Issues in the Direct Support Workforce and their Connections to the Growth, Sustainability and Quality of Community Supports

A Technical Assistance Paper of the National Project:
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Introduction

Current difficulties in assuring adequate direct support staff recruitment, retention and competence are widely reported as the single biggest barrier to the growth, sustainability, and quality of community services for people with developmental disabilities (ANCOR, 2001; Colorado Department of Human Services, 2000; Hewitt, 2000; Lakin, Hewitt & Hayden, in press). Theses are longstanding challenges in efforts to provide sufficient high quality community supports to people with developmental disabilities (Lakin, & Bruininks, 1981; Braddock & Mitchell, 1992); but they are also ones of growing concern because the number of people demanding community services is increasing (Larson, Lakin & Hewitt, in press). As the difficulties of providing for an adequate and well-prepared workforce becomes more complex and multifaceted, so does the requirement of effective responses to these difficulties. The complexity of the current direct support workforce crisis, the effects of this crisis on various stakeholder groups and potential strategies to address them will be further explored throughout this paper. Relevant research, policy, reports and other resources related to these topics will also be summarized.

History and Nature of the Crisis

Concern about recruiting, retaining and training direct support professionals (DSPs) who can meet the needs for community support services for people with developmental disabilities is not new in the United States. Evidence of such concern can be found since the inception of community supports (Larson, Hewitt & Lakin, in press). Finding and keeping direct support staff and supporting their development of necessary skills, competence and attitudes have long been viewed as pervasive problems by service provider organizations. But these problems are becoming increasingly severe, threatening of the viability of community services, and challenging avowed commitments on the part of national, state, and local governments to assure access to community support for growing numbers of persons with developmental disabilities. What was once a problem viewed primarily as a service provider agency problem must today be viewed as a broad systems problem for which there are no easy solutions and in which all entities that have played a part in promising a place in the community for persons with developmental disabilities must play a role in addressing issues that threaten that promise.

The move toward inclusive community supports away from institutional services has had serious effects on the nature of and problems associated with direct support. In June 1977 almost all people who received residential services did so in large institutional settings with 16 or more other people (207, 356); while in June 1999 only a small percentage were living in institutional settings (82, 718) (Prouty & Lakin, 2000). This shift has had an impact on the roles and expectations of the people who provide supports. Service settings have been transformed from relatively few locations primarily in rural areas in which

the service provider was often a primary employer to an enormously greater number of much smaller service settings most often in urban communities. In fact, between 1977 and 1999 the total number of service settings increased from 11,006 to 113,633 (Prouty & Lakin, 2000). These changes have brought geographic dispersion of DSPs, an increase in the number of DSPs needed to support people in their communities, and a marked shift from public to private employment opportunities for DSPs.

Major changes have also occurred in the expectations and roles of direct support professionals (Taylor, Bradley & Warren, 1996). DSPs were in previous decades primary caretakers who under the direction of on-site supervisors carried out structured programs of health, safety, training and basic care. Today, in addition to meeting peoples' basic health, safety and care needs, DSPs have responsibilities to support people to develop and achieve their own personal goals, to balance risks with choices, to connect with peers, friends and family members, and to be full and active citizens in their communities. They carry out these expanded responsibilities with less supervision and increasingly while working alone. These expanded responsibilities and the increased isolation of DSPs have not been accompanied by increased qualifications, education or training. As a result, many DSPs report that their training has been insufficient to prepare them for their job responsibilities (Hewitt, Larson & Lakin, 2000; Test, Solow & Flowers, 1999; Hewitt, 1998).

Changes in the U.S. economy, labor market and the demographic make up of our country have contributed to the workforce problems in the developmental disabilities service system. The typical direct support worker is a female between the ages of 27 and 39 (Larson, Hewitt, & Lakin, 1994). Between 1976 and 1986 as the rapid expansion of community services was just beginning, the number of people between the ages of 20 and 44 grew by about 20 million. Staff turnover in those years was not appreciably higher than today, but replacement staff were plentiful. Since 1986 the number of people in this age group grew by only 7 million people and is currently expected to decline by 2 million people by the year 2006 (Fullerton, 1999). As the demographic pool from which DSPs are traditionally selected is declining, the need for more workers is steadily increasing. As the U. S. population ages and other persons with disabilities stake their claim to community supports, the demand for human service workers also increases. The U.S. Bureau of Labor statistics projects there will be a 58% increase in demand for home health aides and a 53% increase in the demand for community human service workers between 1998 and 2008 (Fullerton, 1999).

Low unemployment and a booming economy exacerbate the workforce challenges faced by community human services providers. Today, with unemployment rates are as low as 2% in some communities and on average 4% nationally in May 2000 (U.S. Census Bureau, 1999), human services join service industries as a whole in struggling to find workers. Unlike most of the competing service industries human services are unable to keep pace with prevailing wages because they cannot increase prices which are set by government and they can not substantially increase productivity because of the highly interpersonal role of direct support.

Direct Support Professionals

Direct support professionals have a variety of job titles; in fact in a recent study conducted in North Carolina over 155 titles were assigned to people in direct support roles (Test, Solow & Flowers, 1999). DSPs have complex jobs that require complex skills, knowledge and ethical judgment (National Alliance for Direct Support Professionals, 2001; Taylor, 2000; and O'Brien & O'Brien, 1992). They support people to participate fully in their families, communities and social lives. They assist people with personal care, health care, transportation, advocacy, financial management and other areas in which a person might need assistance (Hewitt & O'Nell, 1998; Jaskulski & Ebenstein, 1998; Taylor, Bradley & Warren, 1996; and O'Brien & O'Brien, 1992). The Community Support Skill Standards (CSSS) define the direct support role as, "…to assist the individual to lead a self-directed life and contribute to his/her community; and encourage attitudes and behaviors that enhance inclusion in his/her community (Taylor, Bradley & Warren, 1996)."

Direct support professionals work in a variety of settings, including people's own homes and their family homes, group homes, employment settings, recreation programs, and institutional settings (Hewitt, O'Nell, & Larson, 1996). The exact number of DSPs working in the United States supporting people with developmental disabilities is unknown because current labor statistics do not adequately define, identify and count these positions. It is estimated that there were about 110,000 full-time equivalent (FTE) positions in state operated institutions and

> *"My daughter has consistently received about 50% of the in-home and PCA hours she is authorized."*
> *--Parent*

400,000 FTE positions in community residential settings in 2000 (Larson, Lakin, & Hewitt, in press). It is also estimated that between 90,500 and 125,000 DSPs work in vocational programs (Larson, Hewitt & Anderson, 1999). The Bureau of Labor Statistics (1999) reports that there were 746,000 homemaker and home health aide jobs in the United States. DSPs work in both full time and part time positions and are often are required to work shifts that cover 24 hours a day, seven days a week and 365 days per year.

Most direct support professionals are females (Hewitt, Larson & Lakin, in press; Bachelder & Braddock, 1994; Braddock & Mitchell, 1992; Lakin & Bruininks, 1981), below the age of 39 (Colorado Department of Human Services, 2000; Test, Solow & Flowers, 1999; Larson, Hewitt & Lakin, 1994), and have at least some college with as many as a third of DSPs having college degrees (Hewitt, Larson & Lakin, 2000; Test, Solow & Flowers, 1999; Larson, Lakin & Bruininks, 1998). Growing numbers of DSPs across the country are from diverse cultural, ethnic and linguistic backgrounds and many are recent immigrants to the United States (Ebenstein, 1998; Sedlezky, Hewitt, O'Nell, Sauer & Larson, 2001).

Recruitment Challenges

Administrators in community service settings report that direct support professional recruitment is a significant challenge (Cohen, 2000; Hewitt, Larson & Lakin, 2000; Barry Associates, 1999; Test, Solow & Flowers, 1999). Recent studies have found a 17% DSP vacancy rate in Alaska (Johnston, 1998) and an 8% vacancy

rate in Minnesota (Hewitt, Larson & Lakin, 2000). There are a number of reasons for the growing recruitment challenge including an increased demand for workers, a reduced number of people in the traditional demograpic "pool" supplying DSPs, and persistently low unemployment rates. Additionally, there are few career paths within the field to hold workers once engaged. The profession of direct support has a low social status, low pay, limited access to benefits, and is often considered by educators, economists, and policy-makers to be a secondary labor market.

The growing phenomenon of high staff turnover and associated vacancies have serious negative consequences. Higher staff turnover has been associated with a low morale, absenteeism and the phenomenon of "burnout" in which staff may stay on the job but without commitment to it (Pine & Maslock, 1978; Jacobson & Ackerman, 1990). When there is high DSP turnover and vacancies, existing DSPs often work overtime shifts (Larson, Lakin & Bruininks, 1998). Given the intense, stressful nature of the DSP job, when employees work large amounts of overtime they are susceptible to exhaustion, increased mistakes and decreasing quality of performance. Many agencies respond to turnover and resulting vacancies by using "temp agency employees." This often causes additional stress for DSPs and results in service quality deterioration as "temps" do not always know the routines and the needs of the people receiving services nor how to provide supports that are included in their service plans. Increasingly, however, overtime and the use of temporary employees is simply not enough to meet the need for "warm bodies" and therefore

> *"As a single mom I have lost three jobs, because I cannot find a PCA....or they don't show up."*
> *Parent*

agencies are forced to let shifts go unfilled, despite the implications to peoples' safety and the content of their service plans.

Retention Challenges

High turnover of direct support staff has long been a part of community residential services. Studies have shown that community direct support staff turnover rates have consistently been between 45% and 70% (Larson, Lakin & Hewitt, in press; Braddock, et. al., 1992; and Lakin & Bruininks, 1981). No national studies have been conducted since 1992 (Braddock, et. al.), but there have been a number of more recent statewide studies conducted in recent years. Table 1 summarizes research on direct staff turnover that have attempted to identify DSP annual turnover rates.

It is important to note that the turnover rate for frontline supervisors (FLS) is also high. Recently in Minnesota FLS turnover rates were found to be 27% (Hewitt, et al., 2000). Given that FLSs are responsible for guiding and directing the work of DSPs, their lack of stability only exacerbates the lack of continuity and difficulties in establishing competence and quality with high turnover.

Turnover studies have identified several factors that are associated with higher turnover of DSPs. These include DSP wages, organizational socialization and training practices, the length of time that a service setting has been in existence, the characteristics of the people served in the setting, supervisor tenure and the extent to which FLSs are viewed as

Table 1. Direct Support Professional Average Annual Turnover Rates				
Study	**Date**	**Average Turnover Rates Private Community**	**Average Turnover Rates in Pubic and/or Institution**	**State**
Lakin & Bruininks	1981	54.2%	29.5%	Nat'l
Larson & Lakin	1992	57.0%	N/A	Nat'l
Braddock, et al.	1992	70.7%	34.2%	Nat'l
Bachelder, et al.	1994	55.4%	N/A	IL
Johnston	1998	166%	N/A	AK
Sjoberg	1999	50%	14%	CA
Test, et al.	1999	41%	N/A	NC
Larson, et al.	1999	N/A	20.3%	Nat'l
Colorado DHS	2000	67%	18%	CO
Hewitt, et al.	2001	44%	N/A	MN

treating DSPs fairly (Hewitt, et al., 2000; Larson, et al., 1998; Bachelder, 1994; Braddock & Mitchell, 1992; Lakin & Bruininks, 1981). Direct support personnel report that the biggest reasons they have for leaving their positions are difficulty in getting along with co-workers, inadequate pay and benefits and issues with their supervisors (Lakin & Bruininks, 1981; Larson, et. al., 1998).

Turnover is obviously costly to organizations that employ DSPs. In a recent study conducted in Alaska, the cost per hire for DSPs was estimated to be $2, 341 (Johnston, 1998). Considering the estimated 400,000 FTE DSP positions in community residential services alone and the estimated more than 50% turnover, the annualized cost of DSP turnover in the United States is astronomical. The human costs to people who receive services are also significant. People living in a small residential setting are routinely expected to "get used to" five or more new employees each year coming in to their home, often providing the most intimate of personal care or other supportive aspects of their private lives. Lack of continuity makes it extremely difficult to develop and sustain the trusting and familiar relationships that foster personal growth, independence, and self-direction.

Wages and Benefits

Community direct support wages have always been low when compared to the wages of direct support staff who work institutions and in other types of human service settings such as community mental health programs and youth programs (Larson, Lakin & Hewitt, in press; Colorado Department of Human Services, 2000; and Johnston, 1998). Table 2 provides an overview of several studies and their resulting data regarding DSP wages in community residential services as compared to wages in the public sector and/or institutional settings. A national study has not been completed to examine DSP wages in the United States since 1992, although as represented in Table 2, several individual state studies have recently been conducted.

Direct support staff who work in vocational settings often earn higher wages then those who work in residential services. For example, in Minnesota the average DSP wage in residential supports is $8.81 per hour while in vocational services it is $10.49 per hour (Hewitt, Larson & Lakin, 2000). As recruitment of new personnel has become more difficult many organizations have brought up the base rate of pay at the expense of long term employee wages. This results in situations in which newly hired DSPs make as little as $1.00 - $1.50 per hour less than long-term employees. For

Table 2. Direct Support Professional Wages: A Comparison Across States and Between Public Institutions and Private Community Service Settings						
Study	Date	Average Starting Wage in Private Community	Average Wage in Private Community	Average Starting Wage in Public and/or institutional	Average Wage in Public and/or institutional	State
Lakin & Bruininks	1981	N/A	$3.49	N/A	$4.01	Nat'l
Braddock, et al.	1992	$5.22	$5.97	$6.85	$8.72	Nat'l
Bachelder, et. al.	1994	$5.37	$5.75	N/A	N/A	IL
Start & Cook	1997	N/A	$8.41	N/A	$12.41	WA
Fullagar, et. al.	1998	N/A	$7.30	N/A	N/A	KS
Johnston	1998	N/A	$9.14	N/A	N/A	AK
Rubin, et. al.	1998	N/A	$7.36	N/A	$10.65	IL
Sjoberg	1999	N/A	$8.89	N/A	$17.50	CA
Test, et. al.	1999	$7.82	$9.13	N/A	N/A	NC
Larson, et. al.	1999	N/A	N/A	$8.68	$10.81	Nat'l
Colorado DHS	2000	N/A	$8.95	N/A	$13.10	CO
Hewitt, et. al.	2001	$8.13	$8.81	N/A	$9.27	MN

example, in Minnesota between 1995 and 2000, the average starting wages of community DSPs grew by 15% while top level DSP wages grew by only 9.6% (Hewitt, Larson & Lakin, 2000).

Many DSPs also receive limited benefits such as paid time off (PTO) and health care insurance. A study, in North Carolina found that 21% of DSPs were not eligible for health care benefits (Test, et. al., 1999), in Minnesota 31% of DSPs were not eligible for paid time off and another 33% were not eligible for health benefits (Hewitt, et. al., 2000). Reasons for the lack of paid benefits for DSPs include: 1) soaring health care costs which have made it difficult for private provider agencies to absorb the premium costs with their payment rates; and 2) growing numbers of DSPs who work part-time in agencies that provide benefits only to full-time employees (ANCOR, 2001; Colorado DHS, 2000).

> *"The biggest problem in the whole field is the low wages which lead to burnout, frustration, and high turnover."*
> *DSP*

Training Challenges

Training DSPs presents significant challenges to maintaining and improving the quality of community services. The geographic dispersion and the around-the-clock nature of community services make it more difficult to get training to DSPs. Extremely high employee health care costs, the ongoing need to provide cost of living rate adjustments to employees, and the cost associated with increased consumer expectations have all contributed to investments in training that are substantially less than the nature and responsibilities of the DSP role demand.

> *"The budget situation is the worst thing. There is never enough money to train direct support staff."*
> *Supervisor*

Well-developed pre-service training programs for DSPs are rare. Ongoing training programs that target developing new skills rather than complying with mandatory topics are also rare. Career paths are limited for direct support professionals. Some DSPs are promoted into frontline supervisor and management positions, but there are limited numbers of these positions available. Unlike other professions such as nursing and teaching where individuals can remain as direct practitioners and advance substantially in compensation, specialization and recognition, DSPs simply do not have such options.

Training opportunities for DSPs are usually regulatory-driven and include classroom training on topics such as emergency procedures, blood borne pathogens, consumer rights, introduction to developmental disabilities, CPR and first aid. Few states have developed effective training materials and programs for DSPs, leaving training responsibilities solely to the service provider organizations. Those states that have created and continually updated statewide training curriculum and outreach training efforts including but not limited to: New Mexico, North Dakota, Oklahoma, California, and Kansas. DSP training is commonly not transportable from one employer to the next and is rarely competency-based (Larson, et al., in press). More often then not DSPs receive up front training that includes up to 40 hours of classroom training and rarely integrates effective adult learning strategies. DSPs have reported that this training is not effective because it is often repetitive and

boring for employees who have considerable experience in the field, is too fast and not comprehensive enough for people who come to their new jobs with no experience and it rarely is focused on the specific characteristics and needs of the people the DSP has been hired to support (Test, et al., 1999; Hewitt, 1998).

Philosophies and values in community human services are frequently changing (Bradley, Asbaugh & Blaney, 1994). Training programs struggle to keep pace and many do not move beyond the care-taking, health, safety and the developmental focus of the DSP training originally developed for congregate care facilities. New efforts have been made to identify the specific skill set required of community DSPs (Hewitt, 1998; Taylor, et al., 1996). The Community Support Skill Standards were developed in 1996 and describe the specific competencies required of DSPs to support people in living self-directed and connected lives. These competencies are organized into twelve broad competency areas that include: 1) participant empowerment, 2) communication, 3) assessment, 4) community and service networking, 5) facilitation of services, 6) community living skills and supports, 7) education, training and self-development, 8) advocacy, 9) vocational, educational and career supports, 10) crisis intervention, 11) organizational participation, and 12) documentation. There remains a significant challenge in integrating these or other sets of competencies based on structured job analysis into the training provided to DSPs.

> *"We can' find people to work in the community services we have, I don't see how it is possible to think about bringing 12,000 new people onto the HCBS Waiver."*
> *Regional office staff*

Effects of the Workforce Crisis

Sustainability and Development of Community Supports

The ability to create new services and to maintain those that already exist are made enormously more difficult by this direct support staffing crisis. Even as the U.S. Department of Human Services issues requests for proposals for "systems change" grants that will increase access to community services (Thompson, 2001), service providers, families and advocates express concern about the sustainability of currently existing services and great reluctance to expand to meet new demand (Hewitt, Larson & Lakin, 2000). Pressure to reduce waiting lists, to increase the availability of community supports for individuals that want them and to provide high quality, individually oriented supports that deliver desired outcomes make this workforce crisis even more ever present and underscore the need to find solutions.

Many states still have large numbers of people living in institutionss and large congregate care settings. In fact, today as a nation an estimated 47,329 people with developmental disabilities still live in institutional settings and 81,363 live in places where 16 or more other people live (Prouty & Lakin, in press). With the 1999 Olmstead pending lawsuits that have resulted from this decision (Smith, 2001) there could not be a more pressing urgency for federal and state agencies to find solutions to the direct support workforce crisis. There is no

foreseeable way that continued efforts to provide equal access to community services can occur without finding resolutions to the problems of DSP recruitment, retention, and training. The ability of states to create any type of systems change effort designed to enhance community opportunities for people with developmental disabilities must include a specific, planned, proactive, and comprehensive effort to increase the public awareness of the direct support profession, the numbers of people who enter this line of work and serious efforts to enhance DSP wages, benefits, and incentives designed to get DSPs to remain in their positions.

> *"If we want direct support professionals to walk in partnership toward self-determined lives; if we want people with developmental disabilities to share their dreams and hopes; if we want excellence, then we must....promote continuity and competence of direct support professionals." (Taylor, 2001)*

is inconceivable to imagine that when there are a lot of vacant DSP positions, an increased use of overtime and a DSP turnover rate that averages 50% there is not a resulting negative effect on quality. Without continuity, quality, commitment, and competence the opportunity for people with mental retardation and related conditions to become full citizens and active community members is greatly diminished. The reality is that the nature of the current workforce crises makes it even difficult to provide basic care such as self-care and medical support.

Finding Solutions

The direct support workforce crisis is real and complex. It will not get better without serious attention, involving all aspects of the service system engaged in multifaceted solutions. These solutions demand immediate, comprehensive and focused intervention that includes not only service provider agencies, but also the federal and state agencies which too often view this system problem as belonging to those who provide services. Without involvement of all responsible entities, direct support staff recruitment, retention and training in community human services will be an increasingly insurmountable problem of growing significance to the opportunities of Americans with disabilities.

On May 22, 2001 HHS Secretary Tommy G. Thompson announced the release of solicitations for new grants to states to develop new programs for people

Quality of Services and Supports

This workforce crisis has serious and detrimental effects on the lives of people who receive community supports. Perhaps the most detrimental effect is a revolving door of support staff, which effects the quality of support by creating a diminished ability to: 1) develop and maintain relationships of support, 2) understand and develop mutual respect between direct support staff, individuals who receive support and their family members, and 3) develop trust with every new support staff person that enters the person's life. Recruitment and retention concerns have been noted by consumers (Jaskulski & Whiteman, 1996), parents (Jaskulski & Whiteman, 1996; Larson & Lakin, 1992; Hewitt, et al., 2000), service providers (ANCOR, 2001, Rosen, 1996) and policy makers (NASDDDS, 2000). It

with disabilities. Secretary Thompson commented, "these grants will help to extend new opportunities and freedom to Americans who have disabilities or long-term illnesses and allow them to live and prosper in their communities." Such "new opportunities" are wholly dependent on recruiting and retaining increased numbers of committed and qualified people to provide the direct support needed by people with disabilities. Applicants for such funds who do not attend to finding solutions to the challenges of direct support worker recruitment, retention and training are not likely to substantially "extend new opportunities" as the Secretary envisions. The potential elements of such multifaceted "solutions" are numerous.

Primary focus must be given to efforts to attract people to the profession of direct support. These strategies are needed so that the direct support profession is recognized as a primary labor market that requires personnel to have a specific set of skills and competencies for which they are compensated with a living wage. Federal and state agencies must establish ways to assure substantial real dollar increases in the wages and benefits provided to direct support professionals. Substantial improvements in the public's understanding, awareness, and appreciation of the important roles that are performed by direct support professionals also need to occur. Programs must be developed and implemented which are designed to heighten the awareness of educators and workforce development specialists about this industry and the career opportunities it offers to people who are entering the labor force. School-to-work, welfare-to-work, technical college and other formal programs must be induced to incorporate direct support in the menus of occupational options. Efforts

to create education and training programs that offer career paths and other incentives for people to remain in direct support positions must be implemented. For example, financially rewarding direct support professionals who obtain additional education, demonstrate new skills and remain in their positions for periods of more than a year. Distance learning and web-based training programs must be created to improve the quality, consistency and access of training information for direct support professionals. Tuition vouchers and community service benefits must be explored to assist human service agencies and families to be able to compete successfully for young adults who are working as they prepare for careers in education, nursing, law, medicine, business and other areas of importance to persons with disabilities.

Direct support staff vacancy rates, retention and competence should become a serious and seriously monitored component of quality assurance. If quality assurance is to enhance the quality of services to people with disabilities it makes no sense to ignore the skills and stability of the people who provide these services. Providing recognition and other incentives for service organizations that have few vacancies and low turnover rates should be made. Higher expectations must be established for agencies and states in which people experience a revolving door of strangers to whom they must subject themselves for the most intimate interactions are essential. But this is where responsibility must be shared. Higher expectations are vacuous without providing organizations the opportunity to learn more effective workforce development practices. There are a number of organizational and management practices that have been proven to be

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effective at reducing vacancies and increasing the retention of direct support personnel (Larson, Lakin & Bruininks, 1998; Hewitt & Larson, 1998). However, many organizations simply do not have the necessary information about these strategies to design and implement within their organizations. To the full extent possible federal and state governments should support technical assistance and training programs that assure that service providers have access to information and assistance to improve their DSP recruitment, retention and training.

One other important solution to the direct support workforce crisis is the continued expansion of consumer-directed support options to people with disabilities and their families through Medicaid Home and Community Based Services and other service options. Although this option is not one that all consumers of services will likely choose, it is one that offers the greatest flexibility in who is recruited to deliver direct supports and how much these individuals are paid. But individuals and families also face many challenges in using this consumer-directed option. Many of these are similar to those of agencies but many are more complex. Families must have supportive assistance in the recruitment and training of direct support staff. They must learn the basics of positive management techniques to assure that they support the effectiveness and retention of the valuable people they hire. They also need assistance with identifying and using strategies to enhance the wages paid to their employees while simultaneously improving service quality. Written materials, websites, town meetings and other opportunities to learn such skills must be available to people who take on this challenging role of directing their own supports. At a time when there is a limited supply of agency

personnel, supporting families and friends to identify potential direct support staff or to serve in this role themselves is essential. But providing people such responsibilities without proper support will make the option attractive to an unnecessarily limited number of people and will substantially hamper the longevity in that role of many who take it on.

In order to make the needed substantial improvements in direct support professional vacancies, wages, and retention it is critical that these issues are regularly measured and that effort is made to monitor progress on a systems level. The federal agencies responsible for gathering labor statistics must improve their classification system to more accurately reflect the industry. Additionally, states need to collect on-going data about DSP wages, benefits, vacancies, and turnover in order to know whether intended solutions are effective.

In many ways the development and expansion of community services for persons with developmental disabilities has been a remarkable success. It has been a success in the sense that the vast majority of people receiving services outside their family home are living in regular houses and participating in regular activities of their community. It has been a success that families have access to greater amounts of support designed to keep their family members living in their family homes. It has been a success in the sense that there are ever-growing expectations that people will enjoy greater freedom, expanded options, the full measure of citizenship, inclusion in their neighborhood and acceptance in their community. These successes, however, are fragile. Nothing has made this fragility more evident than the national crisis in providing for an adequate and well-prepared direct support workforce. A

workforce with the knowledge, skills and attitudes needed to maintain the previous successes, keep the promises to citizens with disabilities, and assure that increased numbers of those currently denied access to the lives they want in the homes and communities they choose will not come easily. It will take active involvement of leaders in all national, state and local aspects of the service system.

Annotated Bibliography (listed in alphabetical order)

Bachelder, L. & Braddock, D. (1994). *Socialization practices and staff turnover in community homes for people with developmental disabilities*. **Chicago, University of Illinois, Institute on Disability and Human Development, College of Associated Health Professions.**

This 1994 study was one of the first specifically within the field of services to people with developmental disabilities to investigate the correlation between direct support staff turnover and organizational socialization practices for direct support employees. It was conducted in Illinois and included a random sample of 120 small community residential programs including Intermediate Care Facilities for the Mentally Retarded (ICF/MRs), Community Residential Alternatives (CRAs), and Community Integrated Living Arrangements (CILAs). Data was collected through two structured telephone interviews, one with a supervisor/manager and the second with the most recently hired direct support employee.

Direct support employee turnover among sampled agencies was 55.4% per year. Of the staff who left these facilities in the past year, 56% exited prior to completing 6 months and 83% exited prior to one year. The mean starting wage for direct support employees

was $5.37 and the mean wage was $5.75. The most significant finding from this study was that informal coworker support (e.g., providing opportunities to work in groups, mentoring arrangements) shows a significant negative correlation (r=-.64, p<.001) with turnover. This key finding suggests that the provision of informal support to newly hired employees is important when trying to retain employees. Providing opportunities for direct support staff to work in groups and assigning mentors to new workers are among the recommendations found in this study.

Braddock, D., & Mitchell, D. (1992). *Residential services and developmental disabilities in the United States: A national survey of staff compensation, turnover and related issues.* **Washington D.C.: American Association on Mental Retardation.**

This study is the most recent study of direct support staff compensation, turnover and related issues based on a national sample of residential service settings. It includes data from a modified random sample of 1,012 facilities throughout the United States (186 public institutions, 700 private community, and 126 public community). National as well as individual state profiles are presented.

Data gathered on wages and turnover rates were of particular interest. Nationally, in state institutions the starting wage at the time of the study was $6.85, the average wage was $8.72 and the crude separation rate was 24.8%. In private community facilities the starting wage at the time of the study was $5.22, the average wage was $5.97 and the crude separation rate was 70.7%. In public community facilities starting wage at the time of the study was $7.00, the average wage was $8.41 and the crude separation rate was 34.2%. Wages were significantly correlated with employee turnover. Factors associated with higher starting wages were the facility type, whether the facility was unionized and the location of the facility in an urban area. Part-time workers had higher separation rates than full

time workers. Separation rates were lower in facilities that were unionized.

Key findings of this study were: 1) mean starting wages were 3% above the poverty level in privately run community facilities; 2) the mean starting wage for direct care staff in private facilities was about 24% less than those in public facilities; 3) the disparity between private an public wages has grown over the past decade; 4) workers in private facilities receive fewer benefits then workers in public settings; 5) turnover was three times higher in private facilities then in public ones; and 6) the rate of turnover for direct care staff in private facilities grew by more than 25% in the ten years prior to this study.

Colorado Department of Human Services. (2000).   *Capacity of the community services systems for persons with developmental disabilities in Colorado: Response to Footnote 106 of the FY 2001 appropriations long bill. Denver, CO:* **Developmental Disabilities Services, Office of Health and Rehabilitation Services, Colorado Department of Human Services.**

This report prepared by the Department of Human Services, Developmental Disabilities Services in Colorado provides an overview of the challenges faced within Colorado to provide for capacity and quality within the community service system. The major challenges in meeting the demands of capacity and quality that were identified included: the need to serve more people with more significant needs associated with their developmental disabilities, the demands for increased service for people with other types of human service needs (e.g. mental health, corrections), and limitations on the ability to increase community capacity due to restricted funding, labor shortages, and other factors.

One of the primary findings of this report is that there is a direct support workforce crisis that is substantially affecting the ability of the community service system to maintain quality in current services, let alone expand and

improve. This argument was supported by a wage and turnover study conducted by a contracted firm, Effective Compensation, Inc. The key findings included in this report are: 1) direct support staff turnover was 67% for community providers as compared to 18% for regional centers; 2) direct care wages in community services averaged $8.95 per hour while direct care wages in regional centers averaged $13.10, a difference of $4.16 (46%); 3) employees of community service providers are paid anywhere from 13% - 52% less than employees of other human service agencies that perform similar job functions; 4) regional center staff wages are commensurate with employees in jobs requiring similar experience and education levels in Colorado's general industry because these wages are adjusted annually; and 5) community service staff received less training than staff in other human service organizations.

Hewitt, A., Larson, S.A. (1998). *IMPACT: Feature issue on direct support workforce development.* **Minneapolis: Institute on Community Integration, University of Minnesota).**

This newsletter provides an overview of the issues of direct support recruitment, retention and training. It includes featured articles about best personnel practices within the field of developmental disabilities. Best practice examples include: 1) how to assess workplace recruitment and retention problems; 2) school-to-work education in community human services; 3) using the Community Support Skill Standards to guide training programs; 4) strategies to reduce turnover; 5) support and training for mid-level managers; 6) using peer mentoring; 7) self-directed work teams; 8) welfare-to-work programs; and 9) competency-based training.

In addition to best practice illustrations, this issue provides the reader with a simple overview of various interventions that can be used within systems and organizations to address problems related to the recruitment, retention and training of direct support

personnel. Articles are also included that illustrate how workforce "problems" affect the lives of the people who receive support and services.

Hewitt, A., Larson, S.A. (1998). *The Minnesota frontline supervisor competencies and performance indicators*. **Minneapolis: Institute on Community Integration (UAP), University of Minnesota (College of Education).**

This publication presents the results of a job analysis study that focused on identifying the necessary skills and competencies for frontline supervisors who work in community support services for people with disabilities (e.g., group homes, supported living and employment, and sheltered employment settings). One important aspect of responding to the workforce challenges is to prepare effective supervisors who can support, train and guide the work of direct support personnel. This study identified skills that are important for frontline supervisors to have in order for them to be effective at supervising direct support personnel. These skills are clustered into 14 broad competency areas: 1) staff relations, 2) direct support, 3) facilitating and supporting consumer networks, 4) program planning and monitoring, 5) personnel management, 6) training and staff development, 7) public relations, 8) maintenance, 9) health and safety areas, 10) financial activities, 11) scheduling and payroll, 12) coordinating vocational supports, 13) coordinating policies, procedures and compliance with regulations and rules, and 14) office work. In addition to identifying the skill set, this publication provides: performance indicators for each identified skill, suggestions for how agencies can adapt and use this tool, and an assessment and planning tool that can be used to develop a professional development plan for the frontline supervisor.

Hewitt, A., Larson, S.A. & Lakin, K.C. (1997). *Resource guide for high quality direct service training materials (2nd Edition).* **Minneapolis: Institute on Community Integration, University of Minnesota.**

This publication is a compendium of reviews of existing high quality training materials that are designed for use by trainers of direct support personnel. It is available in both hard copy and electronic copy on the WWW (rtc.umn.edu/dsp). The training materials that are reviewed for this guide are obtained from Universities, Governor's Councils on Developmental Disabilities, state program agencies on developmental disabilities, private publishers, and other sources. Several criteria are used in reviewing each training material, including: 1) stated goals and objectives, 2) competency measures, 3) experiential components, 4) content validity, 5) comprehensiveness, 6) quality of learner instructions, 7) quality of instructor instructions, 8) adaptability for individual instruction, 9) variety of instructional modes, 10) freedom from bias, and 11) emphasis on inclusion and self-directedness. Only materials that are rated high on these criteria are included in the resource guide.

Hewitt, A., Larson, S.A., & Lakin, K.C. (2000). *An independent evaluation of the quality of services and system performance of Minnesota's Medicaid Home and Community Based Services for persons with mental retardation and related conditions.* **Institute on Community Integration, Minneapolis: University of Minnesota.**

This recent study provides data results and system recommendations from a comprehensive evaluation of Minnesota's Home and Community Based Services (HCBS) for people with mental retardation and related conditions in Minnesota. This evaluation used many research methodologies to gather information regarding this service option. Methodologies that were used included: 372 face-to-face interviews with

individuals who receive HCBS in Minnesota, six focus group interviews with stakeholder groups, telephone interviews with 21 local county HCBS administrators, 183 written surveys from family members of HCBS recipients, 468 surveys from case managers (service coordinators), 266 written surveys from provider organizations, and 288 written surveys from direct support personnel who work in provider organizations that deliver HCBS.

This study collected information from a variety of perspectives on direct support workforce issues and how they affect the lives of people who receive services, their family members, provider organizations and policymakers. Key findings related to the workforce issues include: 1) 75% of all organizations reported finding qualified applicants was a problem as compared to 57% in 1995, 2) direct support staff (DSS) vacancy rates were 14% in Twin Cities metropolitan counties, 3) families reported that they did not receive the services authorized and that they often could not find in-home support staff, 4) starting residential DSS wages averaged $8.13 with the mean wage being $8.81 while starting vocational wages were $8.89 and the mean was $10.49, 5) starting wages in residential settings grew by 15% between 1995 and 2000 but the average highest wage paid by agencies rose only 9.6% during those years, 6) case managers reported that the high number of DSS in the lives of consumers was a serious problem, and 7) DSS turnover averaged 44% in residential settings and 23% in vocational settings.

Jaskulski, T. & Ebenstein, W. (Eds.). (1998). *Opportunities for excellence: Supporting the frontline workforce*. **Washington D.C.: President's Committee on Mental Retardation.**

This report provides multiple perspectives on issues related to the direct support workforce in the United States. The history and scope of direct support workforce issues such as recruitment, retention and training are reviewed in the context of efforts to assure full citizenship, inclusion and consumer-directed supports for people with developmental disabilities. The roles and responsibilities of direct support professionals in the context of these new and inclusive services and supports are explored and defined.

Personal stories and descriptions of best practices are provided from the perspectives of direct support employees, consumers of services, family members, and agency managers. Connections between the quality of the direct support workforce, factors affecting the workforce, and the quality of services are made. The power of positive, respectful and supportive relationships between direct support employees and consumer outcomes are illustrated.

Johnston, K. (1998). *Developmental disabilities provider direct service worker study: Results and findings*. **Anchorage, AK: Governor's Council on Disabilities and Special Education.**

This report presents the results and key findings of a study of direct service worker recruitment and retention challenges conducted by the Alaska Governor's Council on Developmental Disabilities in collaboration with the Association on Developmental Disabilities (a trade association). This was one of the most recent studies within community human services to estimate a cost per hire for the direct care position and to compare direct care wages with those of other human service positions and with the average wages in similar labor market segments. The findings represent 23 of the 28 developmental disability service providers in Alaska. Key findings were: 1) a 17% vacancy rate, 2) annualized cost of $724,542 in overtime expenditures (beyond straight time expenses), 3) the total of 570 direct support workers statewide with a turnover rate of 166% and a projected number of direct care positions to be filled each year estimated at 1,062, 4) the difference between the average direct care hourly wage compared to other comparable

human service positions was -$3.54, 5) when compared to other labor market segments the direct care wage on average was between $.28 and $2.84 per hour less, and 6) the estimated cost per new hire was $2,341.

Larson, S.A., Lakin, K.C., & Bruininks, R.H. (1998). *Staff recruitment and retention: Study results and intervention strategies*. **Washington, DC: American Association on Mental Retardation.**

This monograph provides the results of a comprehensive study with two main components. The first was a survey of 110 small residential sites (fewer then 6 people) in 83 agencies in Minnesota that provided community residential supports to people with developmental disabilities. Two facility surveys were conducted, one at the beginning of the study and one 12 months later. These included information about facility characteristics, staffing patterns, general staff characteristics, recruitment and retention challenges and the characteristics of the people who lived in the home. The second component followed 124 newly hired direct support staff of these same agencies for twelve months. Participants completed several surveys that at different times over a twelve-month time period. These surveys gathered information about: personal characteristics, education and experience, job expectations, employment context, job characteristics, organizational commitment and satisfaction, supervisor characteristics, training needs, employment context, organizational socialization practices, reasons for leaving a position and the good and bad aspects of direct support work.

There were many key findings of this study. Direct support wages on average were $7.07 per hour to start and the average highest wage was $9.27 per hour. Forty-three percent of direct support workers included in the study were full-time employees; 58% were eligible for medical benefits and 72% were eligible for paid time off. Staff recruiting was found to be the most difficult problem faced by these agencies (57%), followed by turnover (44%) and staff motivation (37%). Average annual turnover for direct care staff was 46% with most people leaving within the first 6 months of employment. An annual turnover rate of 27% was found for supervisors. Supervisor tenure in the home was found to correlate with direct support staff turnover, as did the proportion of direct support staff eligible for paid time off and the number of direct support staff who had been promoted in the past year. Of the newly hired staff followed in this study, 33% stayed in their same position for 12 months, 3% were promoted, 11% moved to another home in the same agency, 38% left voluntarily and 15% were fired. The most common reasons cited by direct support staff for leaving were: problems with co-workers (17%), inadequate pay, benefits or incentives (16%), problems with supervisors (13%) and scheduling problems (13%). Findings include strategies to address recruitment and retention of direct support personnel that were identified in the study.

O'Brien, J. & O'Brien, C.L. (1992). *Remembering the soul of our work.* **Madison, WI: Options in Community Living.**

This publication is a compendium of stories about direct support professionals and their the important, reciprocal relationships with the people to whom they provide direct support. The stories provide glimpses into the work of direct support staff and help to better understand the role and meaning of their work. The editors identified several themes that emerged from this collection of stories, including: ordinary moments, everyday triumphs, assistance, understanding, how people change, dreams, family, friends, money matters, fighting the system, clienthood, control, suffering and death, teachers, words of power, and why I do this work.

Sjoberg, K. (California State Auditor). (1999). *Department of Developmental Services: Without sufficient state funding, it cannot furnish optimal services to developmentally disabled adults.* **Sacramento, CA: Bureau of State Audits.**

This study conducted by the California Bureau of Audits was requested by the Joint Legislative Committee to assess the ability of the State of California to provide optimal services to its 78,000 adults with developmental disabilities through organizations in the community and the statewide network of 21 independent, nonprofit regional centers. The report compares issues of direct support recruitment and retention in community organizations, non-profit regional centers, and the state developmental centers. Key findings are many. Community organizations pay an average of $8.89 per hour to direct support workers and fewer then 40% of these workers are eligible for health insurance and paid time off for illness. Most direct support personnel in these agencies remain on the job for less than two years and their average turnover rate is 50%. Regional center case managers earn an average of $17.50 per hour, remain on the job at least three years and have a turnover rate of 14%. This report concludes that although the State system was designed to provide optimal supports its ability to do so is limited by insufficient funding and budget cuts. This lack of adequate funding results in community providers paying low average wages to direct care staff, thus having difficulty competing for new workers. The findings of this report included data that is of significance in the arguments used in the recently filed class action lawsuit in California (Sanchez, et al. vs. Johnson, et al.) that claims that people with significant disabilities are discriminated against with respect to the availability of and access to community supports because of the low wages paid to direct care staff in community services versus the state developmental centers.

Taylor, M., Bradley, V., & Warren, R. Jr. (1996). *The community support skill standards: Tools for managing change and achieving outcomes.* **Cambridge, MA: Human Services Research Institute.**

This document includes the results of a national job analysis regarding the role of direct support workers in progressive community human service agencies. This job analysis was funded by the U.S. Department of Education for the purpose of developing national voluntary skill standards for direct service workers, based on the assumption that identifying the complex skills needed by direct support personnel will strengthen education and training programs, improve services, create career paths, increase the marketability of workers and enhance the effectiveness and quality of services.

The job analysis was conducted through focus groups of direct service workers and supervisors/managers in several states using a DACUM (developing a curriculum) process. The focus group results were then nationally validated using a technical expert panel and through a written survey. The resulting competencies for direct service workers were benchmarked to a "master worker" level. They were developed to represent the necessary skills for excellent community human service direct care practitioners. The more than 100 identified skills were clustered into 12 competency areas, including: 1) participant empowerment, 2) communication, 3) assessment, 4) community and service networking, 5) facilitation of services, 6) community living skills and supports, 7) education, training and self-development, 8) advocacy, 9) vocational, educational and career supports, 10) crisis intervention, 11) organizational participation, and 12) documentation. Although not specifically focused on developmental disabilities, this skill set is reflective of the skills needed by direct support staff to foster self-determination, inclusion and consumer-directedness of people with developmental disabilities

Test, D., Solow, J. & Flowers, C. (1999).
North Carolina direct support professionals study: Final report. **Charlotte: University of North Carolina at Charlotte.**

This study was conducted in NC to assess the status and skills of the direct support workforce relative to the needs of people with developmental disabilities who receive personalized services and supports in the community. The study used written surveys and focus groups to gather information from administrators (164), direct support personnel (223) and individuals who receive support services or their family members (70). This study is one of a few that includes data collected from people in direct support roles and provides a lens for direct support demographic information and important issues related to these demographics.

Key findings from this study included: 1) a total of 27,700 direct support workers are employed in NC; 2) most DSPs had some college education (31%) or had a Bachelor's degree (32%); 3) forty-three percent of direct support workers were the primary wage earners in their households and on average they had two children; 4) thirty-five percent of direct care staff reported that they had a second job so they could make ends meet; 5) the average turnover rates in direct support positions was 41%, consumers suffer from inconsistency in supports and services; 6) direct support staff reported over 155 total job titles that were used to describe their role; and 7) twenty-five percent of direct support staff reported that they had received fewer then eight hours of training before starting their job duties

References

ANCOR. (2001). State of the states report. Alexandria, VA: ANCOR.

Bachelder, L. & Braddock, D. (1994). *Socialization practices and staff turnover in community homes for people with developmental disabilities.* Chicago: University of Illinois, Institute on Disability and Human Development, College of Associated Health Professions.

Barry Associates (1999). *The Ohio Provider Resource Association 1999 salary and benefits survey.* Columbus, OH: OPRA.

Braddock, D., & Mitchell, D. (1992). *Residential services and developmental disabilities in the United States: A national survey of staff compensation, turnover and related issues.* Washington D.C.: American Association on Mental Retardation.

Bradley, V., Asbaugh, J. and Blaney, B. (1994). *Creating Individual supports for people with developmental disabilities.* Baltimore, MD: Paul H. Brooks, Co.

Bureau of Labor Statistics (1999). *1998-1999 Occupational Outlook Handbook.* (http://stats.bls.gov).

California State Auditor (October 1999). *Department of Developmental Services: Without sufficient state funding, it cannot furnish optimal services to developmentally disabled adults.* Sacramento: Bureau of State Audits.

Cohen, (2000). *Focus on the front line: perceptions of workforce issues among direct support workers and their supervisors - A staff report.* Boston, MA.

Colorado Department of Human Services. (2000). *Response to Footnote 106 of the FY 2001 appropriations long bill: Capacity of the community services systems for persons with developmental disabilities in Colorado.* Denver, CO: Developmental Disabilities Services, Office of Health and Rehabilitation Services, Colorado Department of Human Services.

Ebenstein, W. (1998). Providing culturally competent services. In A. Hewitt & S. Larson (Eds.) *IMPACT: Feature issue on the direct support workforce.* Minneapolis: University of Minnesota, Institute on Community Integration.

Fullerton, H.N. Jr. (1999). BLS releases new 1998-2008 employment projections. (http://stats.bls.gov/emphome.htm).

Hewitt, A. (2000). *Dynamics of the workforce crisis.* Presentation at the NASDDDS Fall meeting. Alexandria, VA.

Hewitt, A. (1998). *Identification of competencies and effective training practices for direct support staff working in community residential services for people with disabilities.* Minneapolis, MN: University of Minnesota.

Hewitt, A. & Larson, S. (1998). *IMPACT: Feature issue on the direct support workforce.* Minneapolis, MN: University of Minnesota, Institute on Community Integration.

Hewitt, A. & O'Nell, S. (1998). People need People: The direct support workforce. In A. Hewitt & S. Larson (Eds.) *IMPACT: Feature issue on the direct support workforce.* Minneapolis: University of Minnesota, Institute on Community Integration.

Hewitt, A., Larson, S.A. & Lakin, K.C. (1997). *Resource guide for high quality direct service training materials 2nd edition.* Minneapolis: Institute on Community Integration (UAP), University of Minnesota (College of Education).

Hewitt, A., Larson, S.A., & Lakin, K.C. (2000). *An independent evaluation of the quality of services and system performance of Minnesota's Medicaid Home and Community Based Services for persons with mental retardation and related conditions.* Minneapolis: University of Minnesota, Research and Training Center on Community Living.

Hewitt, A., Larson, S.A., O'Nell, S., Sauer, J., & Sedlezky, L (1998). *The Minnesota frontline supervisor competencies and*

performance indicators: A tool for agencies providing community services. Minneapolis: University of Minnesota, Research and Training Center on Community Living.

Hewitt, A., O'Nell, S., & Larson, S.A. (1996). Overview of direct support workforce issues. In T. Jaskulski & W. Ebenstein (Eds*.). Opportunities for excellence: supporting the frontline workforce*. (pp. 1 - 18). Washington D.C.: President's Committee on Mental Retardation.

Jacobson, J., & Ackerman, L. (1990). *The precursors and impact of staff turnover in group homes* (Report #90-2). Albany: New York Office of Mental Retardation and Developmental Disabilities.

Jaskulski, T., & Ebenstein, W. (Eds.) (1998). *Opportunities for excellence: Supporting the frontline workforce*. Washington, DC: President's Committee on Mental Retardation.

Jaskulski, T., & Whiteman, M. (1998). Family member perspectives on direct support workers. In T. Jaskulski & W. Ebenstein (Eds.), *Opportunities for excellence: Supporting the frontline workforce* (pp. 56-75). Washington, DC: President's Committee on Mental Retardation.

Johnston, K. (1998). *Developmental disabilities provider direct service worker study: Results and findings.* Anchorage, AK: Governor's Council on Disabilities and Special Education

Lakin, K.C. (1981). *Occupational stability of direct-care staff of residential facilities for mentally retarded people.* Doctoral Dissertation. Minneapolis: University of Minnesota.

Lakin, K.C., & Bruininks, R.H. (1981). *Occupational stability of direct-care staff of residential facilities for mentally retarded people*. Minneapolis: University of Minnesota, Center on Residential and Community Services.

Lakin, K.C., Hewitt, A., & Hayden, M. (in press). *Medicaid Home and Community-Based Services for persons with developmental disabilities in six states*. Minneapolis, University of Minnesota, Research and Training Center on Community Living/Institute on Community Integration.

Larson, S. A., Hewitt, A., & Lakin, K. C. (1994). Residential services personnel: Recruitment, training and retention. In M. Hayden & B. Abery (Eds.). *Challenges for a service system in transition: ensuring quality community experiences for persons with developmental disabilities* (pp. 313-341). Baltimore: Paul H. Brookes.

Larson, S., Lakin, K.C., & Hewitt, A. (in press). Embarking on a new century for direct support professionals, In R. Schalock (Ed.) *A century of concern* (rev. ed.). Washington, D.C.: American Association on Mental Retardation.

Larson, S.A., Hewitt, A., & Anderson, L. (1999). Staff recruitment challenges and interventions in agencies supporting people with developmental disabilities. *Mental Retardation, 37*, 36-46.

Larson, S.A., & Lakin, K.C. (1992). Direct-care staff stability in a national sample of small group homes. *Mental Retardation, 30*, 13-22.

Larson, S.A., Lakin, K.C., & Bruininks, R.H. (1998). *Staff recruitment and retention: study results and intervention strategies*. Washington, DC: American Association on Mental Retardation.

McIntire (1954). Causes of turnover in personnel. *American Journal of Mental Deficiency, 58 (3)*, 375-379.

National Alliance for Direct Support Professionals (2001). *Code of Ethics*. Minneapolis: University of Minnesota, Research and Training Center on Community Living.

National Association of State Directors of Developmental Disability Services. (2000). *Annual Meeting Conference Brochure.*

O'Brien, J. & O'Brien, C.L. (1992). *Remembering the soul of our work.*

Madison, WI: Options in Community Living.

Pines, A., & Masloch, C. (1978). *Characteristics of staff burnout in mental health settings, Hospital and community psychiatry,* 29 (3), 233-237.

Prouty, R.H. & Lakin, K.C. (2000). *Residential services for persons with developmental disabilities: Status and trends through 1999.* Report #54. Minneapolis: University of Minnesota, Research and Training Center on Community Living.

Prouty, R. H. & Lakin, K.C. (in press). *Residential services for persons with developmental disabilities: Status and trends through 2000.* Minneapolis: University of Minnesota, Research and Training Center on Community Living.

Research and Training Center on Supported Employment (1995). *Preliminary comparison of national supported employment data for Fiscal Years 1991 to 1993.* Richmond, VA: Virginia Commonwealth University.

Rosen, D. (1996). Agency perspectives on the direct support workforce. In T. Jaskulski & W. Ebenstein (Eds.) *Opportunities for excellence: Supporting the frontline workforce* (pp. 76-82). Washington, DC: President's Committee on Mental Retardation.

Sedlezky, L., Anderson, L., Hewitt, A., O'Nell, S., Sauer, J., Larson, S. & Sjoberg, T. (2001). *Supporting a diverse workforce.* Minneapolis: University of Minnesota, Research and Training Center on Community Living.

Smith, G. (2001). *Policy Research Brief: Litigation concerning Medicaid services for persons with developmental disabilities status report.* Minneapolis, MN: University of Minnesota, Research and Training Center on Community Living.

Taylor, M., Bradley, V., & Warren, R. Jr. (1996). *The community support skill standards: Tools for managing change and achieving outcomes.* Cambridge, MA: Human Services Research Institute.

Taylor, M. (2001). 2001: *The direct support odyssey.* Presentation at the ANCOR Conference. Phoenix, AZ

Test, D., Solow, J. & Flowers, C. (1999). *North Carolina direct support professionals study: Final report.* Charlotte: University of North Carolina at Charlotte.

Thompson, T. (2001, May 22). *HHS to give money to states to help states build disability programs (press release).* Baltimore: Health Care Financing Administration Press Office.

U.S. Census Bureau (1999). *Statistical Abstracts of the United States: The national data book.* (119th Edition). Washington, DC: Author.