Community programs for severely handicapped adults: An analysis

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This is the first in an occasional series of invited manuscripts.

During the last 10 years, day programs for severely handicapped adults have become a familiar component of community services. This paper examines the current status of those programs, with particular reference to the vocational options provided to participants. Concerns are raised about the lack of work opportunities, disincentives to work, lack of federal coordination, and absence of entitlement. Strategies for effecting needed change are offered for policy makers, advocates, researchers, and public school personnel.

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For nearly three decades, the professional literature in psychology, education, and rehabilitation has included demonstrations of the vocational abilities of severely handicapped people. It is now clear that a variety of jobs can be performed competently, reliably, and remuneratively by previously dependent individuals. Together with the value placed on normal lifestyles, these demonstrations have led to a broadly based professional consensus that work should be an option for all individuals, regardless of the presence or severity of handicapping conditions (Bellamy, Horner, & Inman, 1979; Gold, 1973; Wolfensberger, 1967).

This paper examines the vocational options of one group of severely handicapped individuals: those who do not receive services in sheltered workshops or other employment training programs, and who are served, instead, in community programs variously called adult activity centers, developmental centers, day treatment programs, and work activities centers. Most of the severely handicapped adults in these day programs have been labeled moderately or severely retarded, severely emotionally disturbed, or multiply handicapped; many have spent part of their lives in public residential institutions; many were excluded from school as children; and most require elaborate interventions to effect behavioral changes that improve daily lifestyles.

This paper describes existing services in adult day programs and expresses some concerns about those services. The objectives are (a) to show that targe numbers of severely handicapped individuals now have very limited vocational opportunities and (b) to suggest strategies for achieving needed changes.

CURRENT SERVICES

In the United States, day programs for severely handicapped adults not served by sheltered workshops seem to date from the 1950s. At that time, sheltered workshops typically excluded individuals with more severe handicaps from their programs on the grounds that these people were not yet ready for vocational training (Cortazzo, 1972). To provide regular activities for severely handicapped individuals and relief for their parents, adult day programs (ADPs) emerged, with leadership from local units of the Association for Retarded Citizens, and expanded with local fund raising and volunteer efforts. Cortazzo (1972) reports that in 1964 there were 64 such centers nationwide, and that this number had increased to 422 by 1971.

Although ADP services are now largely supported by government agencies, the organization of ADPs still reflects their origin in volunteer efforts. Unlike services for children in the public schools, ADPs are typically operated as private, not-for-profit corporations that are legally controlled by volunteer boards of directors. Public agencies administer funds, purchase services, and regulate and monitor activities in ADPs, but public control over services is more limited than in the schools or other public agencies. As a

The deinstitutionalization efforts of this decade, together with expanded public funding of community services, income transfer, medical assistance, and housing alternatives, have drastically altered the scope, economics, and role of ADPs. Today these programs represent a significant element of each state's adult service planning and have become critical in efforts to disperse residents of public institutions into community programs. ADPs frequently are viewed as providing the initial services for newly deinstitutionalized individuals (cf. DHEW Report on Deinstitutionalization, 1978), and placement of individuals out of institutions frequently is contingent on availability of space in ADPs.

Despite the importance of ADPs in deinstitutionalization and community services, there is now little published information about the availability, type, duration, or cost of services provided by ADPs nationally, about the individuals served in ADPs, or about the functions of various state and federal agencies in funding and regulating these programs. To provide the needed information, the authors conducted a nationwide survey of state agencies responsible for administering ADPs. While detailed results of the survey will be reported elsewhere (Sheehan, 1980), an overview of the major findings is critical to the present program assessment.

State Program Survey

Between August and October, 1979, agency representatives in all 50 states were contacted to identify an individual who was knowledgeable about or responsible for administering the state's adult day programs. ADPs were identified as the dally community service for the state's most severely handicapped citizens; sheltered workshops administered through vocational rehabilitation agencies and programs in public residential institutions were specifically excluded.

An appointment was then made with the named individual for a telephone conversation lasting approximately 15 minutes. The conversation consisted of a structured interview in which the respondent replied to prepared questions about the state's services, providing both program descriptions and the source of his or her information. The interviewer recorded responses on a printed data sheet that was standardized for all states.

Forty-nine states provided information about ADPs in the survey. In Oklahoma, no single individual could be located who was responsible for or knowledgeable about statewide programs. Data from the 49 states are summarized in the following sections to answer several questions about ADP services in the United States. For those questions to which some states were not able to respond, the number of states actually providing data is noted.

1. What are the State-Level Goals for ADPs?

Twenty of the states surveyed (41%) reported that the overall goal of their ADP was to maximize the potential of the individuals served so that

they might become more independent. Seven states indicated that ADPs were to provide activities that enabled participants to develop basic skills. Another six states (12%) said that ADPs were the first step in a continuum of services, in which the goal was to prepare participants to move to the next program. Other states mentioned goals for providing respite for parents, serving as a community placement for the deinstitutionalized, and providing regular day care. Two states had not formulated state-level goals.

2. How Many Adult Day Programs Are There?

The 47 states responding to this question reported a total of 1,848 ADPs. A population-based estimate of the total number of programs nationally (the 3 states not providing data contain 7% of the U.S. population) is 1,989. Either figure represents phenomenal growth in these programs since Cortazzo's (1972) survey. It is clear that ADPs now represent a significant part of community services for handicapped adults in this country.

3. Who is Served in ADPs?

Forty-two states that were able to provide this information reported that about 81,239 individuals are served daily in ADPs (population-based nationwide estimate is 105,500). Thus, the average-size ADP serves 50 participants. While descriptions of these individuals are not available, state eligibility criteria provide some relevant information. Twenty-five_states reported that anyone labeled mentally retarded or developmentally disabled was eligible for services; others reported that eligibility was defined federally in either the Title XIX or Title XX programs under the Social Security Act; a few respondents felt that programs in their states were providing services to all eligible individuals. Most, however, felt that an unmet service need did exist, but could only estimate the number of unserved people. Respondents in two states felt that most of the people served in ADPs could succeed in work-oriented programs if the opportunity were provided.

4. What Services Are Provided in ADPs?

Thirty-one respondents (63%) indicated that the state required ADPs to provide particular services. The most frequently mandated service was for training in living and social skills (21 states); other mandated services were prevocational training (6 states), recreational programs (6 states), and a variety of more individualized service requirements (10 states). It should be noted that some states mandated several services. In requiring these services, state regulations seldom defined more than general service areas, leaving specific content of services up to the discretion of local programs.

Two features of the requirements for vocational services deserve note. First, vocational services were defined so that a wide variety of training programs and arts and crafts activities could be included; participation in paid work was not required in any state and was actually forbidden in a few. Second, many states expected local programs to provide vocational services only to those individuals who were thought to have the potential for placement in a workshop or job.

5. How Are ADPs Financed?

State-administered funds for ADP operation ranged from \$9.00 to \$35.00 per service day, with a rough average of \$13.00 per day. With an estimated 105,500 persons in ADPs daily for about 240 days each year, this represents an annual public expense for ADPs of approximately \$3000 per person—a total of approximately \$330,000,000. Respondents varied widely in their estimates of the proportion of actual operating costs which this public support covered. Most states acknowledged that additional local support was necessary for program operation, and 27 states specifically required some local matching funds.

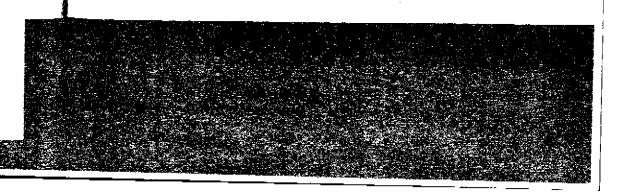
Public monies used to fund ADPs come from three primary sources: Title XX (Social Services) of the federal Social Security Act, Title XIX (Medicaid) of the federal Social Security Act, and state appropriations. Less widely reported income sources include city or county matching funds, local fund-raising, contracts, and grants. Forty-one states report using Title XX funds to support program operations. These monies are provided to states on a formula basis, have a specified ceiling, and may be used according to state-determined priorities to meet social service needs. Use of Title XX funds to support ADPs in a state indicates that the state has ranked this service need above other welfare and social service programs. Title XX funds require a 25% match at the state or local level.

Fourteen states reported using Title XIX funds to support all or part of ADP costs. Funding was reported under several different sections with different operating requirements. In each case, however, daily programming consisted of a variety of therapeutic endeavors that were part of the individual's treatment plan. Since services offered under Title XIX are based on the medical model, a major emphasis on vocational training is not allowed, in fact, in some states using Title XIX funds, vocational training of any type is specifically forbidden. However, Title XIX now requires no state matching funds and does not impose a ceiling on expenditures in each state. It is hardly surprising, therefore, that many states reported that they were evaluating the feasibility of Title XIX funds and expected to use them in the near future.

Forty-four states reported that state appropriations were used to support ADP operating costs. In many cases this represented the match required under Title XX; in others, state appropriations were the only source of public support.

Summary and Comments on Current Services

Adult day programs have experienced phenomenal growth during the last decade as both federal and state support for community-based ser-



vices have increased. It is apparent that ADPs are critical to the deinstitutionalization process. Today, ADPs provide the major daily habilitation for an estimated 105,500 severely handicapped persons.

The organization, funding, and service characteristics of these programs reflect a welfare approach to services, characterized by on-going dependence on social service and long-term care programs. The minor emphasis on job preparation, the lack of funding from vocational rehabilitation agencies, and failure of state program regulations to include paid work all illustrate the nonvocational character of most ADPs. To some extent, this nonvocational focus may result from the way a continuum of community services is conceptualized in many states. ADPs are frequently considered to be the entry step in a flow-through model of services. Within the service continuum, ADPs are expected to develop basic personal and social skills; vocational services are then provided after the individual leaves the ADP and enters a sheltered workshop or other work training program. In fact, six states listed preparation for the next service level as a major objective of ADPs.

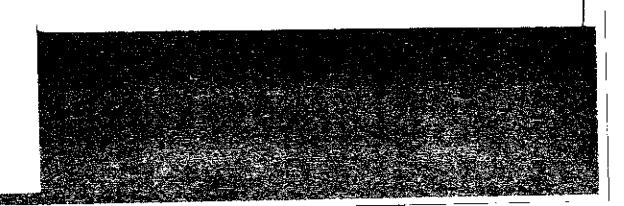
Despite the appealing logic of the flow-through continuum of services, ADPs have become indefinite placements for many severely handicapped individuals (Lynch & Gerber, 1977; Williams & Friedl, 1979). In fact, the Urban Institute (1975) study on the service needs of the severely handicapped reported that most severely handicapped individuals are currently excluded from sheltered workshops. Therefore, evaluations of services available to severely handicapped adults in most states should focus on services provided within ADPs, not on a larger service continuum to which these individuals seldom gain access.

CONCERNS ABOUT CURRENT SERVICES

The results of the survey, together with the authors' experiences in assisting community programs in several states, raise a number of concerns about ADPs. Many aspects of the funding, regulation, and operation of current programs appear inconsistent with the values expressed by professionals and self-advocacy groups, and open to challenge in the courts on the basis of both constitutional guarantees and recent legislation. Major concerns discussed in this section include (a) the lack of work opportunities, (b) disincentives to providing work opportunities, (c) the fragmentation and inertia that result from current funding and regulation, and (d) the unavailability of services to many severely handicapped adults.

Lack of Work Opportunities

ADPs have become long-term service providers for a large number of severely handicapped adults for whom work opportunities remain only a distant goal. Failure to provide either paid work or rapid placement in more work-oriented services appears to conflict both with research on the vocational capacity of severely handicapped people and with expressed values



of professionals and advocacy groups. That work opportunities should be provided to individuals in ADPs is indicated both by research suggesting that work is possible and by professional and societal values indicating work is desirable.

Work Is Possible

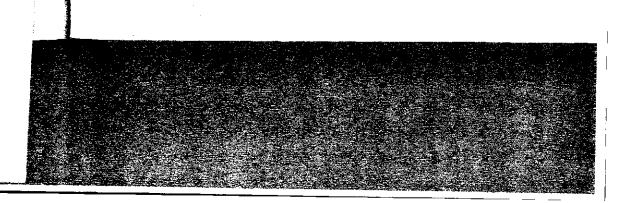
Research conducted over the last two decades provides convincing evidence that many severely handicapped individuals have the potential to perform meaningful work and earn nontrivial wages. The literature includes accounts of severely handicapped individuals learning such diverse jobs as the assembly of bicycle pumps (Clarke & Hermelin, 1955), bicycle brakes (Gold, 1972), oscilloscope switches (Bellamy, Peterson, & Close, 1975), wiring harnesses (Hunter & Bellamy, 1976), nursery specimen cans (Karan, Eisner, & Endres, 1974), ballpoint pens (Martin & Flexer, 1975), chain saw blades (O'Neill & Bellamy, 1978), agricultural gleaning (Jacobs, 1976), and use of power equipment (Crosson, 1966). Other research studies have demonstrated that, after learning vocational skills, severely handicapped individuals are often able to perform those skills at competitive rates (e.g., Bellamy, Inman, & Yeates, 1978; Martin & Pallotta, 1979; Zimmerman, Overpeck, Eisenberg, & Garlick, 1969). More recent longitudinal research efforts have demonstrated that wage levels considerably above those typically achieved in sheltered workshops can be reached by severely handicapped people in ADPs (Bellamy & Horner, in preparation).

Work Is Desirable

The development of work opportunities for severely handicapped people is a logical implication of the concept of normalization, which has received broad acceptance as a critical objective in services for handicapped individuals (Nirje, 1969; Wolfensberger, 1972). Work is a normal and respected part of adult life in the United States (Schrank, 1978; Turkel, 1972) and should be an option for all adult citizens and a necessary component of training and services for severely handicapped people.

Further, it seems unlikely that the benefits of work can be reliably achieved by substituting programs of personal assistance or volunteer efforts in community programs (Tizard & Anderson, 1979; Warnock, 1978). One need only examine the literature of other groups concerned with unequal opportunities to identify a unifying concern with regular, paid work (e.g., Ms. Magazine, March, 1979). Restriction of work opportunities as the nation's economy changes certainly will affect severely handicapped individuals. However, because the potential of severely handicapped individuals has been so well demonstrated, programs and services that give them differentially less access to available work would appear to violate basic constitutional guarantees.

In view of the demonstrated vocational potential of severely handicapped people and the social value placed on work in the United States, the current lack of work opportunities represents a critical deficit in ADP services. Current programs in personal and social development need not be



abandoned; but without simultaneous vocational opportunities, they represent abnormal and unnecessarily restrictive environments for severely handicapped adults. Rather than devising alternatives to work for severely handicapped people, advocates should assist in the development of innovative work structures that allow severely handicapped individuals to participate with other members of society in nonstandard employment opportunities (e.g., supported work, job sharing, and cooperatives).

Disincentives to Development of Vocational Opportunities

Much has been written recently about disincentives to handicapped individuals accepting remunerative employment. The loss of public medical assistance, which often cannot be replaced by private insurance, the difficulty reenrolling in income transfer programs, and the loss of access to other public services all make employment for many severely handicapped people correlate with a loss of personal security (Beck, 1979; Pomerantz & Marholin, 1977).

The fiscal contingencies created by current policies result in equally important disincentives to local service providers and state agencies that attempt to provide vocational opportunities. Two major disincentives are apparent for state agencies responsible for administering ADPs. First, the only untapped source of federal funds that can be used to support community programs is the Title XIX program, which is designed for medical, rather than vocational, services. As an entitlement program, Title XIX supports all programs that meet program regulations. All other sources of funding for ADPs are available only when the state agency competes successfully for limited resources that could be used within the state to meet any of a variety of service needs. It is not surprising, therefore, that an increasing number of states are attempting to develop ADP services that fall within the medical orientation of the Title XIX program.

A second disincentive to states relates to agency jurisdiction. In many states the roles of various agencies are defined in such a way that vocational services are administered by a rehabilitation agency while other community services are administered by mental health, developmental disabilities, or welfare agencies. As a result, development of real vocational opportunities in ADPs could result in a change in administrative responsibility. Such a change could be resisted in some states because it signaled loss of agency jurisdiction or size reduction, and in others because rehabilitation agencies have often been perceived as uncommitted to serving the severely handicapped persons now involved in ADPs.

Local service programs also face barriers and disincentives to providing vocational opportunities to severely handicapped adults. The most important of these relate to the lack of clearly specified program models that combine work options with other needed services. Despite the now extensive literature on vocational habilitation techniques for severely handicapped individuals, there is still little information on how these techniques can be integrated into existing community service programs. Local programs are faced with the task of devising ways to use research results, a

task that may be at least as difficult as conducting the research. Currently, popular organizational models for ADPs focus staff and space on educational and recreational programs (Bergman, 1976; Grunewald, 1975), leaving few program resources available to develop vocational opportunities. Alternative organizational models are needed so that existing resources can be directed to vocational habilitation procedures as well as to other needed services. Given the relative lack of attention to integrating new vocational techniques into comprehensive program models, it is not surprising that most state regulations and accrediting agencies provide significant barriers to ADPs attempting to develop vocational options.

The business difficulty in securing an adequate supply of work for ADP participants also represents a major barrier to provision of vocational opportunities. ADPs seldom have access to funds that are allocated to engineering and other normal business costs. It is hardly surprising, therefore, that availability of work is often a major factor limiting vocational opportunities.

Effects of Uncoordinated Regulation and Support

A third concern with ADPs is the inertia and fragmentation that results from funding and regulation by several different governmental agencies. No single federal agency funds and regulates ADPs, guides policy formulation, or even collects descriptive data on the services they provide. Rather, there is an uncoordinated patchwork of responsibilities. In addition to the Title XX and XIX programs noted earlier, major involved agencies include The Department of Labor's Wage and Hour Administration, which regulates payment of subminimum wages in ADPs that are licensed as work activities centers; the Developmental Disabilities Office, which provides funds to State Councils that may be used to encourage or support adult services; and the Rehabilitation Services Administration, which has responsibility for transitional vocational services for all eligible handicapped individuals through the state-federal vocational rehabilitation system.

While involvement by so many agencies attests to the complexity of adult service issues, it has created a situation in which ADPs are essentially hidden from federal view. This situation fragments service efforts by making It nearly impossible to accumulate regular descriptive or evaluative data on ADP services. As a result, service advocates lack information on which to argue for improved or expanded services, better linkages with work programs, or different service guidelines. Until such data are available, it will be difficult to gain legislative support for policies that encourage vocational opportunities.

A second effect of the current mosaic of funding and regulation is inertia. Simultaneous changes in several federal and state programs will be required before significant program changes can be expected. For example, rapid growth in nonvocational ADP services continued in the 1970s despite the passage of the Rehabilitation Act of 1973 that mandated that vocational services for severely disabled persons be given priority. This was, no doubt, partially because more federal funds were available for nonvocational services under the Social Security Act (Title XIX and XX programs).



Entitlement to Services

Although the number of severely handicapped people served in ADPs has increased rapidly during the last decade, many of these individuals still do not have access to community-based services. Admission to ADPs is often limited both by ceilings on state support for services and by local program prerogatives to accept or reject individual referrals. The result is continued dependence on institutional care for many severely handicapped adults who could participate in ADP services and in the vocational opportunities which this paper advocates. A clear service entitlement is needed through which either Congress or the courts establish the right of each handicapped adult to needed services in his or her own community.

SUGGESTIONS FOR CHANGE

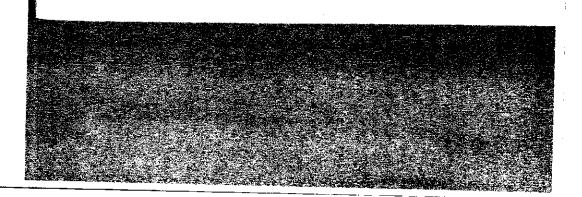
It is significant that nonvocational adult day programs evolved into a large nationwide service system during the same decade that professional research activity demonstrated repeatedly that severely handicapped people could become vocationally competent with appropriate services. Research and demonstration activities to date have not been sufficient to effect needed change. People concerned with development of vocational opportunities for severely handicapped individuals now need to supplement these efforts with other activities. Four potentially useful strategies for promoting change are discussed briefly in the following sections.

Policy Support for Alternative Programs

Policy changes are needed at both federal and state levels to support the development of work opportunities for severely handicapped ADP participants. Such opportunities appear more likely to result from the modification of existing ADPs than from continued emphasis on nonvocational preparation in ADPs for later work opportunities in sheltered workshops. Even if the slow movement of handicapped persons from ADPs to workshops could be corrected, the structure of traditional workshops seems unlikely to foster vocational success for severely handicapped adults. Successful vocational habilitation programs for severely handicapped individuals typically have relied extensively on direct service staff skills (Bellamy, et al., 1979). In contrast, staff resources in most workshops are concentrated in support service areas with evaluators, counselors, and social workers playing key roles (cf. Commission on Accreditation of Rehabilitation Facilities, 1978; Whitehead, 1976), Floor supervisors and other direct service staff typically receive less attention, less remuneration, and less status. However, it is these direct service staff persons who typically are charged with implementing habilitation programs for severely handicapped adults. Task analysiş, vocational training, and production supervision—all normal responsibilities of direct service staff-have been shown repeatedly to be key procedures in changing the behavior of severely handicapped individuals. Without major staff rearrangement, most existing workshops would have difficulty in investing significant personnel resources in these new activities. Therefore, it appears that, to provide vocational opportunities to severely handicapped adults, ADPs will need to develop a different organizational model than that currently offered by most sheltered workshops.

As alternatives to both the sheltered workshop and the adult day program, Horner and Bellamy (1979) and DuRand and DuRand (1978) have argued for the development of extended employment opportunities. Horner and Bellamy (1979) describe this approach in the context of a structured employment model, in which work opportunities are combined with on-going personal support and training for severely handicapped individuals. Structured employment is characterized by (a) a focus on severely handicapped individuals who are not candidates for competitive job placement in the near future; (b) emphasis on extended employment; (c) higher productivity and wages than are typically achieved in sheltered employment; (d) ongoing personal support and training; and (e) administrative breadth so that the habilitation technology can be combined with other effective procedures from both service programs and business. As it is defined, structured employment is appropriate in any of a variety of administrative structures that can provide on-going support to severely handicapped workers (e.g., an enclave within an industry, in a community service program or workshop, in private enterprise or cooperatives).

The concept of structured employment adds a missing element in the array of services typically provided to handicapped individuals. The frequently cited continuum of vocational services, in which individuals begin in ADPs, progress to sheltered workshops, and are finally placed in competitive employment, is illustrated by the solid frames in Figure 1. A frequently voiced concern about this model is that a large number of more severely handicapped individuals simply do not move through the system (Greenleigh, 1975; Horner & Bellamy, 1979). One possible explanation of this difficulty is that movement at each step requires significant improvement in both productivity and independence. To move from an ADP to workshop or from workshop to competitive employment, an individual typically must improve productivity and earnings and simultaneously decrease reliance on extra supervision, social service support, retraining, and so forth. These dual requirements no doubt prevent many individuals from qualifying for a change in services. For example, many advocates for independent living services from vocational rehabilitation have argued that increases in independence—even when not accompanied by improvement in productivity can represent a significant increase in quality of life and a decrease in required social support. The structured employment model is analogous. Many severely handicapped individuals are capable of greatly increased productivity, although they may require retraining and competent supervision from direct service staff, and may need on-going support from social service or medical care agencies. Even with this on-going support, increases in individual productivity could help offset the cost of social services for many people. In Figure 1, the "independent living" program emphasis and "structured employment" program emphasis are illustrated by



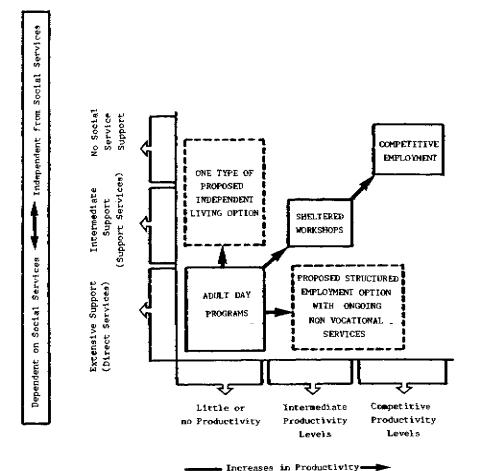


Figure 1 Needed service program array to promote individual improvement in both independence and productivity

dotted frames. Viewed from this perspective, it is clear that meaningful vocational opportunities in structured employment can be combined with on-going comprehensive habilitation services.

To facilitate the development of structured work and other alternatives to ADPs, coordinated policy development is needed in several federal programs. Efforts of both professional and advocacy groups are needed to promote a major evaluation of federal policies affecting ADPs. Such a policy evaluation activity is now underway for sheltered workshops (Whitehead, 1979), and a similar activity is needed for ADPs.

Future Research and Demonstration Efforts

The theoretical and practical problems associated with vocational pre-

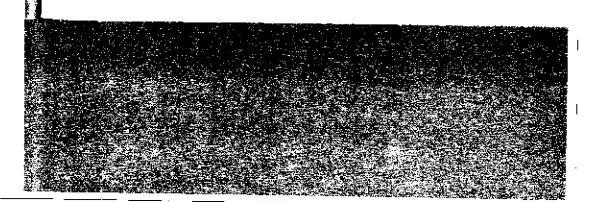
paration of severely handicapped individuals have attracted an increasing number of professionals during this decade. Initially, much of this activity was focused on identification of techniques and procedures that were relevant to the vocational habilitation process (Albin, Stark, & Keith, 1979; Bellamy, et al., 1975; Gold, 1972; Karan, Wehman, Renzaglia, & Schutz, 1976; Martin & Flexer, 1975; Rusch, Connis, & Sowers, 1979). Now the field has advanced to more complex demonstration efforts in which these procedures are integrated into total service programs. This insures more extensive experience with several service recipients, and focuses research efforts on service results, such as job placements and wages (e.g., see Bellamy, Horner, & Inman, 1977; Sowers, Thompson, & Connis, 1979; Wehman & Hill, 1979).

These research and demonstration efforts may have been critical in developing the now widespread interest among advocates in vocational opportunities for severely handicapped people. However, as the present survey results indicate, these efforts have not yet occasioned significant changes in the nonvocational focus of policies and practices in ADPs. As a result, it seems appropriate to examine alternative research strategies. Certainly, the successful demonstration programs now in operation provide an important base. The next logical set of questions addresses the applicability of these programs outside the research and development setting. For example, can similar results be achieved in typically less well-funded community programs? Can similar results be expected with all the reterrals to a community program? Are there limitations on applicability that are imposed by normal ADP staffing patterns?

To address these and similar questions, it would seem appropriate to invest research support in broader evaluation of program models that are based on the existing demonstrations. In such an approach, existing exemplary programs could be used as the basis for defining a standardized program model that could be exported to and field-tested in other settings. Such a program model would involve definition of procedures for implementation within the normal financial and regulatory constraints typically faced by community programs, and establishment of staff training, program management, and program evaluation systems. For example, for the last 4 years, the authors have been involved in evaluating the effectiveness of a standardized training model for the employment of severely handicapped people in work-oriented alternatives to ADPs. The model, originally based on a demonstration program at the University of Oregon, is now in operation in communities in five states in the Northwest. Results of the field-test efforts have demonstrated that the successes of the university program could also be replicated, but not without alterations in both the procedures initially proposed in the model and in some of the policies affecting ADP operation (Bellamy & Horner, in preparation).

Public School Secondary Services

Many handicapped children who might have been institutionalized a few years ago are now served in community public schools. A particularly



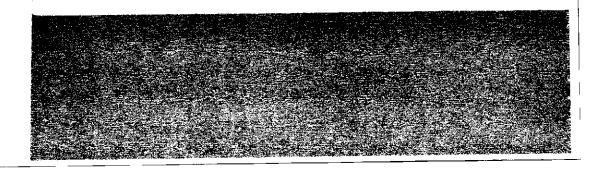
important question facing teachers in these school programs is the selection of learning objectives that will increase students' chances of remaining and participating in the community after graduation. If public school programs for moderately and severely handicapped adolescents prepared students only for currently existing work opportunities, there would be little need for vocational preparation. The adult day programs in which a large segment of adults with similar disabilities are now served place few vocational skill demands on participants. However, educational efforts often are considered a means of accomplishing social change (e.g., Postman & Weingartner, 1969), and several authors now have advocated for provision of vocational training in secondary programs in order to increase the probability of work options after graduation (Bellamy, Wilson, Adler, & Clarke, 1980; Belmore & Brown, 1978). While this strategy has not produced immediately apparent results, it has expanded vocational advocacy efforts by school professionals and continues to prepare students for the community opportunities from which they could benefit.

Legal Strategies

Section 504 of the Rehabilitation Act of 1973, together with the due process and equal protection guarantees of the U.S. Constitution, have provided the legal foundation for several recent court-mandated changes in community services. Armed with the factual basis that handicapped individuals could benefit from less restricted or less segregated services, advocacy groups have effectively challenged practices that reduce education, transportation, or residential services for more severely handicapped individuals. Laski (1979) argues that, given current research results documenting the potential vocational abilities of severely handicapped individuals, the same legal mandates could be extended to vocational habilitation. Work opportunities for severely handicapped individuals appear to violate both the affirmative action intent of Section 504 and the equal protection guarantees of the Constitution. The separation of some individuals into ADPs, while others receive vocational services in sheltered workshops and other job training programs, now seems difficult to justify on the presumption that ADP participants lack "potential" or "readiness" for vocational services. Without this basis for segregated services, the separation of some people into nonvocational ADPs appears to represent separate and unequal services, a circumstance that courts have ruled unacceptable in both school racial desegregation (Brown v. Board, 1954) and deinstitutionalization (Haldeman v. Pennhurst, 1977) cases.

SUMMARY

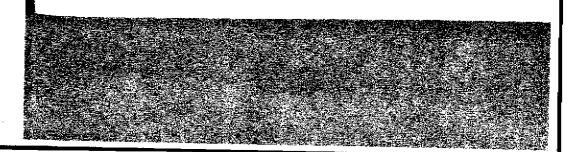
In the United States, more than 100,000 severely handicapped adults are served in day programs at an annual cost of about \$330 million. Despite the rapid growth of these programs and their importance in deinstitutionalization efforts, the lack of vocational opportunities in ADPs has become in-



creasingly discrepant with both research results and accepted service objectives. Significant changes in the activities of researchers, service providers, advocates, and agency administrators will be required to develop vocational options for ADP participants. Needed are better coordination of patchwork public policies, a clear entitlement to community services, and development of practical service models that include vocational opportunities.

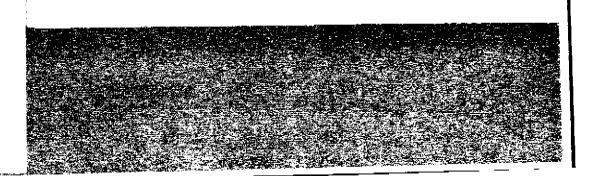
REFERENCES

- Albin, T., Stark, J., & Keith, K. Vocational training and placement: Behavior analysis in the natural environment. In G.T. Bellamy, G. O'Connor, & O. Karan (Eds.), Vocational rehabilitation of severely handicapped persons: Contemporary service strategies. Baltimore: University Park Press, 1979.
- Beck, B.D. Can you afford to work? A handbook for Wisconsin's handicapped recipients of Social Security benefits. Wisconsin Council on Developmental Disabilities, Rehabilitation Facilities of Wisconsin, September, 1979.
- Bellamy, G.T., & Horner, R. Final report, Grant # G 007605455: Multiple evaluation of a model habilitation and education program for severely handicapped adults. From the Bureau of Education for the Handicapped to the University of Oregon, in preparation.
- Bellamy, G.T., Horner, R., & Inman, D. Habilitation of severely and profoundly retarded adults: Reports from the Specialized Training Program (Vol. 2). Eugene: University of Oregon, Center on Human Development, 1977.
- Bellamy, G.T., Horner, R., & Inman, D. Vocational habilitation of severely retarded adults: A direct service technology. Baltimore: University Park Press, 1979.
- Beltamy, G.T., Inman, D., & Yeates, J. Evaluation of a procedure for production management with the severely retarded. *Mental Retardation*, 1978, 17(1), 37-41.
- Bellamy, G.T., Peterson, L., & Close, D. Habilitation of the severely and profoundly retarded: Illustrations of competence. Education and Training of the Mentally Retarded, 1975, 10, 174-186.
- Bellamy, G.T., Wilson, D., Adler, E., & Clarke, J. A strategy for programming vocational skills for severely handicapped youth. Exceptional Education, 1980, 1(2).
- Belmore, K.J., & Brown, L. A job skill inventory strategy designed for severely handicapped potential workers. In N. Haring & D. Bricker (Eds.), Teaching the severely handicapped (Vol. III). Seattle: American Association for the Education of the Severely/Profoundly Handicapped, 1978.
- Bergman, A. A guide to establishing an activity center for mentally retarded persons. Washington: U.S. Government Printing Office, 1976.
- Brown v. Board of Education of Topeka, 347 U.S. 483, 74 S. Ct. 689 (1954).
- Clarke, A.D.B., & Hermelin, B.F. Adult imbeciles: Their abilities and trainability. The Lancet, August, 1955, 337-339.
- Commission on Accreditation of Rehabilitation Facilities. Standards Manual for Rehabilition Facilities. Chicago: Author, 1978.
- Cortazzo, A. Activity centers for retarded adults. Washington, D.C.: President's Committee on Mental Retardation, 1972.
- Crosson, J. The experimental analysis of vocational behavior in severely relarded males. Doctoral dissertation, University of Oregon, 1966. (Dissert. Abst. Int., 27:3304.)



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- DHEW Report on Deinstitutionalization. Task Force on Deinstitutionalization of the Mentally Disabled, *Decision memorandum*. Washington, D.C.: Department of Health, Education and Welfare, Office of the Secretary, 1978.
- DuRand, L., & DuRand, J. The affirmative industry. St. Paul: Minnesota Diversified Industries, 1978.
- Gold, M.W. Stimulus factors in skill training on a complex assembly task: Acquisition, transfer and retention, American Journal of Mental Deficiency, 1972, 75, 517-526.
- Gold, M. Research on the vocational habilitation of the retarded: The present, the future. In N. Ellis (Ed.), International review of research in mental retardation (Vol. 6). New York: Academic Press, 1973.
- Greenleigh Associates, Inc. The role of the sheltered workshop in the rehabilitation of the severely handicapped. New York: Report to the Department of Health, Education and Welfare, Rehabilitation Services Administration, 1975.
- Grunewald, K. Day centers for mentally retarded adults. Brussels, Belgium: International League of Societies for the Mentally Handicapped, 1975.
- Halderman v. Pennhurst, (Eastern District, Pennsylvania), 1977.
- Horner, R.H., & Bellamy, G.T. Long-term structured employment: Productivity and productive capacity. In G.T. Bellamy, G. O'Connor, & O. Karan (Eds.), Vocational habilitation for developmentally disabled persons: Contemporary service strategies. Baltimore: University Park Press, 1979.
- Hunter, J., & Bellamy, G.T. Cable harness construction for severely retarded adults: A demonstration of training technique. AAESPH Review, 1976, 1(7), 2-13.
- Jacobs, J.W. Retarded persons as gleaners. Mental Retardation, 1976, 14(6), 42-43.
- Karan, R.L., Eisner, M., & Endres, R.W. Behavior modification in a sheltered workshop for severely retarded students. American Journal of Mental Deficiency, 1974, 79, 338-347.
- Karan, O., Wehman, P., Renzaglia, A., & Schutz, R. (Eds.). Habilitation practices with the severely and developmentally disabled (Vol. 1). Madison: Waisman Center on Mental Retardation, University of Wisconsin, 1976.
- Laski, F. Legal strategies to secure entitlement to services for severely handicapped persons. In G.T. Bellamy (Ed.), Vocational rehabilitation for severely handicapped persons. Baltimore: University Park Press, 1979.
- Lynch, K., & Gerber, P. Survey of Michigan rehabilitation facilities: Implications for the developmentally disabled. Ann Arbor: Research Monograph, ISMRRD, University of Michigan, 1977.
- Martin, A.S., & Flexer, R.W. Three studies on training work skills and work adjustment with the severely retarded. Monograph No. 5. Lubbock: Texas Tech University, Research and Training Center in Mental Retardation, 1975.
- Martin, G., & Pallotta, A. Behavlor modification in sheltered workshops and community group homes for the retarded: Current status and future considerations. In G. Hammerlynck (Ed.), Applied behavior analysis techniques for the developmentally disabled. New York: Brunner/Mazel, 1979.
- Ms. Magazine. March, 1979.
- Nirje, B. The normalization principle and its human management implications. In R. Kugel & W. Wolfensberger (Eds.), Changing patterns of residential services for the mentally retarded. Washington, D.C.: President's Committee on Mental Retardation, 1969.
- O'Neill, C., & Bellamy, G.T. Evaluation of a procedure for teaching saw chain assembly to a severely retarded woman. *Mental Retardation*, 1978, 16(1), 37-41.



Postman, N., & Weingartner, C. Teaching as a subversive activity. New York: Dell, 1969.

Rusch, F., Connis, R., & Sowers, J. The modification and maintenance of time spent attending using social reinforcement, token reinforcement and response cost in an applied restaurant setting. *Journal of Special Education Technology*, 1979, 2(1), 18-26.

Schrank, R. Ten thousand working days. Cambridge, Mass.: MIT Press, 1978.

Sheehan, M.R. Community day programs for severely handicapped adults: A nationwide survey of current state services. University of Oregon, May, 1980.

Sowers, J., Thompson, L., & Connis, R. The food service vocational training program. In G.T. Bellamy, G. O'Connor, & O. Karan (Eds.), *Vocational rehabilitation of severely handicapped persons: Contemporary service strategies*. Baltimore: University Park Press, 1979.

Tizard, J., & Anderson, E. The education of the handicapped adolescent: Alternatives to work for severely handicapped people. Paris: Organization for Economic Cooperation and Development, Center for Educational Research and Innovation, June. 1979.

Turkel, S. Working. New York: Pantheon Press, 1972.

Urban Institute. Report of the comprehensive service needs study. Washington, D.C.: Urban Institute, 1975.

Warnock, H.M. Special education needs: Report of the committee of enquiry into the education of handicapped children and young people. London: Her Majesty's Stationery Office, 1978.

Wehman, P., & Hill, J. Vocational training and placement of severely disabled persons: Project employability (Vol. I). Richmond: Virginia Commonwealth University, 1979.

Whitehead, C. Planning and organizing a sheltered workshop for mentally retarded persons. Washington, D.C.: U.S. Government Printing Office, 1976.

Whitehead, C. Sheltered workshops in the decade ahead: Work and wages or welfare. In G.T. Beltamy, G. O'Connor, & O. Karan (Eds.), Vocational rehabilitation for developmentally disabled persons: Contemporary service strategies. Baltimore: University Park Press, 1979.

Williams, W., & Friedl, M. Characteristics of facilities providing prevocational/vocational services to the adult developmentally disabled in Vermont. Unpublished manuscript, 1979.

Wolfensberger, W. Vocational preparation and occupation. In A. Baumeister (Ed.), Mental retardation. Chicago: Aldine/Atherton, 1967.

Wolfensberger, W. (Ed.). The principle of normalization in human services. Downsview, Toronto, Can.: National Institute on Mental Retardation, York University Campus, 1972.

Zimmerman, J., Overpeck, C., Eisenberg, J., & Garlick, B. Operant conditioning in a sheltered workshop. *Rehabilitation Literature*, 1969, 30, 326-334.

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