

# ***Supported Employment: Critical Issues and New Directions***

*By: Paul Wehman & John Bricout*

## **ABSTRACT**

This paper chronicles the background, history, and philosophy associated with supported employment. The emphasis has been on growth of participation by people with disabilities into competitive employment for the first time. In addition to this important background, the concept of work supports is introduced. A taxonomy of government supports, business supports, and consumer supports is presented and described in detail. Supported employment as a vehicle to help persons with disabilities is more viable than ever; however, more power is continuing to flow into the hands of people with disabilities and business. Increasingly, these two groups are becoming the primary decision-makers of employment choices and outcomes.

Within less than a decade, the national number of people participating in supported employment in the U.S. has increased from 9,800 to over 140,000 (Wehman, Revell, Kregel, 1998). McGaughey and her colleagues (1994) indicate that approximately 18% of all persons with developmental disabilities in adult day programs participate in some integrated employment. Many thousands more are working for the first time in countries all over the world. These are individuals who historically were confined to adult activity centers, sheltered workshops, nursing homes, and institutions. Competitive employment was not likely to be in their futures as long as they participated in segregated employment. The use of trained employment specialists, informed coworkers, mentors, and technological supports, together with enlightened legislation such as the Americans with Disabilities Act (ADA), have greatly enhanced the employment possibilities for people with significant disabilities. Unfortunately, hundreds of thousands of people with disabilities still remain left behind in segregated centers. Many more are on waiting lists for employment despite the fact that people with significant cognitive, physical, and behavioral challenges have demonstrated their competence in the workplace.

These employment successes are not episodic nor isolated, neither are they confined to any one region of the country or the world. As Table 1 on the following page indicates, the growth of supported employment as a real work option has emerged over the less attractive alternatives of segregation.

Despite encouraging signs of change, the bulk of day program resources still serves to maintain people with significant disabilities in segregated work centers. Even though many individuals with disabilities and their families want integrated employment opportunities, the vast majority have been unable to sufficiently mobilize their communities to make this happen. There are many reports that indicate that people with disabilities want to work, ranging from anecdotal case studies to national survey analyses such as the Louis Harris Poll conducted in the U.S. in 1998.

**TABLE 1 -- TIMELINE OF SUPPORTED EMPLOYMENT GROWTH AND EMERGENCE**

1960 - 1970	1970 - 1980	1980 - 1990	1990 - 2000
<ul style="list-style-type: none"><li>• Domination of sheltered workshops/ adult activity centers/ state institutions for mildly and severely disabled.</li><li>• Well over 1,000,000 persons in 5,000 segregated day programs in U.S. alone.</li><li>• Emergence of applied behavior analysis as important training technology.</li></ul>	<ul style="list-style-type: none"><li>• Placement into real work/competitive employment occurs at selected university centers on a research/ demonstration basis.</li><li>• Focus on those with mental retardation only.</li><li>• Emergence of the term "job coach."</li><li>• Expanded use of term "normalization" increased deinstitutionalization.</li></ul>	<ul style="list-style-type: none"><li>• National acceptance and growth of supported employment via several federal laws with funding in U.S.</li><li>• Expansion into ALL severe disabilities.</li><li>• All 50 states in U.S. offer programs with 3,000 programs offering SEP option.</li><li>• Expanded use of job coach model.</li><li>• Growth is 10,000 to 100,000 persons (still leaves close to one million in day programs in U.S.).</li></ul>	<ul style="list-style-type: none"><li>• Consumer empowerment philosophies and ADA emerge as primary disability issues.</li><li>• Supported employment growth continues internationally. European Union of Supported Employment/World Association of SEP emerges as major force.</li><li>• Efficacy of SEP challenged by well entrenched adult day centers.</li><li>• Community business and natural supports given much greater emphasis.</li></ul>

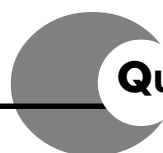
Real, integrated work as an option is an issue on which most will increasingly agree. All parties involved benefit from supported or competitive employment. Such employment provides the individual with a disability with a real job, benefits, and the dignity that arises from gainful employment. The employer gets a good worker and receives specialized support to train and maintain the individual. The family will be able to see their family member in a fully competent role in the workplace. Finally, taxpayers will spend less money than they would to support the individual in a segregated day program year-in and year-out. The question remains: Why do the vast majority of individuals with mental and physical disabilities remain in segregated day programs?

The answer lies partly in the inability of advocates and people with disabilities to ade-

quately marshal their collective efforts to increase work opportunities (Wehman & Kregel, 1995). The adult service systems in the world are deeply entrenched, and have been for several decades (Albin, Rhodes & Mank, 1994). To change this way of providing services, particularly in times of reduced funding and a serious fiscal crunch, is extremely difficult. Hence, there is an overwhelming necessity to market the positive attributes of supported employment for people with significant disabilities on a community level.

Unfortunately, we in the supported employment community, and even more broadly within the greater disability community, have not told our story well. We have not communicated the successes of this approach, nor the positive impact that work has on the lives of people who have historically been disenfranchised and written off as incompetent.

As an interested society, we must get past the notion that people with severe disabilities are unable to work and do not want to work. The purpose of this paper to provide an overview of supported employment, while considering how interventions in the workplace might best be categorized and implemented as we move into the year 2000.



## **QUALITY EMPLOYMENT OUTCOMES**

Quality employment outcomes include competitive wages, good fringe benefits (including health insurance), long-term retention, flexibility in work schedules and the opportunity to get on a career track. For most individuals with significant disabilities, this level of employment outcome has not consistently occurred in rehabilitation programs. However, achieving quality employment outcomes is the avowed purpose of programs that embrace supported employment, transition from school to work, assistive technology, and other rehabilitation approaches.

While supported employment programs have produced employment outcomes for participants that are superior to those produced by segregated employment programs, when considered in absolute terms (Rehabilitation Services Administration, 1995), many supported employment programs still yield employment outcomes that have fallen short of initial expectations. Needed improvements in areas such as earnings and fringe benefits, integration in the workplace, employer attitudes, job retention and job satisfaction remain as concerns in supported employment program evaluation. Furthermore, the limited number of hours worked (averaging 25 hours per week) is a stumbling block to greater prosperity (Wehman & Kregel, 1995).

The Rehabilitation Services Administration's data in 1995 indicated that 28% of persons

in supported employment did not work at the minimum wage level of \$4.25/hour. This is based on 18,000 vocational rehabilitation closures in supported employment, which is below the overall national totals in supported employment of 140,000 persons (Wehman et al, 1998). Supported employment earnings have been reported to be \$114/week, per client on an average basis (Wehman et al, 1998). While this constitutes an increase of several hundred percent over wages earned prior to entering the program, annual wages ranging from \$5000-\$6000 are not consistent with the program's intent for individuals to pursue meaningful careers. In addition, heavy reliance on part-time jobs results in individuals with disabilities receiving few fringe benefits (health care or paid vacation). Table 2, on the following page, provides a summary of the 1993 vs. 1995 supported employment outcomes for people with disabilities.

A commitment to employment opportunities implies that all individuals who can benefit from vocational rehabilitation should have equal access to quality employment programs that are able to respond to their preferences and needs. However, many excellent rehabilitation programs such as supported employment only have resources to serve a small percentage of individuals who could benefit from the supports and services offered through local provider agencies. Persons with severe mental retardation and mental illness, cerebral palsy, or autism remain under-represented in competitive employment programs in relation to their overall level of participation in adult day programs (Snyder, Temple, & Crowell, 1996; Budde, Youngbauer & Snyder, 1997). Individuals who are severely disabled, display inappropriate behaviors, or are merely viewed as too challenging or expensive to serve have been historically excluded from supported employment programs in many areas (Wehman & Kregel, 1995).

**TABLE 2 -- SUPPORTED EMPLOYMENT OUTCOMES IN THE U.S. FOR FISCAL YEARS 1993 AND 1995 (PRELIMINARY DATA)**

Data Element	FY 95	FY93
Number of participants in supported employment	139,812	105,381
Type of supported employment model	Individual placement: 77.4% Group placement: 22.6%	Individual placement: 79% Group placement: 21%
Mean average hourly wage	\$4.70	\$4.53
Mean average weekly wage	\$114.43	\$107.10
Mean average hours worked weekly	23.8	22.5
Number of S.E. providers	3,690	3,739
Primary disability	<ul style="list-style-type: none"> <li>• mental retardation: 61.5%</li> <li>• mental illness: 26.0%</li> <li>• physical disability: 9.6%</li> <li>• other: 3.1%</li> </ul>	<ul style="list-style-type: none"> <li>• mental retardation: 70.3%</li> <li>• mental illness: 19.3%</li> <li>• physical disability: 7.2%</li> <li>• other: 3.0%</li> </ul>
Level of mental retardation	<ul style="list-style-type: none"> <li>• mild: 51.9%</li> <li>• moderate: 37.7%</li> <li>• severe/profound: 10.3%</li> </ul>	<ul style="list-style-type: none"> <li>• mild: 47.0%</li> <li>• moderate: 40.1%</li> <li>• severe/profound: 12.9%</li> </ul>
Use of natural support	not available	<ul style="list-style-type: none"> <li>• increasing 74%</li> <li>• staying the same: 7%</li> <li>• decreasing: 0%</li> <li>• don't know: 18.5%</li> </ul>
Natural supports are the predominant source of extended services	not available	<ul style="list-style-type: none"> <li>• frequently: 3.7%</li> <li>• sometimes: 33.3%</li> <li>• rarely: 29.6%</li> <li>• don't know: 33.3%</li> </ul>

## MOVING SUPPORTED EMPLOYMENT TO THE NEXT LEVEL

As we review the progress that has been made to date, there is some reason to feel encouraged. People with significant disabilities are beginning to work more, to earn better wages, and to be more empowered (e.g., Blanck, 1998). At the same time, we have tended to approach the needs of workers with disabilities and of employers from mutually exclusive perspectives of addressing perceived deficits on one side, and

capitalizing on workplace potential on the other. Too often the rehabilitation needs of workers with disabilities are identified without simultaneously acknowledging the many potential work supports available with the assistance of employers. Frequently, we have not looked closely enough at the different types of work supports that are available to individuals with disabilities in the workplace. The use of a paid job coach has been heavily relied upon by many providers — often with success. Yet, we need to broaden our perspectives further. Table 3, shown on the following page, presents four major categories

of work supports and the subcategories within them. These categories include supports that are agency-mediated, business-mediated, government-mediated, and family/community-mediated.

**TABLE 3 -- TAXONOMY OF WORK SUPPORTS**

**I. Agency Mediated Supports**

1. Job Coach Assistance (e.g., specialized training)
2. Assistive Technology
3. Compensatory Strategies (e.g., memory aids)
4. Counseling
5. Substance Abuse Services
6. Medical Services
7. Specialized Transportation
8. Vocational Rehabilitation Counselor

**II. Business Mediated Supports**

1. Job Restructuring
2. Workplace Accommodations
  - environmental modifications
  - assistive technology
  - task modification
  - schedule modification
3. Coworker Mentoring
  - job task training and support
  - social support
4. Job Creation
5. Employee Assistance Programs
6. Employment Consultant (hired by business)

**III. Government Mediated Supports**

1. Social Security Work Incentives
  - Plan for Achieving Self-Support
  - Impairment Related Work Experience
2. Tax Credits
  - Work Opportunity Tax Credit
  - Disabled Access Credit
  - Tax Deduction to Remove Transportation and Architectural Barriers.
3. Medicaid Waiver

**IV. Family and Community Mediated Supports**

1. Personal Care Attendant
2. Peer Mentors
3. Family Members as Job Developers
4. Friends and Neighbors
5. Social Support Networks

These supports can all be identified, implemented and evaluated in the workplace environment. However, they will be initiated usually from **different starting points** and with different entities mediating resources and services. A literature review is provided as basis for designing this taxonomy. What follows is a short literature review and discussion of each category of work supports.

**AGENCY-MEDIATED SUPPORTS**

Since most human services' funding for rehabilitation flows through a single, common agency, the agency that provides supported employment services is an important "starting point" for examining workplace supports. One of the services that may be provided by such agencies is to coordinate services with other entities, be they employers, government or providers of specialized services such as mental health treatment, vocational rehabilitation, or education. Historically, the rehabilitation agency mediated the flow of supports. There are a number of different types of supports mediated by agencies that are reported in the literature. These various types of supports are listed below.

**1. Job Coach Support.** The majority of the work support literature has focused on the job coach (individual placement) model of supported employment. This approach was initially presented by Wehman (1981) and further articulated by Wehman and Kregel (1989). Since then, Bond (in press) and Drake (1998) have significantly built on this approach, focusing on persons with psychiatric disabilities. The process is the same, regardless of the population of consumers: provide support services at the job site, rather than treatment-centered support at a clinic or elsewhere. Many researchers have written supporting the job coach/individual placement approach (e.g., Bond, Dietzen, McGrew

& Miller, 1995; Kregel, Wehman & Banks, 1989; MacDonald-Wilson, Revell, Nguyen & Peterson, 1991; Shafer, Banks & Kregel, 1991; Sinnott-Oswald, Gliner, & Spencer, 1991; Wehman, Kregel, & Cifu, 1994; Wehman, Kreutzer, West, Sherron, Zasler, Groah, Stonnington, Burns, & Sale, 1990). In fact, the individual placement/job coach model of supported employment appears to be the predominant practice of vocational service agencies in the field as well and has been viewed as something of a "gold standard" of services for many persons with severe disabilities (Kregel, Hernandez & Hock, 1997).

The empirical research literature has demonstrated repeatedly that persons with severe mental retardation can work with job coach support (e.g., Parent, Kregel, Metzler, & Twardzik, 1992; Parent, et al., 1994; Revell, Wehman, Kregel, West & Rayfield, 1994; Test, Hinson, Solow & Keul, 1993). Job coaches have provided equally effective support for persons with different disability labels, such as severe physical disabilities, traumatic brain injuries or psychiatric disabilities (e.g., Danley, Rogers, McDonald-Wilson, & Anthony, 1994; Inge, Wehman, Kregel & Sherron-Targett, 1996; Wehman, Kreutzer, West, Sherron, Diambra, Fry, Groah, Sale, & Killiam, 1989; Wehman & Revell, 1996). Persons with different disabilities will require a somewhat different approach or emphasis on the part of the job coach (Fabian, Waterworth & Ripke, 1993). For instance, persons with a psychiatric disability may need less skills instruction and supervision time than workers with a cognitive disability, but they may also need more advocacy and encounter greater stigma and isolation (Danley, et al., 1994; Drake, Becker, Xie & Anthony, 1995). Workers with different levels of disability may also require different support strategies. For example, there is empirical evidence to suggest that for workers with a *mild* cognitive disability, social skills training is a powerful

support for social interaction with co-workers (Park, Simon, Tappe, Wozniak, Johnson & Gaylord-Ross, 1991). However, other empirical evidence suggests that workers with a *severe* cognitive disability seeking social interaction may benefit more from a different modality of support, a "communications book" of pictures to stimulate conversations (Storey & O'Neil 1996).

**2. Compensatory Strategies.** Compensatory strategies represent one avenue of support for overcoming the gap that sometimes occurs between worker abilities and environmental demands. Compensatory strategies are plans, behaviors, or materials that help workers with disabilities compensate for functional impairments. Certainly, others in addition to the agency alone can initiate compensatory strategies as supports. In fact, the person with the disability will usually be a driving force in selecting a compensatory strategy. The person with the disability will often help the agency or job coach identify what compensatory strategies or tasks makes the best sense, given the situation and available resources.

Examples for workers with cognitive disabilities include memory aids or strategies, additional time to complete tasks, verbal rehearsals, checklists, and location markers (Adelman & Vogel, 1993; Briel, 1996). For persons with traumatic brain injury, compensatory strategies for cognitive remediation can be achieved using systematic task analysis (Giles & Shore, 1989; Kreutzer, Wehman, Morton & Stonnington, 1988; Kreutzer, Gordon and Wehman, 1989). The job coach conducts an intensive analysis of all job tasks until the constituent parts can be identified and listed sequentially. Compensatory strategies are then developed on the basis of the task analysis and the employee's abilities (Kreutzer, et al., 1988; Kreutzer, et al., 1989). Compensatory strategies can be developed that match the individual's presenting problems by integrating information from several sources in a

graduated process of testing and modification (Briel, 1996). An evaluation of learning and memory abilities is conducted, followed by a situational assessment and on-site job training feedback, with employee needs, preferences, and concerns an ongoing part of the process (Briel, 1996). Similar supports are possible using assistive technology. Assistive technology can be considered specialized supports aiding the consumer in his or her adaptation to the environment. Assistive technology complements the supports provided by specialized professional services, such as mental health education and treatment, and other disability-specific services.

**3. Assistive Technology.** One of the most influential definitions of assistive technology is provided by the Technology-Related Assistance for Individuals with Disabilities Act of 1988 (PL 100-407) (Wallace, Flippo, Barcus, & Behrman, 1995). The Act can be paraphrased as stating that with respect to employment, assistive technology are low and high technology devices, services, and adaptations that enable some persons with disabilities to participate in, contribute to and interact in work life in much the same fashion as non-disabled co-workers. Although agency-mediated supports are the focus of this section, it is important to note that government, and more particularly the federal government, is a major funding source for assistive technology (Parette & Van Biervliet, 1992). Supported employment provider agencies play a pivotal role in assistive technology, because job coaches have considerable input in the selection, procurement, implementation and evaluation of devices used as work supports. Some illustrative examples of these work supports follow.

Assistive technology can be either low- or high technology. Several examples from both will make the picture of assistive technology clearer. One example of a low technology is a support already alluded to briefly, a "communications book." Such a book was used to help integrate

workers with severe disabilities in a competitive workplace (Storey & Provost, 1996). This "device" consists of pictures bound together in a book or wallet and used to facilitate conversations with non-disabled co-workers. Two workers with severe disabilities were able to increase their number of interactions with non-disabled co-workers in some circumstances using a communications book (Storey & Provost, 1996).

In the realm of high technology devices, an 18 inch long head pointer, together with an angled control panel and touch-sensitive screen enabled a worker with cerebral palsy to operate a copy machine as part of his job (Smith, 1992). Another copier innovation, an attached computer and voice synthesizer, allowed a worker with a visual impairment to operate the equipment (Smith, 1992). A robotic device to assist workers with severe motor impairments significantly reduced the amount of time per work unit that an assistant was needed, although at some loss of productivity (Birch, Fengler, Gosine, Schroeder, Schroeder & Johnson, 1996). High technology devices must sometimes be adapted to real-life situations that require a coordination of efforts among machine, supervisor, worker and co-workers.

In fact, the effectiveness of high technology devices may hinge more upon employer needs and worker preferences than the sophistication of the device (Lash & Licenziato, 1995). It is encouraging in this light to note that at least one study has found that job coaches can provide effective assessments of assistive technology needs (Behrmann & Schepis, 1994). Apparently job coaches can serve as an effective link between worker and employer in identifying and implementing assistive technology. Other specialists in addition to the job coach may be involved in the identification and implementation of assis-

tive technology. Examples include: rehabilitation engineers, technology specialists, occupational therapists and physical therapists (Behrman & Schepis, 1994; Cooper, 1995; Leslie, 1995). However, the job coach is well-situated to provide the necessary coordination between specialists and customers.

**4. Specialized Agency Services.** Individuals with disabilities can also benefit from multidisciplinary expertise in their adaptation to the competitive workplace. This holds true for disability-related functional impairments as well as for the design and implementation of assistive technology. Some combination of resources and coordination of efforts, between the employment service provider and disability-related service provider is desirable (La Rocca, Kalb & Gregg, 1996). Examples of specialized, disability-related service providers include psychological counseling (Rosseler, 1988), substance abuse programs, medical programs, mental health programs (Rogers, Anthony & Danley, 1989), taxi or shuttle transportation (Griffin, 1994) and developmental disabilities programs (McGaughey, Kiernan, McNally & Gilmore, 1995). Vocational rehabilitation providers may play the same role in mediating disability-related specialized services as supported employment providers. Nonetheless, their roles diverge, inasmuch as it is possible for a supported employment provider to act as the specialized service provider for a vocational rehabilitation service. For the moment, however, supported employment programs and vocational rehabilitation services will be considered equally “vocational service” providers, with other providers lending their specialized expertise on the management and treatment of the disability in question. A hypothetical example of the way vocational and specialized providers influence the employment outcomes of workers with disabilities may bring these issues into sharper focus.

In this example, Simon, a worker with a psychiatric disability, receives specialized services

from mental health providers in accordance with his disability-related needs and goals. Simon receives counseling and medication from a mental health provider in order to manage his illness. These treatments will help him achieve success in his employment goal. Simon has just landed his preferred job and his job coach has determined that co-worker aid is a critical work support for success in his new job. The mental health services Simon receives will enable him to have successful social interactions with co-workers after he has received some additional social skill training from his job coach. The job coach is able to successfully complete social skills training with Simon, because the mental health treatments he is receiving has increased Simon’s receptivity.

As this example suggests, it is not only the employee who benefits from the efforts of the specialized service provider, so too does the job coach. When the specialized provider services are provided separately from vocational services they are called “brokered” services. Particularly with respect to psychiatric disabilities, “brokered” services have been found to produce less effective employment outcomes and poorer customer service than integrated services (Drake, et al. 1995). Ideally, integrated services are characterized by seamless customer-centered services and resources, together with cross-training and/or education of vocational and specialized service staff (Bybee, Mowbray & McCrohan, 1995; Drake, et al., 1995; Drake, McHugo, Becker & Anthony, 1996). Several authors have suggested that the employer is also a critical “rehabilitation” resource ( Flexer, Goebel, Baer, Simmons, Maryonyi, Shell, Steele & Sabousky, 1994; Rhodes, Sandow, Taliferro & Mank, 1993). Positive employment outcomes have been attributed to both employer collaboration in developing work supports (Rhodes, et al., 1993), and sustained positive relationships with employers (Cook, Razzano, Straiton & Ross, 1994). What about employment resources that are primarily



mediated by the employer? This will be the topic of the discussion that follows on business-mediated supports.

## **BUSINESS-MEDIATED SUPPORTS**

Even though agencies have traditionally initiated the work support process, an ever increasing number of professionals are concluding that employers should also be initiating work supports (Hanley-Maxwell, & Millington, 1992; Harper, 1993; Sandow, Olson & Yan, 1993; Test & Wood, 1996a). Businesses are a vital source of in-house work supports including people (e.g., supervisors and co-workers), practices (e.g., flexible scheduling), policies (e.g., early return to work), and environmental supports (e.g., accessible work spaces) (Fabian & Leucking, 1991; Rhodes, et al., 1993; Shoemaker, Robin & Robin, 1992; Sowers, Kouwenhoven, Sousa & Milliken, 1997). Businesses can also lead collaborations with human service providers (Rhodes, et al., 1993). As Golden (1995) notes, businesses can tap into government-sponsored services such as those provided under the Job Training Partnership Act, federal employment-related funding such as the Disabled Access Tax Credit, and non-profit funds such as those provided by the Association for Retarded Citizens' wage reimbursement program.

A wide variety of programs designed to meet the support needs of workers with disabilities have been sponsored by businesses. Businesses have entered into partnerships to hire and provide supports for workers with disabilities with public entities, non-profit organizations, insurance companies, and with other businesses (Akabas & Gates, 1993; Minao, Nalvern & Hoff; Taylor, 1994; Tilson, Luecking & West, 1996). Finally, businesses have also contracted with employment consultants and Employee Assistance Programs to provide work supports (Kiernan & McGaughey, 1992). In each of these instances business is the mediator through which work support pro-

grams, practices, policies and procedures for disabled workers are realized.

### **1. Workplace Accommodations.**

Accommodations such as assistive technology, job modification, environmental modification, job restructuring and schedule modification can often be achieved at a low cost. It is estimated that about eighty percent of accommodations cost \$100-\$500, while half the accommodations cost little or no money (Johnson, 1992). Moreover, the federal government offers businesses tax incentives to cover part of the cost of removing barriers (Johnson, 1992). The cost of job creation, another accommodation possibility, could be justified by seasonal variations in product demand, the labor pool, or unmet company needs. At the same time, "free" accommodations, such as schedule modification, or job restructuring may contain a hidden cost in the burden or perceived inequity that they impose on co-workers, supervisors and employers (Frierson, 1990). The need to have business personnel "buy-in" to work supports and accommodations hints at why these individuals are themselves important work supports.

**2. Co-Worker and Employer Supports.** Co-worker support has been identified as critical to the work performance and job satisfaction of all employees, disabled and non-disabled alike (Curl, Hall, Chisholm & Rule, 1992; Fabian & Leucking, 1991). An important dimension of co-worker support is social integration, which has been linked to both social support (important to job satisfaction) and mentoring (important to job performance) (Curl, Cook, & Clemmons, 1996; Gaylord-Ross, Park, Johnson & Lee, 1995; Storey & Provost, 1996). In addition to providing social support and mentoring, co-workers can provide formal training for workers with disabilities and have done so successfully in a number of circumstances (Curl, et al.,

1996). Supervisors and employers provide training and mentoring support as part of their role, although in the case of workers with disabilities, they may provide more varied, extensive and/or intensive training than for non-disabled workers. Supervisors and/or employers also provide work supports such as flexible scheduling, task modifications, job restructuring and job sharing. Studies have indicated that employers do not object to providing additional task-related support for workers with disabilities (Adelman & Vogel, 1993). However, employers have reported objections to providing additional support of a personal or emotional nature (Adelman & Vogel, 1993). Another source of supports is found in specialized in-house and contracted disability-related programs and policies.

**3. Employer-Sponsored Programs and Policies.** Return to work policies, disability case management and rehabilitation have been identified as cost-saving procedures for employers because of the high costs of disability claims and replacement labor (Taylor, 1994). Disability management programs are one response to the high cost of worker disablement (Akabas & Gates, 1993). Such programs seek to identify and manage job-related stressors, along with workplace environmental limitations in order to create a productive fit between the requirements of the job and the worker (Akabas & Gates, 1993; Akabas, 1994). Supervisory support, job accommodations, supportive policies, training, evaluation, and prevention are integral components of a successful disability management program (Akabas, 1994).

In addition to internal policies about family and/or medical leave, there are two federal statutes of importance to employers of workers with disabilities: the Americans with Disabilities Act (ADA) and the Family and Medical Leave Act of 1993 (Akabas, 1994). The ADA has required an "early return to work policy" of employers (Shoemaker, Robin & Robin, 1992).

It is not known to what degree employers have implemented or even adopted such a policy, although a 1992 study in Michigan found a minority of respondents had either adopted and/or implemented such a policy (Shoemaker, Robin & Robin, 1992).

However, there have been several business-sponsored projects that have successfully implemented the model of in-house hiring and support for workers with disabilities (Miano, Nalven & Hoff, 1996; Rhodes, et al., 1993). These projects used the supported employment and/or natural supports models (Miano, et al., 1996; Rhodes, et al., 1993). For instance, one corporation sponsored a project team of professionals and employees who assessed the workplace environment for the special needs of a group of deaf workers (Berkay, 1993). The recommendations of this team resulted in a number of adaptations and accommodations and inspired a model called the "Assessment Center Deaf Exercise Adaptation Model" (Berkay, 1993). The professionals in this team served as paid consultants for the corporation.

Businesses also use paid professionals with expertise in the issues affecting workers with disabilities in Employee Assistance Programs (Hanley-Maxwell & Millington, 1992). Employee Assistance Programs (EAP) can be either in-house or contracted. In addition to serving employees with a disability directly, EAP can be designed to serve the front line supervisor and co-workers who have family members with a disability (Kiernan & McGaughey, 1992). Research indicates that EAP provide effective supports to employees with disabilities (Kiernan & McGaughey, 1992). It is thought that the ADA will encourage the growth of employee supports for workers with disabilities, such as the EAP (Kiernan & McGaughey, 1992). Once again, as in the instance of the job audits, tax incentives, program funding and workplace disability policies, federal statutes and initiatives loom large. Government

is both a source and a mediator of work supports. It is to the topic of government supports that the discussion turns next.

### GOVERNMENT-MEDIATED SUPPORTS

Government mediated supports are those policies and practices that enhance the likelihood that persons with disabilities will find and/or maintain employment. Examples of government supports include selected Social Security policies, U.S. Department of Treasury tax policies, civil rights legislation, and other laws targeting specifically the employment of persons with disabilities.

Consider, for example, the Targeted Job Tax Credit (TJTC), a law passed by Congress and administered by the U. S. Department of Treasury for the purpose of enticing employers to hire persons with disabilities. Zivolich and his colleagues (1995) studied the effects of the TJTC and found it to be a useful support. Similarly, the Social Security Administration (SSA) has implemented a number of supports to help support individuals with disabilities who want to work. Referrals to state vocational rehabilitation services, trial work periods, continuing eligibility for Medicare, deduction of impairment-related work expenses from taxable earnings, and development of a Plan for Achieving Self-Support (PASS) are all strategic elements of an effort to support and promote the employment of individuals with disabilities. Some of these incentives or supports have been difficult for many beneficiaries to access or understand (See General Accounting Office report, April, 1996) and thus many of these supports have been underutilized.

Only recently has there been another effort to greatly improve the viability of the PASS program. SSA (Colvin, 1998) provided a new set of guidelines to make PASS supports more viable. They include:

- PASS evaluations and notices will make a clear distinction between the feasibility of the

goal, based on a individual's reasonable expectations to perform the work, and the viability of the plan for achieving it, based on the steps necessary to achieve the goal.

- Unless there is evidence to the contrary, the Social Security Administration's PASS Specialists will presume an occupational goal to be feasible, and the plan for achieving it to be viable, if any of certain state or private professionals in the field of vocational rehabilitation and employment develops the PASS. If the PASS Specialists cannot approve a PASS, he or she will discuss the matter with the individual as well as with the plan's preparer.
- Instructions regarding the limit on occupational goals will make it clear that this limit is not the strict "entry level" limit that many, both in and outside of SSA, perceive it to be. The SSA policy stipulates that, within the business, trade, or profession the individual has chosen, the occupational goal cannot exceed the earliest point on the career path that would generate sufficient earnings to enable the individual to pay for his or her own living expenses, uncovered medical expenses, and work-related expenses.
- Allowable expenses for major purchases will not be limited to down payments. Funds set aside for installment payments will be excluded to the extent that the expense remains related to and supportive of an approved occupational goal, and earnings do not negate the need to continue the exclusion.
- The PASS Specialist will play an earlier and expanded role in the PASS application or review, and he or she and the customer will be able to communicate directly with each other throughout the process.

Medicaid and Medicare reforms at the federal and state levels also have very significant impact on health benefits and employment for persons with disabilities, as well as the way in which Medicaid funds are dis-

tributed. For example, in 1997, the Congress amended the Medicaid statute in order to make funds for supported employment available for Medicaid-eligible clients who were not previously institutionalized and who wish to enter supported employment. This is a major government support that may open up the door to supported employment for 150,000 new clients (NASMRDD, August, 1997). The Home and Community Based Waiver can be seen as a major government support adopted by states across the nation (West, Revell, Kregel, & Bricout, 1999)

In 1994, 135,000 individuals participated in MR/DD waiver programs, a tripling of the number of participants since 1990. State and federal outlays for those programs totaled \$3.5 billion in 1994. Twice as many people with developmental disabilities participate in the HCB waiver program as reside in public MR institutions (West, et al., 1999). By 1995, the number of individuals who participated in MR/DD HCB waiver programs had exceeded the number served in Intermediate Care Facilities for persons with mental retardation (ICF/MR) of all types (West, et al., 1999). States are continually increasing the number of services and supports they are offering in their programs, including supported employment. The number of people participating in mental retardation or developmental disability (MR/DD) Home and Community Waiver Based (HCB) programs likely will grow at annual rate of 10-15% for the next three-to-five years (West, et al., 1999).

But perhaps the most far-reaching government support can be found in the Americans with Disabilities Act, a law passed in 1990 that provides a host of civil rights and protections for persons with disabilities. For example, in Title I of the ADA, employment access is ensured through nondiscrimination protections in the workplace. This act was followed by a comprehensive set of regulations published exactly one year later (Federal Register, July 26, 1991). These

regulations provide for accessibility, non-discrimination, greater integration and participation in workplaces, in community facilities, in the use of public transportation, and in telecommunication use. As a consequence of the ADA's success in bringing about some of these outcomes, young adults have been able to participate in a world that is less discriminatory against people with disabilities. The ADA is a critical government-mediated social policy that brings necessary support to the enhancement of employment opportunities for persons with disabilities.

Under Title I of the ADA, employers are prohibited from discriminating against otherwise qualified individuals with disabilities during recruitment, hiring, evaluation, promotion, or any facet of employment. Employers are further required to provide "reasonable accommodations" to enable qualified individuals with disabilities to successfully perform their jobs. Such accommodations are to be provided to the extent that the employer does not sustain "undue hardship." Reasonable accommodations may include such things as restructuring jobs or work schedules, modifying equipment or providing assistive devices, providing an interpreter or reading aids, or improving the overall accessibility of the worksite. Employers in violation of this law face the same legal penalties as those found guilty of discrimination based on gender or race. Another piece of federal legislation providing critical supports to workers with a disability is the Technology-Related Assistance for Individuals with Disabilities Act Amendments of 1994 (P.L. 103-218), also referred to as the "Tech Act" was signed into law on March 9, 1994. This law provides access to assistive technology services and devices for individuals with disabilities of all ages.

There are numerous specific purposes of the Tech Act which are:

- to provide discretionary grants to states to assist them in developing and implementing a "consumer-responsive, comprehensive,

statewide program of technology-related assistance for individuals with disabilities of all ages.

- to fund programs of national significance related to assistive technology.
- to establish and expand alternative financing mechanisms to allow individuals with disabilities to purchase assistive technology devices and services.

With the passage and reauthorization of the 1994 Tech Act, Congress acknowledged the powerful role that assistive technology can play in maximizing the independence of individuals with disabilities. This law has the potential to open many new opportunities for individuals with disabilities and their families to receive appropriate assistive technology services. The Tech Act places the emphasis on being responsive to the needs of consumers and their families.

The state grants program under Title I of the Act served a catalyst for statewide systems change to increase access to appropriate assistive technology devices and services. These funds were used to support systems change and advocacy activities to increase the availability of assistive devices and services (Barcus, et al., 1995).

## **CONSUMER AND FAMILY-MEDIATED SUPPORTS**

In a consumer-driven system of human services, persons with disabilities should be the true customers of supported employment. Brooke and her colleagues (1995) outline a series of steps and strategies for consumers and families that help them take more power and responsibility for the supports they need. But as will soon become evident, the literature on this topic is still developing.

**1. Family Supports.** Families play an important role in the quality of life, adjustment and health outcomes of persons with disabilities (Kelly & Lambert, 1992). Families can provide

informal care that ranges from general psychosocial support to job-related skills training (Prosser, & Moss, 1996; Turner & Alston, 1994; Urbain, 1997). The ethnic group and culture to which the person with a disability belongs may have an impact in how strongly family influences consumer life choices and decisions, with some groups and cultures emphasizing independence more than others (Parette, 1997; Turner & Alston, 1994). Individual differences and context (e.g., employment) may also influence the degree of independence from family a person with disabilities displays (Mowbray, Bybee, Harris & McCrohan, 1995). However, family continues to be an important mediator of various work supports (Killiam, Petranek & Harding, 1996; Kutty, 1993; Parette, 1997; Prosser & Moss, 1996). For instance, family members have an important role to play in the selection and implementation of assistive technology devices and services (Parette, 1997). Parents have successfully managed a supported employment program for persons with severe disabilities (Killiam, Petranek & Harding, 1996). Parents trained by professionals have also been involved in providing vocational services at community-based programs (Kutty, 1993).

On the basis of experience from six projects nationwide, Urbain (1997) of the PACER organization in Minneapolis formulated a comprehensive approach for parental involvement in fostering natural supports in the supported employment process. She envisions parents as both facilitators and skills trainers. For instance, as facilitators, parents can use their unique access to interpersonal networks, including relatives, neighbors, friends, business contacts and others to provide the job developer with a broader range of employment possibilities (Urbain, 1997). Parents can also act as skills trainers by actively encouraging successful work-related behaviors at home,

such as timeliness, task completion and following instructions (Urbain, 1997).

However, it is not easy to generalize about the relationship of family support to actual employment outcomes. In fact, the influence of family support on employment outcomes appears to be uneven. Some investigators have found positive associations of family support to favorable employment outcomes (see Kelley & Lambert, 1992; Siegel & Gaylord-Ross, 1991); others have reported negative associations of family support to favorable employment outcomes (e.g. Mowbray, et al. 1995). Further research needs to take place that clearly specifies the degree of collaboration between family and supported employee, as well as specifying what constitutes "family support," before any conclusions can be drawn on the influence of different kinds of family support on employment outcomes. It has already been suggested that the interpersonal supports available to individuals with disabilities extend beyond family to include co-workers, supervisors and mentors with a stake in their employment success. Peers and other friends and acquaintances may also have an important role to play in providing work supports for persons with disabilities (Kelly & Lambert, 1992).

**2. Consumer, Friend and Peer Support.** One important force in enhancing the working potential and choices of persons with disabilities is found in the independent living "movement". The independent living "movement" for persons with disabilities grew out of a desire to increase the autonomy and community participation of persons with disabilities (Asher, Asher, Hobbs & Kelley, 1988). Independent living was intended to provide a barrier-free, self-directed environment and an alternative to institutionalization, medicalization and dependence (Boland & Alonso, 1982; Budde & Bachelder, 1986). Independent living was first conceived of as a model for persons with severe physical disabilities, but came to serve persons with a wide range of

disabilities, including many with mental retardation (Budde & Bachelder, 1986). Increasing the employability of persons with disabilities has always been one goal of independent living, within the broader goals of consumer decision-making control and community participation (Asher, et al., 1988; Asher, Asher, Hobbs & Kelley, 1991), or as it is sometimes called "total rehabilitation" (Boland & Alonso, 1982).

Personal attendants, also called personal care workers, are vital to successful independent living for many consumers (Atkins, Meyer & Smith, 1982). Personal attendants make it possible for persons with disabilities to live in their own residence and to work in the community (Budde & Bachelder, 1986). Attendants help consumers with domestic chores, personal hygiene and dress, cooking, and other daily living tasks (Asher, et al., 1991; Budde & Bachelder, 1986). The services of the attendant can also be modified to include the role of advocate, advisor or coach (Budde & Bachelder, 1986).

Personal care decisions are an important domain for consumer self-direction. That is, in making personal care decisions, and in directing their own personal care, persons with disabilities have the opportunity to exert choice and control in a critical area of their lives with direct consequences for employment, as well as overall quality of life (Asher, et al., 1991). This consumer-driven approach is known as the "consumer" model of attendant care, in which the person with the disability is responsible for the decision making and administrative tasks, including attendant recruitment, hiring, training and management (Asher, et al., 1988; Asher, et al., 1991). At the other end of the spectrum, the "agency" model of attendant care locates all decisions and responsibilities in the agency (Asher, et al., 1988; Asher, et al., 1991). Both models are practiced to varying degrees in the community, allowing the consumer a continuum of choice-making and control (Asher, et al., 1988; Asher, et al.,

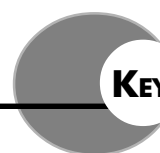
1991). A consumer focus would suggest that persons with disabilities have access to the attendant care model. This is because this model maximizes individual decision-making and control while providing needed support.

Consumers with a psychiatric disability and their peers have contributed directly to their own work adjustment through the model of psychosocial rehabilitation. In the psychosocial rehabilitation model, consumers determine what their goals are for functioning in the community and how they will achieve them (Peterson, Patrick & Rissmeyer, 1990). This rehabilitation takes place in psychosocial "club-houses," facilities in which consumer members and professional staff work together to create an environment that fosters the skills necessary to function successfully in the community (Barker, 1994; Peterson, Patrick & Rissmeyer, 1990). Prevocational skills and even transitional employment may be offered through such club-houses in addition to community support and social relationships (Peterson, Patrick & Rissmeyer, 1990; Dougherty, 1994). In a related vein, mutual peer support and self-help in a joint consumer-professional employment project using a "Self-help Employment Center" enhanced the vocational rehabilitation of a group of individuals with serious psychiatric disabilities (Kauffmann, 1995).

Persons with disabilities have also successfully implemented and used a program of self-directed personal services while employing personal assistants and others (Asher, et al., 1991). Friends and family members may provide job leads or job networks through informal contacts (Wehman, Kregel, & Seyfarth, 1985). Community contacts and advocates can also provide job developers with critical referrals for persons with disabilities (Nietupski, Verstegen, Hamre-Nietupski & Tanty, 1993). In one demonstration project, community members provided various rehabilitation supports to persons with psychiatric disabilities, including limited pre-

employment experience (Guay, 1994). On the job site, employees with disabilities may receive help from co-workers on the basis of perceived friendship, rather than as a collateral duty or shared obligation (Gaylord-Ross, et al., 1995). Transportation is another work support that may be provided by friends as well as family (Parent, et al., 1994).

Admittedly, people with disabilities, their families, friends and community may not always share the same perspective, or objectives. In the context of this discussion, the employment supports provided by each of these parties is conceived as serving consumer-centered goals and objectives. Regardless of the good intentions and consumer focus of others, individuals with disabilities must still negotiate with their interpersonal support systems. As members of family groups, work organizations, and a broader community, people with disabilities have to reconcile competing tugs toward dependence and independence, just as their non-disabled peers must. The work and career goals they pursue are undertaken in a framework that requires both choice and compromise. What must not be compromised; however, is the ability of the consumer to realize an employment situation that they find satisfying. The efforts of family, friends, disabled peers, community, agency, business, and government must have the needs and aspirations of the individual with a disability as their focus for this goal of consumer satisfaction to be achieved.



### **KEY POINTS TO REMEMBER IN DESIGNING A SUPPORT SYSTEM: CONCLUDING REMARKS**

The use of community and workplace supports in the provision of supported employ-

ment services represents the state of the art of what we know today in how best to support individuals with severe disabilities in the competitive jobs of their choice. Empirically-based, innovative support strategies and technologies, such as those described previously, may better meet the needs of all individuals who would like to work and receive assistance from supported employment. However, as the field of supported employment prepares to move to this next level, several critical caveats must be kept in mind.

1. The utilization of community and workplace supports is not a panacea for correcting all of the shortcomings observed in supported employment implementation. It will not fix all of the inconsistencies in service delivery, the lack of funding resources, the shortages of skilled job coaches, the disincentives for conversion, the interagency "turf" issues, the large numbers of persons on waiting lists for services, or the poor quality outcomes reported for some supported employment participants (e.g., low wages, inadequate integration, paucity of hours, lack of career advancement). What the new perspective on innovative strategies for support will do is to place consumers in the driver's seat, allowing them to direct their careers and truly choose the type and amount of assistance they would like to receive to achieve their career goals.

2. The basic premises on which supported employment was established have not changed, despite the expansion to include new service technologies. People with disabilities want to work in real jobs, and supported employment offers the means for achieving this goal. No support strategy or methodology, regardless of how good it sounds, should compromise the values of employment integration, participation and choice upon which this vocational model was based. Individuals have the right to be employed by community businesses where they can earn comparable wages, work side-by-side with their co-workers, receive adequate hours of work, and

enjoy all of the same benefits as other employees of the company. Most importantly, they should be able to choose these characteristics of their jobs, with the freedom to change their minds as their needs and preferences dictate.

3. The reliance on community and workplace supports is not an all-or-nothing, sink-or-swim approach, but rather one of the supportive features of the existing supported employment model. The job coach is responsible for implementing all of the services characteristic of the consumer assessment, job development, job-site training, and ongoing, follow-along phases of supported employment. However, the idiosyncratic needs of individuals for different types of assistance, and for varying levels of support in the employment process are respected and addressed by supported employment. The type of support an individual receives to meet each of these needs, and the way it is provided can be decided by that person, using some of the strategies and supports outlined in this manuscript.

For example, an individual with extensive job-site training needs may choose to have a co-worker teach one task, the job coach teach another, her parents arrange transportation, the rehabilitation counselor purchase uniforms, a friend assist with managing her paycheck, and the cafeteria personnel help with taking lunch and breaks. A supervisor could monitor her work performance as a function of time spent in training. Meanwhile she might have the job coach accompany her for social events on the job and after work hours. Also outside work hours, a Social Security consultant might assist her with writing a Plan for Achieving Self-Support (PASS).

4. With the advent of new and creative support technologies, the job coach's role is not eliminated, but remains an essential element. It is evident that existing community and workplace supports do not automatically meet the needs of individuals with severe disabilities. People were not working before the establishment of supported



employment, and many more who could be employed with proper supports are still unemployed due to a lack of services. This situation does not mean that individuals cannot benefit from the assistance provided by different support resources. Rather it suggests that help grounded in practice experience, empirical research and first principles (e.g., consumer-focused) is needed to marshall that assistance in a meaningful way to meet particular support needs. The job coach is the one constant person who possesses the skills to be able to identify and develop support resources. It is the job coach who is most skilled at assisting consumers with accessing needed services, evaluating their effectiveness, and arranging alternative provisions as the need arises.

As important as the job coach is to the success of work supports, and as critical as the technologies and strategies of work supports are, all of these hinge on the active participation, and even leadership, of the consumer. Without

the experience, ideas and feedback of the person with a disability, adequate and appropriate work supports will not be developed and implemented. Moreover, the very notion of work “support” as something that enhances the employment success of an individual with a disability is meaningful only if it responds to the aspirations, abilities and enthusiasms of the consumer, by whom success is measured. Again, the focus is on the consumer as the first and most basic mediator of work supports. The consumer focus is not a “new” focus, rather it represents a salutary return to fundamental supported employment values and practices, which put the success and interests of the person with the disability first. Only with the collection of empirical data and experience, accumulated over time, has it become possible to determine which strategies and supports help realize the promise of supported employment for consumer success, choice, and satisfaction.

# References:

---

Adelman, P.B., & Vogel, S.A. (1993). Issues in the employment of adults with learning disabilities. Learning Disability Quarterly, 16(3), 219-232.

Akabas, S.H. (1994). Workplace responsiveness: Key employer characteristics in support of job maintenance for people with mental illness. Psychosocial Rehabilitation Journal, 17(3), 91-101.

Akabas, S.H., & Gates, L.B. (1993). Stress and disability management project: Final report. Columbia University, School of Social Work, Center for Social Policy and Practice in the Workplace. New York: Author.

Albin, J.M., Rhodes, L., & Mak, D. (1994). Realigning organizational culture, resources, and community roles: Change over to community employment. Journal of the Association for Persons with Severe Handicaps, 19(2), 105-115.

Asher, C.C., Asher, M.A., Hobbs, W.E., & Keley, J.M. (1988). A preliminary investigation of the independent living movement in Pennsylvania. Journal of Rehabilitation, 54(2), 34-39.

Asher, C.C., Asher, M.A., Hobbs, W.E., & Kelley, J.M. (1991). On consumer self-direction of attendant care services: An empirical analysis of survey responses. Evaluation and Program Planning, 14(3), 131-139.

Atkin, B.J., Meyer, A.B., & Smith, N.K. (1982). Personal care attendants: Attitudes and factors contributing to job satisfaction. Journal of Rehabilitation, 48(3), 20-24.

Barker, L.T. (1994). Community-based models of employment for people with psychiatric disabilities. Psychosocial Rehabilitation Journal, 17(3), 55-65.

Behrmann, M.M., & Schepis, M.M. (1994). Assistive technology assessment: A multiple case study review of three approaches with students with physical disabilities during the transition from school to work. Journal of Vocational Rehabilitation, 4(3), 202-210.

Berkay, P.J. (1993). The adaptation of assessment group exercises for deaf job applicants. Journal of the American Deafness and Rehabilitation Association, 27(1), 16-24.

Birch, G.E., Fengler, M., Gosine, R.G., Schroeder, K., Schroeder, M., & Johnson, D.L. (1996). An assessment methodology and its application to a robotic vocational assistive device. Technology and Disability, 5(2), 151-165.

Boland, J.M., & Alonso, G. (1982). A comparison: Independent living rehabilitation and vocational rehabilitation. Journal of Rehabilitation, 48(1), 56-59.

Bond, G. (in press). Principles of the individual placement and support model: Empirical support. Psychiatric Rehabilitation Journal.

Bond, G.R., Dietzen, L.L., McGrew, J.H., & Miller, L.D. (1995). Accelerating entry into supported employment for persons with severe psychiatric disabilities. Rehabilitation Psychology, 40, 91-111.

- Briel, L.W. (1996). Promoting the effective use of compensatory strategies on the job for individuals with traumatic brain injury. Journal of Vocational Rehabilitation, 7(2), 151-158.
- Brooke, V., Wehman, P., Inge, K., & Parent, W. (1995). Toward a customer-driven approach of supported employment. Education and Training in Mental Retardation and Developmental Disability, 30(4), 308-319.
- Budde, J.F. & Bachelder, J.L., (1986). Independent living: The concept, model and methodology. Journal of the Association for Persons with Severe Handicaps, 11(4), 240-245.
- Budde, J., Youngbauer, J., Snyder, J., (1997). Underserved consumers with mental retardation. University of Kansas: Lawrence, Kansas.
- Bybee, D., Mowbray, C.T., & McCrohan, N.M. (1995). Towards zero exclusion in vocational services for persons with severe psychiatric disabilities: Prediction of service receipt in a hybrid vocational/case management service program. Psychosocial Rehabilitation Journal, 18(4), 73-78.
- Cook, J.A., Razzano, L.A., Straiton, D.M., & Ross, Y. (1994). Cultivation and maintenance of relationships with employers of people with psychiatric disabilities. Psychosocial Rehabilitation Journal, 17(3), 103-116.
- Cooper, R.A. (1995). Forging a new future: A call for integrating people with disabilities into rehabilitation engineering. Technology and Disability, 4(2), 81-85.
- Curl, R.M., Fraser, R.T., Cook, R.G., & Clemmons, D. (1996). Traumatic brain injury vocational rehabilitation: Preliminary findings for co-worker as trainer project. Journal of Head Trauma Rehabilitation, 11(1), 75-85.
- Curl, R. M., Hall, S. M. Chisholm, L. A. & Rule, S. (1992). Coworkers as trainers for entry-level workers: A competitive employment model for individuals with developmental disabilities. Rural Special Education Quarterly, 11 (1), 31-35.
- Danley, K.S., Rogers, E.S., MacDonald-Wilson, K., & Anthony, W. (1994). Supported employment for adults with a psychiatric disability: results of an innovative demonstration project. Rehabilitation Psychology, 39(4), 269-276.
- Dougherty, S.J. (1994). The generalist role in clubhouse organizations. Psychosocial Rehabilitation Journal, 18(1). 95-108.
- Drake, R.E., Becker, D.R., Haiyi, X., & Anthony, W.A. (1995). Barriers in the brokered model of supported employment for persons with psychiatric disabilities. Journal of Vocational Rehabilitation, 5(2), 141-149.
- Drake, R. (1998). Individual placement and support. Special Issue: Psychiatric Rehabilitation Journal, 22(1), whole issue.
- Drake, R.E., McHugo, G., Becker, D.R., Anthony, W.A., & Clark, R.E. (1996). The New Hampshire study of supported employment for people with severe mental illness. Journal of Consulting and Clinical Psychology, 64(2), 391-399.

Fabian, E.S., & Luecking, R.G. (1991). Doing it the company way: Using the internal company supports in the workplace. Journal of Rehabilitation Counseling, 22 (b), 32-35.

Fabian, E.S., Waterworth, A., & Ripke, B. (1993). Reasonable accommodations for workers with serious mental illness: Type, frequency, and associated outcomes. Psychosocial Rehabilitation Journal, 17(2), 163-172.

Federal Register (1991, July 26). Americans with Disabilities Act (ADA): Accessibility guidelines for buildings and facilities. Washington, DC: U.S. Government Printing Office.

Flexer, R., Goebel, G., Baer, R., Simmons, T., Maryonyi, E., Shell, D., Steele, R., & Sabousky, R. (1994). Participant, employer, and rehabilitation resources in supported employment: A collaborative support. Journal of Applied Rehabilitation Counseling, 25(4), 9-15.

Frierson, J.G. (1992). An employer's dilemma: The ADA's provisions on reasonable accommodation and confidentiality. Labor Law Journal, 43(1), 309-312.

Gaylord-Ross, R., Park, H-S, Johnston, S., & Lee, M. (1995). Individual social skills training and co-worker training for supported employees with dual sensory impairments: Two case examples. Behavior Modification, 19(1), 78-94.

General Accounting Office (April, 1996). SSA Disability: Program redesign necessary to encourage return to work. Washington, DC: Author.

Giles, G., & Shore, M. (1989) A rapid method for teaching severely brain injured adults how to wash and dress. Archives of Physical Medicine and Rehabilitation, 70, 156-158.

Golden, T.P. (1995). Employer incentives for hiring workers with disabilities: How job developers can consult with business to access supports for employees with disabilities. Training Resource Network, St. Augustine, FL: Author.

Guay, J. (1994). Involving citizens in the rehabilitation process. Psychosocial Rehabilitation Journal, 18(1), 145-150.

Hanley-Maxwell, C., & Milington, M. (1992). Enhancing independence in supported employment: Natural supports in business and industry. Journal of Vocational Rehabilitation, 2(4), 51-58.

Harper, J. (1993). Securing a role for people with disabilities in the work force. Journal of Vocational Rehabilitation, 3(4), 70-73.

Inge, K.J., Wehman, P., Kregel, J., & Sherron-Targett, P. (1996). Vocational rehabilitation for persons with spinal cord injuries and other severe physical disabilities. American Rehabilitation, 22(4), 2-12.

Johnson, S.E. (1992). Creating a barrier-free work environment. HR focus, 69, 15.

Kaufmann, C.L. (1995). The self-help employment center: Some outcomes from the first year. Psychosocial Rehabilitation Journal, 18(4), 145-162.

Kelley, S.D.M., & Lambert, S.S. (1992). Family support in rehabilitation: A review of research, 1980-1990. Rehabilitation Counseling Bulletin, 36(2), 98-119.

Kiernan, W.E., & McGaughey, M. (1992). Employee assistance: A support mechanism for the worker with a disability. Journal of Rehabilitation, 58(2), 56-63.

Killiam, S.G., Patranek, I., & Harding, G. (1996). Parents in charge of the system: Strategies for increasing supported employment opportunities for individuals with severe disabilities. Journal of Vocational Rehabilitation, 6(1), 41-45.

Kregel, J. and Wehman, P. (1989). Supported employment: Promises deferred for persons with severe disabilities. Journal of the Association for Persons with Severe Handicaps 14 (4), 293

Kregel, J., Wehman, P., & Banks, P. (1989). The effects of consumer characteristics and type of employment model on individual outcomes in supported employment. Journal of Applied Behavioral Analysis, 22, 407-415.

Kreutzer, J.S., Wehman, P., Morton, M.V., & Stonnington, H. (1988). Supported employment and compensatory strategies for enhancing vocational outcome following traumatic brain injury. Brain Injury, 2(3), 205-224.

Kreutzer, J.S., Gordon, W.A., & Wehman, P. (1989). Cognitive remediation following traumatic brain injury. Rehabilitation Psychology, 34, 117-130.

Kutty, A.T.T. (1993). Parents associations for vocational training and employment of persons with mental retardation. Indian Journal of Disability and Rehabilitation, 7(1), 53-58.

LaRocca, N.G., Kalb, R.C., & Gregg, K. (1997). A program to facilitate retention of employment among persons with multiple sclerosis. Work, A Journal of Prevention Assessment and Rehabilitation, 7(1), 37-46.

Lash, M., & Licenziato, V. (1995). Career transitions for persons with severe physical disabilities: Integrating technological and psychosocial skills and accommodations. Work, 5(2), 85-98.

Leslie, J.C. (1995). Worksite accommodation: Adaptation from a pragmatic perspective. Technology and Disability, 4(2), 131-135.

Louis Harris at Associates (1994). Survey for the international center for the disabled. The ICD Survey II: Employing disabled Americans. Washington, DC: National Organization on Disability.

MacDonald-Wilson, K., Revell, G., Nguyen, N., & Peterson, M. (1991). Supported employment outcomes for people with psychiatric disabilities: A comparative analysis. Journal of Vocational Rehabilitation, 1(3), 30-44.

McGaughey, Kiernan, McNally, Gilmore & Keith (1994). Beyond the workshop: National perspectives on integrated employment. Boston Children's Hospital, Institute for Community Inclusion. Boston: Author.

Miano, M.N., Nalvern, E.B., & Hoff, D. (1996). The Pachysandra Project: A public-private initiative in supported employment at the Prudential Insurance Company of America. Journal of Vocational Rehabilitation, 6(1), 107-118.

Mowbray, C.T., Bybee, D., Harris, S.N., & McCrohan, N. (1995). Predictors of work status and future work orientation in people with a psychiatric disability. Psychiatric Rehabilitation Journal, 19(2), 17-29.

- Nietupski, J., Verstegen, D., Nietupski-Hamre, S., & Tanty, S. (1993). Leveraging community support in approaching employers: The referral model of job development. Journal of Vocational Rehabilitation, 3(4), 38-45.
- Parent, W. S., Kregel, J., Metzler, H.M.D., & Twardzik, G. (1992). Social integration in the workplace: An analysis of interaction activities of workers with mental retardation and their co-workers. Education and Training in Mental Retardation, 27 (1), 28-38.
- Parent, W., Unger, D., Gibson, K., & Clements, C. (1994). The role of job coach: Orchestrating community and workplace supports. American Rehabilitation, 20 (3), 2-11.
- Park, H., Simmon, M., Tappe, P., Wozniak, T., Johnson, B., & Gaylord-Ross, R. (1991). Effects of a coworker advocacy program and social skills training on the social interaction of employees with mild disabilities. Journal of Vocational Rehabilitation, 1(4), 73-90.
- Parette, H.P. (1997). Assistive technology devices and services. Education and Training in Mental Retardation and Developmental Disabilities, 32(4), 267-280.
- Parette, H.P., & Vanbiervliet, A. (1992). Tentative findings of a study of the technology needs and patterns of persons with mental retardation. Journal of Intellectual Disability Research, 36(1), 7-22.
- Peterson, C.L., Patrick, S.L., & Rissmeyer, D.J. (1990). Social work's contribution to psychosocial rehabilitation. Social Work, 35(5), 468-472.
- Rehabilitation Services Administration closure report (1995). Washington, D.C.
- Prosser, H., & Moss, S. (1996). Informal care networks of older workers with an intellectual disability. Journal of Applied Research in Intellectual Disabilities, 9(1), 17-30.
- Revell, W. G., Wehman, P., Kregel, J., West, M., & Rayfield, R. (1994). Supported employment for persons with severe disabilities: Positive trends in wages, models and funding. Education and Training in Mental Retardation and Developmental Disabilities, 29 (4), 256-264.
- Rhodes, L., Sandow, D., Taliaferro, W., & Mank, D. (1993). Final report: The community employment development project, April, 1993. Specialized Training Program, University of Oregon. Eugene, OR: Author.
- Roessler, R.T. (1988). A conceptual basis for return to work interventions. Rehabilitation Counseling Bulletin, 32, 98-107.
- Rogers, E.S., Anthony, W.A., & Danley, K.S. (1989). The impact of collaboration on system and client outcomes. Rehabilitation Counseling Bulletin, 33(2), 100-109.
- Sandow, D., Olson, D., Yan, X.Y. (1993). The evolution of support in the workplace. Journal of Vocational Rehabilitation, 3(4), 30-37.
- Shafer, M.S., Banks, P.D., & Kregel, J. (1991). Employment retention and career movement among individuals with mental retardation working in supported employment. Mental Retardation, 29(2), 103-110.
- Shoemaker, R.J., & Robin, S.S., & Robin, H.S. (1992). Reaction to disability through organization policy: Early return to work policy. Journal of Rehabilitation, 58, 18-24.

Siegel, S., & Gaylord-Ross, R. (1991). Factors associated with employment success among youths with learning disabilities. Journal of Learning Disabilities, 24(1), 40-47.

Sinott-Oswald, M., Gliner, J.A., & Spenser, K.C. (1991). Supported and sheltered employment: Quality of life issues among workers with disabilities. Education and Training in Mental Retardation, 9, 388-397.

Smith, B. (1992). Technology gives workers greater freedom in the office. HR Focus, 69, 12-13.

Snyder, J., O'Neil, T., Temple, L., Crowell, R. (1996). Psychiatric disabilities: concerns, problem solutions. Boston, MA: Boston University.

Sowers, P. C., Kouwenhoven, K., Sousa, F., & Milliken, K. (1997). Community-based employment for people with the most severe disabilities: New perspectives and strategies. University of New Hampshire, Institute on Disability, Durham, NH: Author.

Storey, K., & Provost, O.N. (1996). The effect of communication skills instruction on the integration of workers with severe disabilities in supported employment settings. Education and Training in Mental Retardation and Developmental Disabilities, 31(2), 123-141

Test, D. W., & Wood, W. M. (1996a). Natural supports in the workplace: The jury is still out. Journal of The Association for Persons with Severe Handicaps, 21(4), 155-173.

Test, D. W., Hinson, K. B., Solow, J., & Keul, P. (1993, March). Job satisfaction of persons in supported employment. Education and Training in Mental Retardation, 28 (1), 38-46.

Technology-Related Assistance for Individuals with Disabilities Act of 1988, PL 100-407, 29 U.S.C. § 2201 et seq.

Technology-Related Assistance for Individuals with Disabilities Amendments of 1994, PL 103-218, 29 U.S.C. § 2201 et. seq.

Tilson, G.P, Luecking, R., & West, L.L. (1996). The employer partnership in transition for youth with disabilities. Journal for Vocational Special Needs Education, 18(3), 88-92.

Turner, W.L., & Alston, R.J. (1994). The role of the family in psychosocial adaptation to physical disabilities for African Americans. Journal of the National Medical Association, 86(12), 915-921.

Urbain, C. (1997). Supported employment using a natural supports approach: A handbook for parents. PACER center. Minneapolis: Author.

Wallace, J.F, Flippo, K.F., Barcus, J.M., & Behrman, M. (1995). Legislative foundation of assistive technology policy in the United States. In K.F. Filippo, K.J. Inge, & J.M. Barcus (Eds.). Assistive technology: A resource for school, work and community (pp. 3-22). Baltimore: Paul H. Brookes Publishing.

Wehman, P. (1981). Competitive Employment. Baltimore: Paul H. Brookes, Publishers.

Wehman, P. (1989). Effect of supported employment in vocational outcomes of persons with traumatic brain injury. Journal of Applied Behavior Analysis, 22(4), 395-405.

Wehman P., & Kregel, J. (1995). Supported employment: At the crossroads. Journal of The Association for Persons with Severe Handicaps, 20 (4), 286-299.

Wehman, P., Kregel, J., & Seyfarth, J. (1985). Employment outlook for young adults with mental retardation. Special issue: Transition and disability over the life span. Rehabilitation Counseling Bulletin, 29(2), 90-99.

Wehman, P., Kregel, J., West, M., & Cifu, D. (1994). Return to work for patients with traumatic brain injury: Analysis of costs. American Journal of Physical Medicine and Rehabilitation, 73(4), 280-281.

Wehman, P., Kreutzer, J., West, M., Sherron, P., Diambra, J., Fry, R., Groah, C., Sale, P., & Killam, S. (1989). Employment outcomes of persons following traumatic brain injury: Pre-injury, post-injury, and supported employment. Brain Injury, 3 (12), 397-412.

Wehman, P., Kreutzer, J., West, M., Sherron, P., Zasler, N., Groah, C., Stonnington, H., Burns, C., & Sale, P. (1990). Return to work for persons with traumatic brain injury: A supported employment approach. Archives of Physical Medicine and Rehabilitation, 71(13), 1047-1052.

Wehman, P., & Revell, W.G. (1996). Supported employment from 1989 to 1993: A national program that works. Focus on Autism and Other Developmental Disabilities, 11(4), 235-242.

Wehman, P., Revell, W. G. & Kregel, J. (1998). Supported employment: A decade of rapid growth and impact. American Rehabilitation, 24 (1), 31-43.

West, M., Kregel, J., Hernandez, A., and Hock T. (1997). Everybody's doing it: A national study of the use of natural supports in supported employment. Focus on Autism and Other Developmental Disabilities, 12 (3), 175-181, 192.

West, M., Revell, G., Kregel, J., & Bricout, J. (1997). The medicaid home and community-based waiver and supported employment. American Journal of Mental Retardation, 104 (1), 78-87.

Zivolich, J.S. & Aivilich, S. (1995). If not now, when?: The case against waiting for sheltered workshop change over. Journal of the Association for Persons with Severe Handicaps, 20, 311-312.