⁴ National Assessment of Vocational Education Interim Report to Congress, Office of Educational Research and Improvement, U.S. Department of Education, Washington, D.C. 1993.

⁹⁵ Adelman, Clifford, The Way We Are: The Community College As American Barometer, U.S. Department of Education, February, 1992; Hansen, Janet, ed. Preparing for the Workplace: Charting A Course For Federal Postsecondary Training Policy, National Research Council, Washington, D.C, November, 1993.

⁹⁶ Jacobson, Louis, et. al., The Returns From Community College Schooling for Displaced Workers, Unpublished Paper, Westat, Inc., June, 1997.

⁹⁷ This finding may also be due to unobservable differences in job search success between trainees and non-trainees.

A second study has examined a national sample of experienced adult workers who return to community college for additional schooling.⁹⁸ Returning adults are defined as students aged 25 or older (the oldest students in the sample were 35), or students who had greater than a three year period of non-enrollment since their last schooling experience. (Note that this population may be quite different than the displaced worker sample from the Jacobson study). The authors find that returning adults enjoy earnings gains from community college of roughly 5% to 8% per year. No attempt was made to distinguish the returns to different types of courses.

These gains are comparable to those estimated in earlier studies for all community college students.⁹⁹ They are also comparable to the general consensus among labor economists on the labor market returns per year of post-secondary education.

⁹⁸ Leigh, Duane and Andrew Gill, "Labor Market Returns to Community Colleges: Evidence for Returning Adults", Journal of Human Resources, Spring, 1997. Note that these returning adults are not necessarily displaced workers.

⁹⁹ Kane, Thomas, and Cecilia Rouse, "Labor Market Returns to Two and Four Year Colleges", American Economic Review, Vol. 85, Number 3, 1995.