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Policies for People with Disabilities in U.S. Employment and Training Programs

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This paper discusses the federal government's employment and training policies and programs for individuals with disabilities. For each program considered, a brief description is provided, followed by a discussion of any policies and provisions especially applicable for persons with disabilities, a summary of available evidence on services provided to this population, and an assessment of potential programmatic and policy improvements that could be made.

There are several important issues that, for various reasons, are not covered in the paper. First, programs whose main purpose is to deal with discrimination in the labor market are not included. Thus, government antidiscrimination programs administered by the U.S. Equal Employment Opportunity Commission (EEOC) and the Department of Labor's Office of Federal Contract Compliance Programs (OFCCP) are not discussed. With the important exceptions of vocational rehabilitation and vocational education, which are joint federal-state undertakings, the paper excludes programs administered by the states or by other federal agencies.¹

Another important limitation is that the paper does not address the issue of whether the level of services to people with disabilities is adequate or even if people with disabilities are served in proportion to their share of the eligible population. Although it would be desirable to include such information, there has been a variety of definitions used over time and by various sources at a given time. Additionally, some sources use self-identification, while others rely on observations by the individuals compiling the information or on administrative data. Indeed, it is the lack of coordination in defining the population in need and in establishing roles for various programs that makes it difficult to

determine how well the nation is doing in serving people with disabilities who need training.

Vocational Rehabilitation

The vocational rehabilitation program, authorized under Title I of the Rehabilitation Act of 1973, provides grants to states to provide comprehensive vocational rehabilitation that meets the “needs of individuals with handicaps so that such individuals may prepare for and engage in gainful employment to the extent of their capabilities.” Disabled individuals must satisfy a number of requirements to be eligible to participate in the program. Participants must have a physical or mental disability that can be medically described, they must have a substantial handicap to employment, and they must be capable of achieving employability (i.e., they have rehabilitation potential). All vocational rehabilitation activities are conducted at the state level, but they are reviewed and monitored by the Rehabilitation Services Administration of the U.S. Department of Education. Currently, there are over 80 “state” agencies administering vocational rehabilitation in the 50 states, the District of Columbia, the territories, and other government units (U.S. General Accounting Office 1993, U.S. Department of Education 1992). About half the states have two agencies, one for the blind and one for people with other disabilities. In the remaining states, a single agency is responsible for all vocational rehabilitation services. In fiscal year 1992, total federal funding available for state grants was approximately \$1.78 billion. These funds are allocated on a formula basis (depending on state population, per capita income, etc.), and there is a state matching fund requirement (80 percent federal and 20 percent state except for construction of facilities).

Approximately 1 million individuals are served by state vocational rehabilitation agencies annually, and approximately 200,000 are “successfully rehabilitated.”² The number of cases rehabilitated dropped slightly below 200,000 in 1992 (to 191,000 cases) for the first time in 25 years. Data on the characteristics of clients who were rehabilitated in fiscal year 1991 (the most recent year for which these data are available) are shown in table 1.³ About half of all clients were between the

Table 1. Characteristics of Persons Rehabilitated in Vocational Rehabilitation, Fiscal Year 1991)

Characteristics	Total rehabilitations	
	Number	Percent
Total	202,831	100.0
Age at referral		
Number reporting	202,170	100.0
Under 18	15,214	7.5
18-24	44,137	21.8
25-44	100,982	49.9
45-64	34,612	17.1
65 and over	7,225	3.6
Sex		
Number reporting	202,640	100.0
Male	112,452	55.5
Female	90,188	44.5
Race		
Number reporting	22,580	100.0
White	162,602	80.3
Black	35,973	17.8
American Indian/Alaskan Natives	1,313	0.6
Asian and Pacific Islander	2,692	1.3
Hispanic origin		
Number reporting	202,591	100.0
Hispanic origin	17,057	8.4
Not of Hispanic origin	185,534	91.6
Education		
Number reporting	201,507	100.0
No grades completed	897	0.4
1-7 grades completed	7,926	3.9

(continued)

Table 1. (continued)

Characteristics	Total rehabilitations	
	Number	Percent
8-11 grades completed	45,067	22.4
12 grades completed	78,225	38.8
13 grades and over completed	37,528	18.6
Special education	31,870	15.8
Marital status		
Number reporting	201,923	100.0
Married	56,018	27.7
Widowed	7,848	3.9
Divorced	28,955	14.3
Separated	11,506	5.7
Never married	97,596	48.3
Severity of disability		
Number reporting	202,831	100.0
Severely disabled	139,794	68.9
Nonseverely disabled	63,037	31.1
Veteran status		
Number reporting	202,623	100.0
Veteran	9,445	4.7
Nonveteran	193,178	95.3
Weekly earnings at application		
Number reporting	201,887	100.0
No earnings	158,059	78.3
Less than \$100	14,866	7.4
\$100-\$199	14,136	7.0
\$200 and over	14,826	7.3

SOURCE U.S. Department of Education (1992).

NOTE: Items may not total precisely 100 due to rounding.

ages of 25 and 44. Participants were more likely to be never-married, male, and white. In addition, the average participant was more likely to be severely disabled and to be a nonveteran. A recent analysis of the vocational rehabilitation program (U.S. General Accounting Office 1993) found that the demographic characteristics of accepted applicants are very similar to those of individuals not accepted. The study found applicants and participants more likely to be men and under the age of 45 than the eligible population as a whole.

A significant majority, about 78 percent, of rehabilitated clients had no earnings at application to the program. The program is supposed to focus on individuals with severe disabilities, and 65 percent of the individuals accepted were classified as severely disabled, as compared to 35 percent of those not accepted. The most common disabling conditions among those accepted were mental and emotional (43 percent) and orthopedic (24 percent).⁴

Table 2 shows data on the various services received during the course of their rehabilitation by clients whose cases were closed in 1988. Although the majority of participants served received diagnosis and evaluation (87 percent) and counseling and guidance (73 percent), slightly less than half (47 percent) received training of any sort. Training is broadly defined in this program and includes education; program participants are classified as receiving training if they are given academic, business, vocational, or personal and vocational adjustment training from any source as arranged for by the state agency. Some participants received more than one type of training. Services provided in 1988 did not vary by severity of the disability. The average cost of services in 1988 per participant was \$1,573 (U.S. General Accounting Office 1993). In 1991, the average cost per client rehabilitated was \$2,518 (U.S. Department of Education 1992).

There have been few evaluations of the impact of vocational rehabilitation on earnings and employment because it is difficult to identify an appropriate group of untreated individuals to use as a comparison group. One study (U.S. General Accounting Office 1993) found that rehabilitants with physical disabilities, emotional disabilities, and mental retardation were likely to earn \$2,000, \$1,600, and \$1,000 more, respectively, than would dropouts from the program. In interpreting this result, it is important to keep in mind that the definition of rehabilitation includes placement in a job, so the comparison being made is

not between those who receive services and those who do not receive such services. Another recent study, which was limited to Virginia, included all closed cases in the treatment group and used dropouts as the comparison group (Dean and Dolan 1991). This research found statistically significant one-year impacts for men (\$910) and women (\$1,632) with physical disabilities. For mental and emotionally disabled participants, the impacts were also positive but smaller in magnitude and statistically significant only for women with mental disabilities.⁵

Table 2. Percentage of 1988 Vocational Rehabilitation Clients Who Received Various Types of Services

Category of service	All VR clients	Severely disabled clients
Diagnosis and evaluation	87	88
Counseling and guidance	73	75
Restoration	33	35
Transportation	27	28
Placement	22	23
Referral	21	22
Income maintenance	20	20
Adjustment training	19	23
Business or vocational training	12	12
Miscellaneous training	12	14
College or university training	11	10
On-the-job training	8	9
Other services	22	23

SOURCE U.S. General Accounting Office (1993)

NOTE: These figures are based on cases closed in 1988

As the General Accounting Office has pointed out, the vocational rehabilitation program clearly deserves more study. Better data are needed to determine who receives services and what the impacts of the program are on employment and earnings. Recent efforts to develop and analyze longitudinal data have improved matters somewhat, but good evaluations of the program are still few in number.

The Job Training Partnership Act Title II Programs

The Job Training Partnership Act (JTPA) authorizes the nation's major employment and training programs for individuals with specific labor market needs. JTPA was passed in 1982 to replace the Comprehensive Employment and Training Act (CETA), and the programs began operation in 1983. The specific programs established by JTPA are authorized in Titles II, III, and IV of the Act. Major provisions include training services for economically disadvantaged adults (Title II-A) and youth (Title II-C), the summer youth employment and training program (Title II-B), employment and training services for dislocated workers (Title III), employment and training programs for Native Americans and migrant and seasonal farm workers (Title IV-A), the Job Corps (Title IV-B), and veterans' employment and training programs (Title IV-C). Each of the JTPA programs has specific eligibility requirements, although an individual may qualify for more than one program. The Economic Dislocation and Worker Adjustment Assistance Act (EDWAA) of 1988 modified the JTPA Title III program substantially, and major amendments to JTPA were enacted in December 1992.⁶

The JTPA Title II program for economically disadvantaged adults and youth is operated through a partnership of federal, state, and local government with the private sector. The program is financed by the federal government, with funds distributed by formula to over 600 state and local governmental units, called service delivery areas (SDAs). Each SDA must form a private industry council (PIC) comprised of representatives of the private sector and of other governmental and nonprofit organizations. PICs may choose to run the program or to serve more as a board of directors, providing guidance. Private sector members of the PIC must constitute a majority of the membership. Major activities for participants enrolled in JTPA include the following:

- *Basic skills and remedial education.* These programs provide participants with classroom instruction in reading, arithmetic, and other academic skills. The programs are often intended to lead to a general equivalency diploma (GED) or high school diploma.

- *On-the-job training (OJT)*. Work opportunities with individual employers are offered in OJT programs. The employer typically receives a reimbursement of 50 percent of wages paid to the participant for up to six months to cover the cost of formal and informal training.
- *Work experience*. Work experience programs provide paid employment for participants with government or nonprofit agencies and organizations. Participants are generally paid the minimum wage. The intent of the program is for the individuals to gain experience that will help them qualify for an unsubsidized job.
- *Job search assistance*. Participants are helped to improve their job search methods and skills.

The amount of work experience that can be provided is limited by provisions governing the use of funds, and the 1992 amendments to JTPA restricted the use of job search assistance provided without training and placed constraints on the use of OJT, particularly for youth. In program year 1993, the most common activities for adults were classroom training (46 percent), job search assistance (19 percent), and on-the-job training (18 percent), as reported by Stanley (1995). In 1993, the average length of stay for adults was about four months, and the average cost per terminated participant was about \$3,300.

JTPA programs have several features that encourage the state and local governmental units that receive funding to serve people with disabilities, but the programs are generally targeted to needy groups, and people with disabilities must often compete with other disadvantaged individuals for scarce program resources. The original legislation defines a handicapped individual as “any individual who has a physical or mental disability which for such individual constitutes or results in a substantial handicap to employment.” The December 1992 amendments replaced the term “handicapped individual” with the term “individual with a disability” but otherwise left the definition unchanged. Beginning in program year 1992 (the 12-month period beginning July 1, 1992), however, programs were required to report individuals with a disability using the following definition based on the Americans with Disabilities Act (ADA).

Any individual who has a physical (motion, vision, hearing) or mental (learning or developmental) impairment which substantially limits one or more of such person's life activities and has a record of such an impairment, or is regarded as having such an impairment. Record the code as follows:

- 1 – Yes, individual has such an impairment that *does* result in a substantial barrier to employment;
- 2 – Yes, individual has such an impairment that *does not* result in a substantial barrier to employment;
- 3 – No, individual has no disability (U.S. Department of Labor 1994).

The reporting instructions state that a response of 1 to the revised definition is the same as the definition used in prior years, although these do not appear to be equivalent. While the revised version is to be used for reporting characteristics, this definition differs from the statutory definition, which is to be used for determining eligibility.

The JTPA Title II programs have enrolled a significant number of people with disabilities. Comparisons over time are difficult because of the change in the definition for reporting purposes as of program year 1992. Between program years 1989 and 1991, the total number of individuals terminated from Title II-A programs dropped substantially, from 613,200 to 481,600, and although the proportion of these individuals with disabilities increased from 12.9 percent to 14.2 percent, their absolute numbers declined from 79,000 in program year 1989 to 68,200 in program year 1991 (U.S. Department of Labor 1992 and 1993a). Data for program year 1993 indicate that 10.6 percent of adults terminated and 19.8 percent of the youth terminated had disabilities.

Table 3 shows the characteristics and outcomes for individuals terminated from Title II-A programs. The information is for program year 1991, the latest for which data are currently available. There are some notable differences between the characteristics of disabled and nondisabled persons, but the outcomes are only slightly worse for those with disabilities. Relative to nondisabled Title II-A participants, those with disabilities were more likely to be men (58 percent compared to 42 percent), white non-Hispanic (70 percent compared to 47 percent), young (42 percent under age 19 compared to 26 percent), not on Aid to Families with Dependent Children (AFDC) or other welfare (9 percent

on AFDC compared to 30 percent), and a high school student (41 percent compared to 18 percent). Individuals with disabilities were just as likely to be economically disadvantaged as those without disabilities (92 percent compared to 93 percent).

Table 3. Comparison of Characteristics of Participants Terminated with and without Disabilities in JTPA Title II Programs during Program Year 1991 (July 1991-June 1992)

Selected characteristics and outcomes	People with disabilities (percent)	People without disabilities (percent)
Sex		
Male	58	42
Female	42	58
Minority status		
White excluding Hispanic	70	47
Black excluding Hispanic	20	36
Hispanic	7	13
Other	3	4
Age at enrollment		
Younger than 19	42	26
19-21	12	16
22-54	43	54
55 and older	4	5
Economically disadvantaged	92	93
Receiving AFDC	9	30
Receiving any public assistance	30	53
Unemployment compensation claimant	4	7
Education status		
School dropout	17	30
Student (high school or less)	41	18
High school graduate	42	53

Table 3. (continued)

Selected characteristics and outcomes	People with disabilities (percent)	People without disabilities (percent)
Program activity		
Classroom training	39	45
On-the-job training	9	15
Job search assistance	15	15
Work experience	7	6
Other services	29	19
Median length of stay (days)	150.4	136.5
Average entered employment rate by type of service received		
Overall	49	50
Classroom training	36	43
On-the-job training	78	73
Job search assistance	72	65
Work experience	43	41
Other services	46	41
Average hourly wage at termination by type of service received		
Overall	\$5.44	\$5.82
Classroom training	\$5.98	\$6.08
On-the-job training	\$5.32	\$5.76
Job search assistance	\$5.52	\$5.78
Work experience	\$4.96	\$5.07
Other services	\$4.99	\$5.55

SOURCE: U.S. Department of Labor (1993a)

Participants with disabilities received a slightly different mix of services than did other participants. The proportions acquiring classroom training and on-the-job training were lower (39 percent compared to 45 percent and 9 percent compared to 15 percent, respectively), and more

participants with disabilities received “other services” (29 percent compared to 19 percent). Participants with disabilities remained in the program about two weeks longer than other participants (150.4 days compared to 136.5 days). In terms of outcomes, the proportions entering employment at termination were virtually identical (49 percent for participants with disabilities compared to 50 percent for those without disabilities), and the hourly wage rate for those obtaining employment was somewhat lower for participants with disabilities (\$5.44 per hour compared to \$5.82).

Thus, in spite of the potential problems with the performance standards system (described below), JTPA Title II programs have been able to attract a reasonable number of participants with disabilities, and the outcomes have been close to those achieved for participants without disabilities. This relative success does not mean that improvements could not be made. It is possible that the favorable results ensue from creaming among the population with disabilities. Thus, additional incentives in the performance standards system may still be warranted, and SDAs should consider negotiating with the governor to obtain lower standards if enrolling severely disabled individuals is being considered.

The Department of Labor recently funded a controlled experiment to determine the effectiveness of JTPA Title II-A programs (Orr et al. 1994). The evaluation took place in 16 sites throughout the country, and the treatment and control groups were followed for 30 months after random assignment. In-school youth were excluded from the experiment. Major findings, as reported by Orr et al. (1994) and Stanley (1995) are as follows:

- For youth, the evaluation found no significant impact on earnings during the 30 months after random assignment. Estimates of the impact on earnings were positive but not statistically significant for young women and were negative and not significant for young men.
- The program increased earnings for both adult men and adult women participants. During the second post-program year, both men and women experienced gains of about \$900 in 1993 dollars over the control groups. These gains represented a 15 percent differential for women and a 10 percent differential for men.

- The earnings gap between the experimental and control groups widened over the post-program period, especially for men. Subsequent analyses may lead to larger impacts of the program.
- The impacts were generally greatest for participants assigned to receive OJT and/or job search assistance, and the impact for vocational classroom training was always positive (but not always statistically significant for subgroups).

At this time, the future of JTPA is very uncertain. A number of proposals have been made to modify the nation's employment and training system. Options being considered include abolishing the programs entirely and providing the eligible population with vouchers, and providing employment and training block grants to states.

There are several special features of JTPA that either encourage local SDAs to enroll people with disabilities or make it easier for people with disabilities to meet the entry requirements. While these features are likely to have increased enrollment of people with disabilities in the programs, it is impossible to gauge how large the impact has been.

Special Definition of Family for People with Disabilities

The Title II JTPA programs have strict targeting requirements. At least 90 percent of the participants must be economically disadvantaged, and a maximum of 10 percent may have some other barrier to employment.⁷ Individuals with disabilities are permitted to have only their personal income considered in determining eligibility rather than having the entire family's income counted. This provision permits an individual with disabilities to qualify even if his or her parents or spouse earns enough to exceed the income limits. Estimates are not available on the number of additional individuals with disabilities who are eligible because of this provision.

Requirement for Enrollment of the Hard to Serve

The December 1992 amendments to JTPA added requirements that at least 65 percent of both Title II-A adult and Title II-C youth participants fall into a category of "hard to serve." In addition, the Secretary of Labor is required to establish performance standards and a reward

structure for SDAs that exceed the 65 percent requirement. Section 203 defines the term hard to serve for adults to include the following categories:

- individuals who are basic skills deficient,
- individuals who are school dropouts,
- recipients of cash welfare programs, including AFDC), Supplemental Security Income (SSI), and general assistance,
- offenders,
- individuals with disabilities,
- homeless individuals, and
- individuals in another category approved by the governor but not to include “poor work history” or “unemployed.”

For youth, the disabilities category is expanded to include learning disabilities, and the welfare recipient category is omitted; categories added are pregnant or parenting individuals, runaways, and persons with educational attainment at least one grade level below what is appropriate.

Although the hard-to-serve requirements could, in theory, increase enrollments of individuals with disabilities, it is unlikely that these provisions will have much impact. The Department of Labor has chosen to implement the performance standards by making achievement of the required enrollment of hard-to-serve individuals a “gate” that must be passed to receive any other incentive funds; however, no incentive funds are received simply for meeting or exceeding the hard-to-serve participation requirements. A series of group discussions was held at three regional conferences in the spring of 1994 for an evaluation of the impact of the 1992 amendments. At the meetings, representatives of most SDAs indicated that they were already fulfilling the hard-to-serve requirements, and so they would not have to change their enrollment behavior as a result of the amendments. Representatives of some SDAs stated that they have selected food stamp recipients as their additional target group, and because the eligibility requirements are relatively broad for the food stamp program, such SDAs would have little trouble satisfying the 65 percent requirement. Thus, the hard-to-serve stipulations are likely to have little, if any, impact on enrollment of

people with disabilities (or of other hard-to-serve groups, for that matter): most SDAs already meet the requirement and the additional category provides SDAs with sufficient flexibility to satisfy the rules without serving other groups.

Performance Standards Adjustments

The JTPA Title II programs include a performance management system in which SDAs are held accountable for meeting goals. The basic parameters of the system are established at the national level, but governors have a significant amount of latitude to change the level of expected performance to meet their own criteria, to add additional evaluation measures, and to decide how the various standards will be aggregated to assess total outcomes. SDAs that exceed expected results receive additional funding; SDAs that fall short receive technical assistance, and, if performance remains poor for two consecutive years, they are reorganized.

There are currently four core performance standards for adults served under Title II-A of JTPA and two standards for youth served under Title II-C:

- the adult follow-up employment rate, defined as the total number of adult trainees who were employed at least 20 hours per week during the 13th week after termination, divided by the total number of adult trainees;
- adult follow-up weekly earnings, defined as total weekly earnings for all adults who were employed for at least 20 hours per week during the 13th week after termination, divided by the total number of adults employed at follow-up;
- the welfare adult follow-up employment rate, defined for adult welfare recipients in the same manner as for all adults;
- welfare follow-up weekly earnings defined for adult welfare recipients in the same manner as for all adults;
- the youth entered employment rate, defined as the total number of youth who, at termination entered employment with at least 20 hours per week, divided by the total number of youth who terminated (other than potential dropouts who remained in school); and

- the youth employability enhancement rate, defined as the total number of youth terminating from the program who obtained one of the employability enhancements at termination, divided by the total number of youth who terminated.⁸

Satisfactory performance on each of the measures is adjusted to take account of the characteristics of participants served and local economic conditions. The adjustments are determined through regression analysis based on data submitted by SDAs in previous years. Linear regression models are used to determine which participant and local economic variables have a statistically significant impact on the performance measures.⁹ Variables with insignificant coefficients or coefficients with what appears to be the “wrong” sign are omitted from the adjustment equation. Note, for example, that percentage Hispanic does not appear as an adjustment for the adult follow-up employment rate, so SDAs receive no adjustment in expected performance for serving more Hispanics. The constants in the equations are set so that approximately 75 percent of all SDAs will exceed the standards, but governors may vary the constant to take account of conditions in their states.

Adjustment models for program year 1994 (July 1, 1994 through June 30, 1995) have recently been released. Table 4 shows the adjustments in program year 1994 for the percentage of participants with disabilities and for three other characteristics that apply to the six core performance measures. The two measures with adjustments of zero (the two welfare measures) make no modification in expected performance for serving individuals with disabilities, i.e., SDAs are expected to achieve as well on these measures for people with disabilities as they do for other participants. To interpret the adjustments, consider the following example for the adult follow-up employment rate. The percentage of participants with a disability coefficient of $-.090$ means that, if the share of participants who have a disability is increased by one percentage point (such as from 10 percent to 11 percent), then the acceptable level of performance on the measure is decreased by $.09$ percentage points. The adjustments in the standards for the adult follow-up employment rate and adult follow-up weekly earnings are greater for serving people with disabilities than are the adjustments for dropouts, blacks, and females; however, the adjustments for welfare adults with disabilities on follow-up employment and earnings are zero

and are, therefore, smaller than the adjustments for the other three categories.

Table 4. Performance Standards Adjustments in Program Year 1994 (July 1994-June 1995) for Title II-A Core Standards for Persons with Disabilities and Selected Other Groups

Performance measure	Population characteristics			
	Disability	Dropout	Black	Female
			(percent)	
Adult follow-up employment rate	-.090	-.084	-.086	-.056
Adult follow-up weekly earnings	-.558	-.276	-.325	-.443
Adult welfare follow-up employment rate	0	-.062	-.048	-.144
Adult welfare follow-up weekly earnings	0	-.274	-.340	-.642
Youth entered employment rate	-.047	-.162	-.090	-.061
Youth employability enhancement rate	-.047	0	-.059	0

SOURCE: Social Policy Research Associates (1994)

Although the adjustment procedures provide some stimuli to serve people with disabilities, the incentives do not appear especially strong and suffer from several shortcomings. To see the size of the incentives, consider an SDA that initially has all factors in the adjustment model at the national average and has the option of doubling the percentage of people with disabilities it serves, from 10.6 percent to 21.2 percent. For an SDA with average values of all factors in the adjustment model, the standard for the follow-up employment rate would be 59.0 percent (based on the Department of Labor worksheet). If the SDA doubled its proportion of people with disabilities to 21.2 percent, the follow-up employment rate standard would drop by .95 percentage points ($10.6 \times .09 = .95$) to 58.05 percent. Thus, although an SDA receives a reduction in its level of required performance for serving additional people with disabilities, the magnitude of the incentive is probably too small to have much impact. The result is also quite small when the same exercise is performed for follow-up weekly earnings: the standard for

follow-up weekly earnings for an SDA with average factor values would drop from \$245 to \$236 if the proportion of participants with disabilities doubled from 10.6 percent to 21.2 percent. In the case of adult welfare recipients, an increase in the proportion of participants with disabilities would have *no* impact on minimum acceptable performance.

Another shortcoming of the adjustment procedure is that it treats all disabilities alike. An SDA receives the same adjustment for serving a person with a minor or a major disability. SDAs who wish to maximize measured performance avoid serving people with major disabilities and concentrate on people with minor disabilities.¹⁰ Under the current performance management structure, it is impossible to overcome this problem because there are too few participants with disabilities to be disaggregated into finer categories for the regression analysis used to determine the adjustments.

Note that even if the adjustment procedure worked as intended, it would provide no incentive to serve people with disabilities. As explained in the latest technical assistance guide (Social Policy Research Associates 1994, p. III-1), "Performance standards are adjusted to 'level the playing field' by making the standards neutral with respect to who is served and to local economic conditions." Thus the current system is not intended to provide net incentives to serve people with disabilities; if the Department of Labor wished to provide such motivation, the adjustments would have to do more than level the playing field.

Another problem with the current approach to adjusting performance is that, because the percentage of participants with disabilities is relatively small, the regression coefficients are probably unstable, particularly for the adult welfare group, which is likely to include very few people. The small proportion of welfare recipients with disabilities probably results in a failure to find an appropriate adjustment for adults on welfare. Unfortunately, under the current approach, SDAs receive no modification in their expected performance for adults on welfare for serving recipients with disabilities. Although the program year 1994 adjustment models for youth included a factor for the proportion of participants with disabilities, the 1993 models included no such adjustment. It is unlikely that the reason for the change in the status of the variable is in any way related to changes in the efficacy of the programs

for people with disabilities; instead the change probably stems from the instability of the regression coefficients estimated.

Finally, by estimating the adjustment models on participant data rather than on the unserved eligible population, the current approach may create several problems. First, if the SDAs do tend to cream among the disabled, the adjustments produced by the regressions will apply to the "more advantaged" population already served and may not provide enough incentive for those with more severe disabilities to be served. In addition, by estimating the relationships on the basis of participant data, the coefficients derived combine training impacts with labor market differences that would have resulted in the absence of the program.¹¹

In sum, the performance management system in JTPA has mixed effects in its incentives to serve people with disabilities. If there were no performance management system, SDA administrators would not consider creaming as a means of assuring that they have high measured performance. The performance management system includes adjustments for serving groups with various outcomes, but the adjustments for serving people with disabilities do not take account of the degree of disability; the effects are sometimes impossible to measure, resulting in no adjustment; and the adjustments are based on the population currently served rather than on the population interested in participating. Although the current regression-based system has an objectivity that has helped make it credible with the SDA administrators, it may not provide them with strong enough incentives to enroll people with disabilities in adequate numbers. The Department of Labor should seriously consider the possibility of modifying the adjustments to achieve greater enrollment of groups of interest.¹² Although regression modeling provides a useful starting point for adjustments and was very helpful in getting SDAs to accept the performance management system, the Department of Labor should now determine whether the current procedures do an adequate job of promoting its policies. In situations where the regression model for the current year produces coefficients that are judged inappropriate for inclusion, the Department of Labor could use estimates from previous years, pool data from several years, or use results obtained from another group. This would avoid having no adjustment for adult welfare follow-up employment and earnings in program year 1994. In addition, the Department of Labor should

reconsider whether it wants simply to “level the playing field” or to provide actual incentives to serve people with disabilities and other groups with high needs.

Vocational Education

Vocational education programs provide students at the secondary and postsecondary levels with training that will enable them to pursue employment in a broad range of occupations. Federal support for vocational education is authorized under the Perkins Act, which defines vocational education as follows:

Vocational education means organized educational programs which are directly related to the preparation of individuals for paid or unpaid employment, in such fields as agriculture, business occupations, home economics, health occupations, marketing and distributive occupations, technical and emerging occupations, modern industrial and agricultural arts, and trades and industrial occupations, or for additional preparation for a career in those fields, and in other occupations requiring other than a baccalaureate or advanced degree (P.L. 98-527).

There is little, if any, distinction between vocational education and training provided under JTPA and other programs, so it is appropriate to treat vocational education as a training program for this study.

Vocational education is primarily funded by the states rather than by the federal government, but federal support is currently \$1.178 billion annually (Apling and Irwin 1994).¹³ Most of that money is distributed to states by a formula based on population and per-capita income. States are required to distribute 75 percent of their federal funds to local areas using a formula based on proxy measures of poverty. States have discretion to allocate the funds between the secondary and postsecondary levels. Most states spend a majority of the funds on secondary education; in fiscal year 1993, with 44 states reporting, 62.2 percent of federal funds were used at the secondary level, with the percentage varying from 8.6 percent up to 91.9 percent (U.S. Department of Education 1994). In the discussion that follows, attention is restricted to postsecondary vocational education.¹⁴

About two-thirds (65.7 percent) of individuals enrolled in postsecondary vocational programs in the 1989-1990 school year were in public community colleges, and 22.5 percent were in proprietary schools (Tuma 1993). The remaining students were enrolled in public vocational-technical schools (3.7 percent), private junior colleges (2.9 percent), public four-year colleges (3.2 percent), and private four-year colleges (1.9 percent).

Analysis of the National Postsecondary Student Aid Survey (NPSAS) indicates that many people with disabilities participate in postsecondary vocational education. Of the 5.76 million students enrolled in vocational programs in the 1989-1990 school year, about 12.7 percent, or 732,000, had a physical or learning disability.¹⁵ The proportion of students with disabilities was greater in vocational curricula than in academic two-year programs (11.9 percent) and four-year degree programs (7.6 percent).

The literature concerning the impact of postsecondary vocational education on earnings is somewhat inconsistent. One review of the literature concludes that each additional year of education beyond high school, academic or vocational, increases earnings by 5 to 10 percent even if a degree or other credential is not obtained (Stanley 1995). Another survey of the literature is much more cautious and concludes that analysis of the returns to higher education is hampered by a lack of recent, high-quality data and by methodological problems (U.S. Department of Education 1994).

Several approaches have been included in the Perkins legislation to encourage states and local school districts to adequately enroll and serve individuals with disabilities. Prior to 1990, 10 percent of the federal funds were earmarked for services to participants with disabilities. The 1990 legislation eliminated the set-aside but gave states and local districts increased responsibilities such as

- obtaining input from state personnel responsible for programs for students with disabilities,
- adjusting performance standards and measures “to encourage service to targeted groups or special populations,”
- assuring that the state will monitor the degree to which the needs of special students are met, and

- assuring that the state will guarantee equal access to quality vocational education programs for special population students and establish procedures for community input at the state and local levels (U.S. Department of Education 1994).

The National Assessment of Vocational Education conducted a survey to determine if the elimination of the set-aside resulted in reduced services for disabled students and concluded that “elimination of the set-aside funds did not lead to a reduction in services [to students with disabilities] among postsecondary institutions” (U.S. Department of Education 1994). The use of adjustments to performance standards to reflect the proportion of students with disabilities was completed or in process in 45 percent of the states by the 1992-1993 school year (U.S. Department of Education 1994). It is likely that states are moving slowly in this area because they are reluctant to express a willingness to accept lower performance for special populations than for the regular population.

Postsecondary vocational education is a major source of training for people with disabilities. The recent National Assessment of Vocational Education has indicated that alternatives to set-asides can result in maintaining the enrollment level of individuals with disabilities. An important issue for further exploration is what is and should be the respective roles of vocational rehabilitation and vocational education. Is there a need for separate programs, and if so, what should the responsibilities of each program be? In addition, estimates should be made of the impact of vocational education on the employment and earnings of the population with disabilities.

The Employment Service

The U.S. Employment Service (or job service, as it is sometimes known) is a federal-state partnership providing labor exchange and related services and activities to U.S. workers and firms. The employment service is one of the nation’s oldest employment and training programs, dating back to the Wagner-Peyser Act of 1933. The program is funded through the federal unemployment insurance tax on employers, with the money channeled back to state employment service agencies.

In this section, the provision of basic labor exchange activities for persons with disabilities is discussed, along with the targeted jobs tax credit (TJTC), which was administered by the employment service. The treatment of disabilities in the testing program is also briefly reviewed.

Although the employment service is intended to assist to all segments of the labor force, special provisions apply to individuals with disabilities.¹⁶ When the Job Training Partnership Act of 1982 amended the Wagner-Peyser Act, people with disabilities were the only population group for whom states were required to include provisions in their annual plans. Section 8(d) of the Wagner-Peyser Act indicates the following:

Such (annual state) plans shall include provision for the promotion and development of employment opportunities for handicapped persons and for job counseling and placement of such persons, and for the designation of at least one person in each State or Federal Employment office, whose duties shall include the effectuation of such purposes.

Each October, the Employment Service observes National Disability Employment Awareness Month. During October, special promotional kits prepared by the President's Committee on Employment of People with Disabilities are distributed to state employment service agencies. The kits are intended to assist the state agencies in observing the program and in advancing opportunities for people with disabilities.

The most recent data on characteristics of applicants and the services provided to them are for program year 1992 (July 1992 through June 1993), and highlights are presented in table 5. People with disabilities made up a very small proportion of all applicants: only 529,000 out of 21.346 million applicants, or 2.5 percent, as of program year 1992. This is somewhat less than one would expect based on their share of the labor force.¹⁷ Relative to all applicants, those with disabilities were more likely to have been males (72.4 percent compared to 58.3 percent), over age 44 (31.1 percent compared to 19.1 percent), and economically disadvantaged (25.7 percent compared to 15.8 percent). Surprisingly, the percentage on welfare was about the same for

the two groups (5.9 percent for applicants with disabilities and 5.6 percent for those without disabilities).

Table 5. Characteristics and Activities of Employment Service Applicants, Program Year 1992 (July 1992-June 1993)

Characteristics and activities	All applicants	People with disabilities
Total active applicants	21,346,000	529,000
	(Percent)	
Male	58.3	72.4
Female	41.7	27.6
Age		
Under 22	15.5	7.8
22-44	65.3	61.2
45-54	12.0	19.8
55 and over	7.1	11.3
Economically disadvantaged	15.8	25.7
Welfare recipient	5.6	5.9
Services received		
Assessment	8.8	17.2
Testing	2.4	3.6
Job search activities	15.2	23.8
Referral to employment	37.3	42.5
Placement	12.6	14.4

SOURCE. Data provided by the U.S. Department of Labor, United States Employment Service, October 1994.

Employment service applicants with disabilities were more likely to have received services and obtained a job than other applicants. Assessment was provided to 17.2 percent of applicants with disabilities but to only 8.8 percent of all applicants. A slightly higher percentage of applicants with disabilities were tested (3.6 percent of applicants with disabilities and 2.4 percent of all applicants), but this result must be interpreted with caution as testing is inappropriate for some people

with disabilities. Individuals with disabilities were also more likely to have had job search activities (23.8 percent compared to 15.2 percent for all applicants) and to have been referred for a job (42.5 percent compared to 37.3 percent). Finally, and perhaps most importantly, applicants with disabilities were slightly more likely to have been placed in a job (14.4 percent compared to 12.6 percent). Thus, individuals with disabilities have done quite well relative to people with no disabilities in terms of the labor services provided to them and the results achieved. The only area that may be of concern is that the proportion of people with disabilities using the employment service has been lower than one would anticipate.

TJTC was enacted in 1978 to provide incentives for firms to hire workers with selected characteristics. The program has been controversial throughout its life, and it has been scheduled for termination numerous times. The program expired December 31, 1994, but some parties have expressed interest in reviving the program. Many of the provisions that have generated disputes about TJTC were either corrected or did not apply to workers with disabilities. In previous years, for example, firms were able to receive retroactive certifications for hiring members of the target groups, and young workers with no special barriers to employment were eligible if they were in a cooperative education program.

Evaluations of the program indicate that it may have had a small positive effect on employment of economically disadvantaged youth, but the results are not robust, and research on the impact of the program on people with disabilities has not been conducted.¹⁸ In addition, one study found that advising employers of one's eligibility through participation in a welfare program actually hurt job prospects; because disabilities are more difficult to conceal, it is unlikely that this effect would pertain to people with disabilities (Burtless 1985).

Eligible individuals could obtain vouchers from the employment service indicating that they qualified for the credit. An employer was required to request certification when or before the employee began work. If the job applicant had a voucher, the employer had five days to request certification. For individuals without vouchers, the employer was required to certify to the employment service that a good faith effort was made to determine eligibility.

The tax credit for most groups was 40 percent of the first \$6,000 in qualified wages, with a maximum credit of \$2,400. Employers claiming the credit reduced their tax deduction for wages by the amount of the credit. The Committee on Ways and Means (U.S. Congress 1994, p. 709) notes that the effective subsidy was about 18 percent for a full-time employee hired at the minimum wage by an employer in the 35 percent tax bracket.

In its final form, TJTC applied to nine groups:

- people with disabilities who have been referred to an employer from the vocational rehabilitation program of either a state or the U.S. Department of Veterans Affairs;
- recipients of federal SSI, the welfare program for poor individuals and couples who are aged, blind, or disabled;
- youth aged 16 to 19 who are from economically disadvantaged families and who participate in a qualified cooperative education program;
- economically disadvantaged Vietnam-era veterans;
- recipients of state or local general assistance payments for at least 30 days;
- youth aged 18 to 22 from economically disadvantaged families;
- economically disadvantaged ex-convicts who are hired no later than five years after the earlier of release from prison or the date of conviction;
- recipients of AFDC who have received assistance for at least 90 days prior to being hired; and
- economically disadvantaged youth aged 16-17 when hired for a summer job, if they have not previously worked for the same employer.

Although people with disabilities could have been in any of the nine categories, they were most likely to be in the first two. In program year 1991, 500,000 certifications were issued (Landini 1995). The most recent year for which the distribution of certifications by eligibility category is available is calendar year 1989. In that year, 9.0 percent of the certifications were for vocational rehabilitation referrals and 1.6 per-

cent were for supplemental security income recipients. If those proportions remained the same, slightly over 50,000 certifications were issued per year for people with disabilities. (Of all certifications, economically disadvantaged youth 18 to 22 years old and AFDC recipients were the two largest groups, constituting about three-quarters of the total.) Although TJTC may have certified a significant number of individuals with disabilities, the lack of any evidence showing that the program increased employment or earnings for those certified makes it likely that the program's expiration has not produced much harm for the U.S. population with disabilities.

As part of its procedure of matching job applicants and employers, the Employment Service has long used aptitude tests, particularly the General Aptitude Test Battery (GATB). In the 1970s and 1980s, the testing program became increasingly controversial, primarily for reasons unrelated to disabilities. Issues of importance included the question of whether test scores could be generalized and applied to most or all occupations (validity generalization or VG) and how differences in mean scores across demographic groups should be handled in scoring the GATB and reporting results to employers (group norming). In addition, the test was nearly 45 years old, and there was concern about how well it was holding up in predicting job success.

To deal with these and other concerns, including the applicability of tests such as the GATB for people with disabilities, the Department of Labor provided funds to the National Research Council to investigate matters related to fairness in employment testing. Although most of the resulting report deals with other topics, the National Research Council Committee has several recommendations regarding employment testing for people with disabilities:

- For applicants with handicapping conditions, we recommend the continued use of job counselors to make referrals.
- Measures should be taken to ensure that no job order is filled automatically and solely through the VG-GATB system. Job counselors who serve handicapped applicants, disabled veterans, or other populations with special needs must have regular access to the daily flow of job orders.
- To ensure that handicapped applicants who can compete with tested applicants are given that opportunity, the GATB should be

used when feasible to assess the abilities of handicapped applicants. But the test should be used to supplement decision making, not to take the place of counseling services.

- Because special expertise in assessing the capabilities of people with handicaps is necessary and available, we recommend that the Department of Labor encourage closer coordination between state rehabilitation agencies and State Employment Service Agencies. States should consider placing their rehabilitation counselors in local employment service offices that serve a sizable population of handicapped people (Hartigan and Wigdor 1989).

As a result of the National Research Council study, the employment service has undertaken a major psychometric research agenda to adapt its testing procedures to meet the needs of employers and applicants without discriminating against particular groups. Results of these studies are now becoming available. The interim policy is to recognize that tests can be useful, but no referral can rest solely on test scores. As noted, testing currently involves only a small proportion of applicants, but the percentage is slightly higher for those with disabilities.

Employment of Workers with Disabilities under Special Certificates

Since 1938, the Fair Labor Standards Act (Section 14[c]) has permitted employers meeting certain requirements and obtaining special certificates to pay workers with disabilities less than the minimum wage.¹⁹ The term “worker with a disability” is defined for this law as “an individual whose earning or productive capacity is impaired by a physical or mental disability, including those related to age or injury, for the work to be performed.” Employers who wish to make use of this provision must obtain a certificate from the Wage and Hour Division of the Department of Labor’s Employment Standards Administration.

The covered employee is to be paid a “commensurate wage,” which is defined as the prevailing wage for the work adjusted for the productivity of the person with the disability relative to the typical worker in

the area. Thus, if the prevailing wage for a given job is \$5.00 per hour and a disabled worker is 80 percent as productive as a typical worker, the disabled individual could be paid $.80 \times \$5.00 = \4.00 per hour, which is less than the regular minimum wage, provided that the employer obtains the certificate.

An employer who wishes to operate such a program must calculate both the prevailing wage rate and the relative productivity of the workers. Because worker productivity varies, employers are responsible for measuring the productivity of each person employed under the program to assure that the individual is not paid less than the commensurate wage. Workers must be reviewed at least once every six months to reassess their commensurate wage. Because of the computations that must be conducted and employer fear of violating discrimination law, particularly the ADA, most affected individuals are employed by sheltered workshops that exclusively hire workers with disabilities, and few such workers are hired by regular firms. A Department of Labor official has estimated that approximately 7,000 employers have certificates and that about 200,000 workers are employed under the program. It is believed that the majority of those working under the program have mental retardation as their disability. In carrying out investigations, the Wage and Hour Division has found that employers sometimes underestimate the productivity of their workers with disabilities.

Although the special certificate program affects a large number of people with disabilities, the Department of Labor has not evaluated the program in over 20 years, due to a shortage of resources. The net impact of the program on job creation and whether the program could or should be expanded are of particular interest. Especially worth exploring is the potential for expanding the use of the program by regular employers.

Conclusions

A number of federal employment and training programs are available for people with disabilities. In reviewing the variety of programs that serve this population, it does not appear to be a comprehensive plan for assessing these individuals' employment and training

needs or for developing a comprehensive service strategy. Many of the programs use different definitions of disabilities, and programs often appear disconnected from others in the same cabinet department and linked even less with programs and agencies in other departments. A comprehensive review of all the major employment and training programs for people with disabilities is overdue. Among the questions that need to be answered are the following:

- What are the unique responsibilities of each program in serving individuals with disabilities?
- When (if ever) is it appropriate to serve individuals with disabilities in special programs such as vocational rehabilitation, and when is it better to serve them in general programs such as vocational education and JTPA?
- How can the coordination of programs be encouraged, so that duplication of effort is avoided and so that people with disabilities are served most effectively?
- What are appropriate levels of service to individuals with disabilities in each of the programs? What is the appropriate level of service overall?
- If some programs are not serving appropriate numbers of people with disabilities, what incentives or requirements should there be for them to meet these goals?

It is apparent that all of the major employment and training programs have an interest in serving individuals with disabilities. Unfortunately, the lack of a single lead agency has led to decentralized, uncoordinated efforts with inconsistent and incomplete data, and one cannot judge whether the resources provided are adequate or if the mix of programs and services is appropriate.

NOTES

1 The paper also does not cover the Dictionary of Occupational Titles (DOT) program. To the extent that the DOT (or its successor) indicates essential functions of occupations, the DOT may be important in interpreting provisions of the Americans with Disabilities Act. The DOT is in the midst of a major revision, and Department of Labor staff have indicated that they are aware of the issues, but the DOT revision project is at too early a stage for any findings to have been reported.

2 Closures from the active caseload are classified as rehabilitated if the individuals have (1) been declared eligible for services, (2) received appropriate diagnostic and related services, (3)

had a program for vocational rehabilitation services formulated, (4) completed the program, (5) been provided counseling, and (6) been determined to be suitably employed for a minimum of 60 days.

3 Note that since these data only apply to cases that were closed with rehabilitation during fiscal year 1991, they may not exactly reflect the total population of individuals being served by the program.

4. Figures in this paragraph are for individuals accepted into the program in 1988 (U.S. General Accounting Office 1993) Data on cases rehabilitated in 1991 (U.S. Department of Education 1992) provide similar but not identical findings

5. Dean and Dolan note that the use of dropouts as a comparison group is not ideal, but they argue that dropouts are the best available group for the analysis

6 The Title III program for dislocated workers serves very few people with disabilities and is not discussed further in this paper. In program year 1990, for example, only 2 to 3 percent of individuals terminated, depending on the source, were reported as having disabilities.

7 Economically disadvantaged is defined in Section 4 of JTPA as an individual who is a member of a family that receives cash welfare payments under a federal, state, or local welfare program, is a member of a family receiving total family income for the six months prior to application that is less than either the poverty level or 70 percent of the lower living standard income level, is receiving or is eligible to receive food stamps, qualifies as a homeless individual under the McKinney Act, or is a foster child on whose behalf state or local payments are made

8. Youth employability enhancements include attaining two or more PIC-recognized youth employment competencies, completing a major level of education following participation of at least 90 days or 200 hours in the program, and entering and remaining at least 90 days or 200 hours in non-Title II training or receiving a certificate of occupational skill attainment

9 Governors are not required to use the Department of Labor's adjustment models, but virtually all states now do. In the early years of the program, many states used the Secretary's standards without adjusting for participant characteristics and local economic conditions

10 This "creaming" problem is not unique to people with disabilities, and, as noted, Congress amended JTPA in 1992 to require SDAs to assure that at least 65 percent of participants fall into a category of "hard to serve"

11 See Barnow 1994. Barnow demonstrates that, if the goal of the performance management system is to maximize total impact on the performance measures, then the current system leads to disincentives to serve members of groups for whom the program is most effective

12 This point applies to any hard-to-serve group. See Barnow and Constantine (1980)

13 It is widely believed that federal monies account for 8 to 10 percent of funding for vocational education, but accurate estimates are unavailable

14. The Perkins Act also supports several "special" and "national" programs. In fiscal year 1995, funded programs include vocational education provided by community-based organizations, tech-prep education, consumer and homemaking education, and tribally controlled postsecondary vocational institutions (Apling and Irwin 1994).

15. Figures in this section were estimated by the author based on data from NPSAS (Tuma 1993)

16 The Disabled Veterans' Outreach Program (DVOP) is administered through the Office of the Assistant Secretary for Veterans' Employment and Training. DVOP funds about 1,880 specialists who provide outreach, job development, and placement services to veterans with disabilities. About three-quarters of the DVOP staff are located in local employment service offices.

17 One must be cautious in making comparisons because of variation in the definitions used but people with disabilities comprise about 4.2 percent of the labor force. In 1993, there were 5.4 million people with disabilities out of a total of 128 million people in the adult labor force

Because the unemployment rate for individuals with disabilities is about twice as high as for those without work disabilities, one would expect the former to show greater use of the employment service. See LaPlante, et al. 1996).

18. For a brief review of some of the literature on TJTC, see Ehrenberg and Smith (1994)

19. This section is based on a telephone interview with Mr. Howard B. Ostmann of the Employment Standards Administration and on Title 29, Part 25, of the Code of Federal Regulations.

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