This article describes employers' assessment of the types of workplace supports available within their businesses, the workplace accommodations provided to supported employees, and the role of human service providers in facilitating those accommodations. Employee support needs in the areas of employee training and benefits, career advancement, and work culture were addressed by the 53 employers who participated in the study. The results indicated that employers are quite capable of providing workplace accommodations for workers with significant disabilities, drawing on existing employer resources. The data indicated that employers are going beyond mere compliance with the Americans with Disabilities Act of 1990 "reasonable accommodations" provisions; employers reported responding to employee needs in such areas as career advancement, changing something about one's job, and social integration. Often, supervisors and co-workers played instrumental roles in providing support to co-workers with disabilities.

Striking progress and true change have transpired over the last two decades regarding the employability of people with significant disabilities, who were once thought unable, unqualified and uninterested in participating in the nation's competitive labor market. Supported employment has afforded an increasing number of persons with significant disabilities an opportunity to enter and compete in our nation's labor force. Since the inception of supported employment as a federal program with the authorization of the Rehabilitation Act Amendments in 1986, the number of individuals receiving these services grew from 10,000 persons in 1986 to 139,812 persons in 1995 (Wehman, Revell, & Kregel, 1997). As supported employment experienced rapid growth and employers became increasingly aware of the employment potential of persons with disabilities, increased efforts were directed toward identifying and developing supports that existed in the workplace to assist individuals with disabilities in both learning how to do their jobs and maintaining employment.

The job coach model of supported employment (see, e.g., Rusch, 1986; Wehman & Kregel, 1985) has been the mechanism through which persons with significant disabilities obtain competitive employment. In this model, the job coach has typically been the primary provider of support to an individual with a disability for the duration of the individual's employment. However, commencing with the early days of supported employment implementation, the job coach model has always embraced the idea of using co-workers and natural cues in the work environment to provide assistance to supported employees (Moon, Goodall, Barcus, & Brooke, 1986; Rusch & Hughes, 1989; Wehman, 1981). As supported employment gained widespread acceptance among its many customers, the role of the job coach evolved from being the primary provider of support to the role of a facilitator of supports to assist individuals with severe disabilities in obtaining and maintaining competitive employment (Brooke, Inge, Armstrong, & Wehman, 1997; Fabian & Luecking, 1991; Unger, Parent, Gibson, Kane-Johnston, & Kregel, 1998). Several additional factors have also assisted in the changing role of the job coach in providing supported employment services. These factors include favorable employer perceptions of supported employees (Kregel & Tomiyasu, 1994; Shafer, Kregel, Banks, & Hill, 1988) and supported employment (Kregel & Unger, 1993; Petty & Fussell, 1997), increased consumer demand for supported employment services over other vocational rehabilitation options (Coker, Osgood, & Clouse, 1995), and the idea that support exists in most workplaces (HanleyMaxwell & Millington, 1992, Sandow, Olson, & Yan, 1993; Wehman, Kregel, & Briocout, 1998). Increasingly, employers are collaborating with employment specialists and rehabilitation professionals in order to identify and develop accommodations in the workplace for their employees with disabilities.
Workplace Supports

Regardless of the size of business, employers offer many types of support to their employees. It is important for supervisors and co-workers to recognize that the support needs of employees with disabilities are similar to the variety of employment-related issues that occur among individuals with no known disabilities (Miano, Nalven, & Hoff, 1996). In addressing the support needs of employees with disabilities, efforts should be directed at identifying and accessing accommodations that may be available within the employment setting. Examples of these business-mediated supports are (a) workplace accommodations such as assistive technology, job restructuring, and schedule modification; (b) co-worker and employer supports; and (c) employer-sponsored programs and policies such as return-to-work policies, disability case management, and company policies regarding family and/or medical leave (Wehman et al., 1998). According to Hanley-Maxwell and Millington (1992), accommodations that exist in workplaces include wellness programs, employee assistance programs, basic skills training, coaching, mentoring, and apprenticeships. Often, employers may not be aware of these inexpensive and unobtrusive accommodations or supports that may be readily available within their businesses. For example, employees or supervisors from large Fortune 500 companies, whose business may have extensive, on-site disability management programs in place, may be unaware of the types of assistance and support available from their own program to assist in supporting an applicant or potential employee with a disability within their own organization.

Workplace supports can also be informal or formal. Informal workplace supports tend to evolve out of the daily workplace activities and routines. They tend to occur on a more random or ad hoc basis, and are not traditionally planned for until a support need is identified. Formal employer supports typically are company-sponsored programs or assistance that are systematically developed and accessed. For example, a formal support would be an employer-sponsored program such as paid sick leave or an employee assistance program. In contrast, an informal support would be, for example, a co-worker assisting another employee, with completing a task that is not within his or her typical job duties or a watch alarm prompting an individual when to take a break and return to work. Further, supervisors may provide informal support to co-workers by listening to the individual "vent" about a non-work-related issue. In comparison, formal supports might consist of that same employee accessing the company’s employee assistance program.

Though employers may have greater awareness of formal supports, the presence or availability of supports in the workplace does not necessarily ensure that human resource professionals, supervisors, or employees know how to access them or how they can be used to assist employees with disabilities. A critical factor in the use of supports is often the employment specialist, who assists the employer and the employee with a disability in identifying, choosing, and using needed supports at whatever level of assistance the employee with a disability requires (Parent, Unger, Gibson, & Clements, 1994). Additionally, when employees have employment-related needs that may not be directly tied to the workplace, such as substance abuse, the challenge lies in using the existing supports in nontraditional ways. For example, employee assistance programs were initially developed to assist employees with substance abuse issues and have evolved to address a variety of areas including stress related to work, family, or financial issues (Hanley-Maxwell & Millington, 1992). In some businesses and organizations, employees with disabilities have accessed employee assistance programs to assist in job redesign and restructuring of the work environment (Kiernan & McGaughey, 1992), services that are not customary in employee assistance programs.

Flatow (1997) has argued that businesses should employ a team approach in determining workplace accommodations through the integration of activities of human resource professionals, safety professionals, top management, and employees with disabilities. Often within business and industry, human resource professionals are called on to address the needs of applicants or employees with disabilities. Even if the business has a disability management program, there may be limited communication between human resource
professionals and representatives from all units of the organization that address workplace accommodation or
disability-related employment issues. However, it might be more beneficial to the business to solicit the
collective knowledge and resources of the organization's disability management professionals, or others within
the organization, as well as human service professionals to assist employers in the identification and
development of workplace accommodations.

Supports also exist outside of the workplace that can be accessed or utilized to assist persons with disabilities
in obtaining and maintaining employment. However, there is uncertainty surrounding employers' level of
awareness and access to these types of employer or workplace supports, such as (a) government assistance
in the form of financial incentives or federally funded job training and employment programs such as supported
employment, and (b) training and technical assistance pertaining to employment policies and workplace
supports designed to ensure access and/or maintain individuals with disabilities in employment (O'Leary &
Dean, 1998). Many employers may be unaware that various types of workplace supports exist or that
resources and assistance are available from outside one's place of employment. For instance, employers may
be unaware of resources such as the Job Accommodation Network (JAN) Business and Disability Technical
Assistance Centers (DBTACs), both vocational rehabilitation and supported employment services. Or,
employers may be aware of resources but because dissemination of disability related information may be
fragmented and uncoordinated, employers may be overwhelmed by the abundance of information they
encounter (O'Leary Dean, 1998).

This is especially alarming given that Butterworth and Pitt-Catsouphes (1997) found that human resource
administrators, supervisors, and co-workers who had experience working with employees with disabilities
expressed concerns about not having the resources (e.g., time, money, experience, and expertise) to
adequately support the employment of individuals with disabilities. Employers may express a willingness to
hire persons with disabilities but may have concerns and reservations regarding how to identify and develop
supports to assist with integrating persons with disabilities into their workforce, especially applicants with
significant disabilities.

Employers express much apprehension surrounding the implementation of Title I of the ADA (Pati & Bailey,
1995). Employers' fears regarding the ADA may derive, in part, from the lack of specificity regarding
employers' responsibilities for providing "reasonable accommodations." Under the ADA, employers are
required to provide reasonable accommodations to enable individuals with disabilities to successfully perform
their jobs when accommodation can be provided without an employer sustaining an "undue hardship." Some
professionals contend that the ADA's reasonable accommodation requirement is unlikely to maximize the
employment of persons with disabilities because it provides incentives to resist accommodations (e.g., Rosen,
1991; Williams, 1993). For instance, the cost of reasonable accommodation is inextricably linked to economic
analysis; employers weigh the costs of the accommodation against the resources of the employer and the
benefit received from employment (Blanck, 1997). An employer whose only goal is to maximize profit might not
hire an applicant with a disability who required an accommodation unless the costs of the accommodation
were trivial. The employer's choices are to hire persons with disabilities and pay the costs of accommodations
or reject such job applicants and risk the payments of damages imposed on the employer if a lawsuit evolves
and ultimately succeeds (Johnson & Baldwin, 1993). Employers' decisions are also influenced by the fact that
they do not necessarily have the information needed to identify and develop job accommodations for
individuals with disabilities.

It is a well-documented fact that one of the greatest concerns expressed by employers regarding the idea of
reasonable accommodations is the perceived cost of accommodations (Moore & Crimando, 1995; United
Cerebral Palsy Association [UCPA], 1993). Even employers reporting that the costs of accommodations for
employees with disabilities were less than $100, with most costing little or nothing, still expressed concerns surrounding the cost or difficulty of providing reasonable accommodations (UCPA, 1993). However, Granger, Baron, and Robinson (1997), reporting on the types and costs of accommodations for employees with psychiatric disabilities, described job accommodations as being relatively non-intrusive, not particularly costly, and often involving only subtle shifts in workplace procedures that employers who wished to keep valued employees might make for those without defined disabilities. Even businesses that may be limited in personnel or funds should be able to find innovative ways to effectively accommodate applicants with disabilities (Magill, 1997).

Despite employers’ concerns pertaining to the ADA and reasonable accommodations, the percentage of employers who claimed to have made an accommodation for an employee with a disability had increased from 51% in 1993 to 81% in 1995, according to the results of a recent National Organization on Disability (NOD) study (Harris et al., 1995). Additionally, a study by the Job Accommodation Network (JAN, 1994) revealed that 69% of employees with disabilities require no specialized assistance and that half of the accommodations made by employers cost less than $500 to implement (52%), with the typical cost of accommodation being about $200.

A number of professionals have suggested that employers should also be initiating work supports (Hanley-Maxwell & NElfington, 1992; Harper, 1993; Test & Wood, 1996). Corporate initiatives have emerged, such as activities undertaken by Universal Studios Hollywood (Weiner & Zivohch, 1998), MBNA, and Prudential Insurance Company (Miano et al., 1996), where business and industry have assumed the lead role in employing and supporting individuals with significant disabilities. Even prior to the passage of the Americans with Disabilities Act, a number of businesses recognized the economic benefits of early return-to-work and disability management programs for their employees who had been injured or become disabled while employed. Despite these efforts to increase the participation of individuals with disabilities in our nation’s labor force, much more remains to be done to address the 72% unemployment rate of persons with disabilities (Harris et al., 1998).

Even though various types of accommodations and supports exist in most businesses, employers are often unclear as to how "business-mediated supports" or other types of informal supports can be used to provide accommodations for employees with disabilities. With the job coach assuming more of a consultant role or a facilitator of supports, employers should become increasingly aware of the types of workplace supports and technical assistance available to assist persons with significant disabilities in obtaining and maintaining employment. The employment specialist can assist employers in the identification and development of workplace supports based on (a) their knowledge of the abilities of the individuals they are working with, (b) their knowledge of resources that exist outside the employment setting (e.g., JAN, tax incentives, assistive technology, compensatory strategies, etc.), and (c) their ability to analyze the work environment to maximize existing employer resources. The identification and development of workplace supports offers many new challenges and opportunities for those providing services to persons with disabilities. Human service personnel are beginning to understand and develop employer relationships founded on partnerships and mutual support (Mank, Cioffi, & Yovanoff, 1997). With the development of these new partnerships, employers may be much more willing to assume the role of primary support provider to employees with disabilities.

Since the implementation of the employment regulations of the ADA, much research has emerged that explores employer attitudes toward the Americans with Disabilities Act and the costs of accommodating workers with disabilities. However, descriptions of the types of accommodations available in the workplace and the potential of employers to meet the needs of employees with disabilities are extremely limited. Further, with increased employer initiatives directed toward improving the work environment in an effort to retain valuable human resources in a period of shrinking labor markets, a variety of resources are available in the workplace...
to assist all employees with learning how to do their job, maintaining employment, and advancing in their
careers. Increasingly, employers are being called on to deliver a number of supports to enhance the quality
and productivity of their workforce, as well as retain valuable employees. The purpose of this article is to
describe the types of workplace accommodations that have been provided to employees with significant
disabilities in learning and maintaining their jobs, as well as pursuing career advancement opportunities.
Additionally, the role of the human service provider in assisting and identifying workplace accommodations for
employees with disabilities will be explored.

Method Sample

Data were collected from employers who had hired individuals with disabilities through the Natural Supports
Demonstration Project at Virginia Commonwealth University's Rehabilitation Research and Training Center on
Supported Employment (VCU-RRTC) for all individuals hired from October 1993 through September 1998. The
purpose of the Natural Supports Demonstration Project was to develop and implement a natural supports
approach for achieving competitive employment outcomes for transition-age youth with significant disabilities.
Natural supports were defined as any type of available support that assists individuals in participating in the
community and work environment of their choice. The seven-step community and workplace model (Parent et
al., 1994), which incorporates the use of natural supports, individual choice, and self-determination into the
existing supported employment service delivery system, was implemented with all persons placed into
supported competitive employment by project employment specialists. Individuals were referred to the project
by parents, rehabilitation counselors, and special educators. Participants were representative of a variety of
disability labels and resided in rural, suburban, and urban geographical areas surrounding a southeastern
metropolitan city. The mean age reported for individuals at the time of referral was 23 years with a range of 20
to 38 years. Table I contains a description of demographic characteristics of the 37 individuals employed by
the employers who participated in the study.

A total of 53 businesses participated in the study, with 16 of the individuals having worked at one or more
businesses during the time frame for the study. Prior to the individual's first day of work, the representative
from the business responsible for hiring the supported employee was asked to complete the Employer Support
Questionnaire (developed by VCU-RRTC Natural Supports Project staff). A majority of the employers (62.3%)
represented small businesses, employing less than 100 employees (see Table 2).

Instrumentation Data were collected with two different instruments, the Employer Support Questionnaire and
the Community and Workplace Support Form, both developed by the VCU-RRTC Natural Supports Transition
Project staff. The instruments have been previously validated and found to be highly reliable and correlated
with positive employment outcomes for individuals with disabilities (Unger et al., 1998). The development of
the instruments consisted of a three-step process: (a) generation and selection of survey items, (b) review by
expert panels, and (c) a pilot test of the instruments. The generation and selection of questions to be included
on the instruments involved recommendations from the project's advisory committee, which consisted of
individuals with disabilities, parents, rehabilitation counselors, educators, employers, and community
representatives. Input collected from the advisory committee was used to develop initial drafts of the survey
instruments.

<table>
<thead>
<tr>
<th>TABLE 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee Demographic Characteristics (N 37)</td>
</tr>
</tbody>
</table>
### TABLE 2

Employer Demographic Characteristics (N = 53)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>24</td>
<td>64.9</td>
</tr>
<tr>
<td>Women</td>
<td>13</td>
<td>35.1</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian</td>
<td>1</td>
<td>2.7</td>
</tr>
<tr>
<td>Black</td>
<td>9</td>
<td>24.3</td>
</tr>
<tr>
<td>Hispanic</td>
<td>1</td>
<td>2.7</td>
</tr>
<tr>
<td>White</td>
<td>26</td>
<td>70.3</td>
</tr>
<tr>
<td><strong>Primary disability label</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental retardation</td>
<td>19</td>
<td>51.3</td>
</tr>
<tr>
<td>Traumatic brain injury</td>
<td>6</td>
<td>16.2</td>
</tr>
<tr>
<td>Mental illness</td>
<td>11</td>
<td>29.7</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>2.7</td>
</tr>
</tbody>
</table>

Note. Mean age = 23.27 years (range: 20-38 years).
Employer Support Questionnaire
The initial draft of the Employer Support Questionnaire was field-tested with employers in the pilot study of the Natural Supports Transition Project to ensure the form's clarity and potential for capturing the necessary information. The instrument was completed by a manager or supervisor from a business who had hired a person with a disability through a supported employment program, prior to the individual's first day of employment. During the pilot study, feedback regarding the clarity of the instrument was obtained from employers and community representatives. On the basis of their input, and the results of the pilot study, instrument was modified and then reviewed by a panel of experts consisting employers and rehabilitation professionals.

Content of the Employer Support Questionnaire
The final version of the seven-page Employer Support Questionnaire consisted 32 forced-choice questions, 9 of which quested additional information regarding the employer's response. The purpose of the form is to identify potential supports available from the employer or within the employment setting that assist an employee with learning and/or completing his or her job duties. Additionally, the form addresses the type of assistance available to employees in the area of training, advancement, and social or recreational activities, as well as examining the typical work routines of employees. Once an employer representative completes the form, the employment specialist and the employee with a disability review the form to identify potential sources of support for the new employee to address anticipated support needs. At any point during the individual's tenure with the business, the form can serve as a reference for identifying potential sources of accommodations to address individual needs that may arise.

Development of the Community and Workplace Support Form
The Community and Workplace Support Form was developed by the VCU-RRTC Natural Supports Transition Project staff. The initial draft of the form was developed with assistance from the project's advisory committee, which consisted of individuals with disabilities, parents, rehabilitation counselors, educators, employment specialists, advocates, employers, and community representatives. It was field-tested with participants in the Natural Supports Transition Project to ensure the form's clarity and potential for capturing the necessary information. During the field test, feedback regarding the clarity of the instrument was obtained from employment specialists administering the form, individuals with disabilities, and family members. On the basis of their input, the instrument was modified and then reviewed by the project's advisory committee and rehabilitation professionals familiar with natural support strategies.

The Community and Workplace Support Form consists of approximately 14 forced-choice questions. The questions address (a) the type of support needed or desired, (b) support resources that have been identified, (c) support option selected, (d) individuals primarily responsible for arranging or accessing the support, (e) individuals primarily responsible for providing the support, (f) the role of the employment specialist in addressing the support need, (g) the costs of providing the support, and (h) the person primarily responsible for overseeing the ongoing monitoring of the support. The purpose of this form is to identify the type of support needed or desired by an individual, the supports used by the individual in meeting his or her support needs, and the type of assistance provided by the employment specialist in addressing the individual's support needs.

Data Analysis
For the purpose of this study, workplace support is defined as any type of assistance or support provided to employees within or outside of the work environment that assists employees in all aspects of the employment process, including pre-employment interviews and screenings, job training, advancing in one's career or changing jobs, and maintaining employment. A workplace accommodation can be internal (e.g., co-workers,
company checklists, wellness programs, etc.) or external (e.g., tax credits, supported employment, etc.) to the work environment, with the common feature being that the support assists individuals in obtaining and maintaining employment, as well as advancing in their careers. The construct of workplace supports contains two key elements: (a) The support need arose at the work site, and (b) some type of assistance was provided within the work environment to assist individuals in maintaining employment and advancing in their career. The idea of workplace support, or accommodation, is a much broader concept than the legal term reasonable accommodation.

**Support Need**

Support needs are defined as any type of assistance required or desired by an individual that aids or facilitates participation in community and employment environments. Learning how to do the job, obtaining transportation to and from work, remembering how to complete all required job duties, socializing with coworkers, and picking up and cashing a paycheck are all examples of support needs. A support need is identified anytime assistance might be needed or when obstacles are encountered that may impede or limit participation in community or work environments. Support needs may be identified by the employment specialist or communicated to the employment specialist by the individual or anyone involved in his or her life, such as his or her family members or friends, employer, or co-workers.

**Procedure**

The Employer Support Questionnaire was completed by a representative from the business who was primarily responsible for hiring the individual with a disability, prior to the individual's first day of employment. Employment specialists were responsible for ensuring that employers completed the survey. After the employment specialist collected the questionnaire from the employer, the completed forms were returned to the project data management specialist and reviewed for completeness and accuracy. The data management specialist reconciled any discrepancies or unanswered questions through direct contact with the employment specialists.

The Community and Workplace Support Form was completed by an employment specialist every time a support need was identified for an individual throughout the supported employment process. The director of the Natural Supports Demonstration Project trained employment specialists in data collection, and various monitoring devices were implemented to ensure accuracy and timeliness of form completion. During the training period, employment specialists were trained to an average interrater agreement of .90. Data were also collected on demographic and historical information for individual and employment outcomes, such as wages earned, hours worked, and job retention; data were recorded on forms developed by the VCU-RRTC for the Supported Employment Information System (SEIS; Kregel, Wehman, Revell, & Hill, 1990). All data were reviewed for completeness and congruence with previously entered data, and the project data management specialist reconciled discrepancies through direct contact with the employment specialist who had completed the instrument.

Data were collected for 37 individuals who were employed in 53 different businesses. During the period of the study, 31 different support needs were identified for individuals that required some form of employer or workplace support. Support could be provided by the individual, employment specialist, or other workplace personnel. When an individual provided his or her own support, it meant that he or she had the primary responsibility for implementing or accessing an accommodation to meet his or her needs. However, other people (e.g., coworkers, parents, or employment specialist) could assist with identifying and developing the support. For example, one person required assistance in remembering all of her job duties. The employer had a checklist of the individual's duties readily available and provided the checklist to the individual. The individual was responsible for locating the checklist at the beginning of her shift and checking off the duties as she completed them. Therefore, the individual provided her own support through the use of a checklist.
Results

Employer Characteristics

Overall, 53 employers who have employed persons with significant disabilities participated in the study. These 53 employers consisted of businesses from the food and hospitality industry, grocery and department stores, human services (e.g., hospital, day care, nursing home), and industrial and manufacturing. The majority of businesses employed fewer than 100 employees at the location where the supported employee worked. A number of businesses reported previously employing persons with disabilities (see Table 2).

Identified Employer or Workplace Support Needs

During the time period of the study, the participating employers and consumers identified 31 different types of support needs. The identified support needs were categorized into the following four areas: employee training, career advancement, employee benefits, and workplace culture. Employee training needs focused on an individual's ability to learn and perform the job and encompassed activities such as skill acquisition, completing job duties, performing independently, and other activities. Career advancement needs addressed an individual's ability to advance within or between jobs and included activities such as learning additional duties, pursuing opportunities for promotion, and other related needs. Employee benefit needs focused on enabling the individual to take advantage of benefits provided by the employer, such as sick leave, pay raises, or other benefits. Finally, needs in the area of workplace culture focused on the ability of the employee to assimilate into the culture, social structure, and routines of a specific work setting.

The relative percentages of reported needs in each of four categories are shown in Table 3. Almost two thirds of the identified employer or workplace support needs identified were in the area of employee training (63.1%). Identified employer or workplace support needs under employee benefits (14.3%), career advancement (6.0%), and workplace culture (22.0%) were much less prevalent than needs identified under employee training.

Employee Training

As indicated in Table 4, the most frequently identified employee training needs reported for individuals were earning how to do the job (32.8%), remembering how to do the job (16.1%), completing all regular job duties (14.6%), signing in and out of work (13.1%). Other identified employer or workplace or needs addressed by employers included recording and monitoring work schedule and hours, getting along with -workers, addressing communication sues, requesting time off from work, taking lunch and breaks, and pursuing career advancement opportunities.

Employer Training Strategies

To identify the ways in which employers responded to these needs, detailed information was obtained on the strategies used by employers to address training and performance issues. The data collected from the Employer Support questionnaire indicate that the vast majority (90.6%) of employers paired the employee with seasoned co-workers order to train new employees. Employers also provided supervisor instruction (54.7%), orientation meetings (4.0%), and company videos (30.2%) in to train new employees.

In addition to the employers, the employment specialists (job coaches) also identified a variety of employer or worksupports available for employee within the participating businesses, in addition to what employers had organized. Table 5 summarizes all employer or workplace supports that were identified by employment specialists, employers, and workplace personnel to address individual support needs in how to do the job. The most frequently cited employer or workplace support available for learning how to do job was the use of a co-
worker mentor (40.9%), followed by the employment specialist providing initial training new employee (31.3%). To a much lesser extent, other employer or worksupports were also available to provide training to new employees, including supervisors, retired persons, college students, and volunteers. A complete listing of the strategies used by employers to address the training needs of individuals with disabilities is contained in Table 5.

Role of the Employment Specialist in Addressing Training Needs

Supervisors (40.0%) and co-workers and other workplace personnel (36.9%) were reported as the primary providers of support to individuals with disabilities in learning how to do the job. Employers reported that the employment specialists were the primary provider of support to the individual with a disability in only 13.8% of the cases. Though the employment specialist was not providing training to the employee, he or she was still instrumental in assisting workplace personnel to train the new employee. For instance, the employment specialists would advise or demonstrate the best way to provide training to the employee based on their knowledge of the skills and abilities of the individual with a disability.

Though learning how to do the job was the most prevalent support need in the area of employee training, other support needs were identified as well. For example, remembering how to do the job, completing all required job duties, and signing in and out of work were identified support needs for participants that also fall under employee training. To assist individuals in remembering how to do their jobs, a variety of employer or workplace supports were available. The most frequently identified workplace supports included co-workers or supervisors assisting, training, or prompting individuals (36.2%), using a self monitoring strategy such as a checklist or flip chart (31.4%), and additional employment specialist training (15.2%)

Duration of Training

A majority of the employers typically allocated almost 3 weeks to initial training of new hires (53.8%), with slightly more than one fourth of the employers (28.8%) devoting as much time as needed to new employee training. However, an overwhelming majority of the employers (92.3%) reported offering ongoing training for all employees in the form of co-worker mentoring, company videos, and supervisor instruction. The idea that ongoing training or co-worker mentoring is available at a majority of the businesses is especially encouraging in light of the fact that remembering how to do the job and learning how to do the job were frequently identified support needs by supported employment participants.

Career Advancement

A majority of the employers (92.3%) offered assistance to employees in changing employee job responsibilities through career advancement or lateral job changes.

| TABLE 3 |
| Employer-Reported Support Need Categories |

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee Training</td>
<td>63.1</td>
</tr>
<tr>
<td>Employee benefits</td>
<td>14.3</td>
</tr>
<tr>
<td>Career advancement</td>
<td>6.0</td>
</tr>
<tr>
<td>Workplace culture</td>
<td>22.0</td>
</tr>
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</table>
**TABLE 4**

Employee Training Needs (N = 198)

<table>
<thead>
<tr>
<th>Employee need</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning how to do the job</td>
<td>32.8</td>
</tr>
<tr>
<td>Remembering how to do the job</td>
<td>16.1</td>
</tr>
<tr>
<td>Completing all regular job duties</td>
<td>14.6</td>
</tr>
<tr>
<td>Signing in and out of work</td>
<td>13.1</td>
</tr>
<tr>
<td>Orienting around the workplace</td>
<td>8.6</td>
</tr>
<tr>
<td>Being able to perform infrequent duties</td>
<td>5.6</td>
</tr>
<tr>
<td>Arranging follow-along</td>
<td>5.1</td>
</tr>
<tr>
<td>Addressing fatigue or stamina</td>
<td>2.6</td>
</tr>
<tr>
<td>Distractibility management</td>
<td></td>
</tr>
<tr>
<td>Handling a crisis at work</td>
<td>.5</td>
</tr>
<tr>
<td>Advocacy</td>
<td>.5</td>
</tr>
<tr>
<td><strong>Total 100</strong></td>
<td></td>
</tr>
</tbody>
</table>

**TABLE 5**

Accommodations Available in the Workplace for Employee Training (N = 198)

<table>
<thead>
<tr>
<th>Supports for learning how to do the job</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Co-worker mentor or co-worker training</td>
<td>81</td>
<td>40.9</td>
</tr>
<tr>
<td>Employment specialist</td>
<td>62</td>
<td>31.3</td>
</tr>
<tr>
<td>Supervisor instruction</td>
<td>33</td>
<td>16.7</td>
</tr>
<tr>
<td>Company orientation, videos</td>
<td>33</td>
<td>16.7</td>
</tr>
<tr>
<td>Standard company training procedures</td>
<td>24</td>
<td>12.1</td>
</tr>
<tr>
<td>expanded/modified/extended</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Restructuring job duties, making</td>
<td>20</td>
<td>10.1</td>
</tr>
<tr>
<td>accommodations, developing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>compensatory strategies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training provided by a retired person</td>
<td>3</td>
<td>1.5</td>
</tr>
<tr>
<td>College student/volunteer</td>
<td>3</td>
<td>1.5</td>
</tr>
<tr>
<td>Classroom Training</td>
<td>3</td>
<td>1.5</td>
</tr>
<tr>
<td><strong>Total: 86</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. More than one response selected; total > 100%.
Employer Benefits
Reported support needs in the area of employee benefits are summarized in Table 7. Slightly more than one half of the employers offered paid vacation and about one third of the employers offered paid sick and holiday leave for full-time employees. However, when employees identified support needs such as requesting time off from work, calling in sick or late to work, and arranging work schedule or hours, employers accommodated individual requests if it did not disrupt the operation of the business. For example, less than one fourth of the employers (17.0%) indicated that employee schedules are permanently set and slightly more than two thirds of the employers (67.9%) indicated that employee schedules are determined on a weekly or monthly basis. In terms of coordinating other supports for employees, such as transportation and the availability of coworkers and mentors for training, employers’ flexibility scheduling provides ample opportunity to maximize supports that might have limited availability or hours of operation.

Transportation is one of the most frequently cited barriers to employment for persons with disabilities (see Unger et al., 1998; West et al., 1998). Employers in this study revealed that a small percentage of employers (15.4%) provided or arranged transportation for their employees. The employers who provided or arranged transportation frequently indicated that they assist employees in identifying co-workers who might carpool or assist in transporting co-workers who need a ride to and/or from work.

Workplace Culture
Employers reported a relatively small number of different support needs in the area of workplace culture. These support needs are identified in Table 8. The employer’s ability to deal with disruptive or problem behaviors on the part of the employee was identified most frequently in this area. Other needs addressed social interaction issues such as getting along with co-workers and addressing communication problems, as well as scheduling the employee’s time (arranging work schedules and taking lunch or breaks). Certainly the physical arrangement of the workplace and contact among employees throughout the workday may enhance or prohibit the ability of coworkers or other workplace personnel to provide support. Several questions on the Employer Support Questionnaire addressed the typical routines of coworkers, and physical proximity in the work environment for the purpose of identifying potential sources of support. The results of this study indicate that almost three fourths (71.2%) of the employers reported that co-workers are in relatively close proximity to each other throughout their workday. Furthermore, a majority of employers (61.5%) reported that assistance was available for employees throughout the day from other coworkers. In almost three fourths of the businesses, employers also claimed that supervisors were readily available to provide assistance to employees.

<table>
<thead>
<tr>
<th>Employee need</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pursuing career advancement opportunities</td>
<td>42.1</td>
</tr>
<tr>
<td>Learning how to do something new at work</td>
<td>31.6</td>
</tr>
<tr>
<td>Finding a different or second job</td>
<td>15.7</td>
</tr>
<tr>
<td>Resigning from work</td>
<td>5.3</td>
</tr>
<tr>
<td>Changing something about the job</td>
<td>5.3</td>
</tr>
<tr>
<td>Being able to perform infrequent duties</td>
<td>5.6</td>
</tr>
</tbody>
</table>
TABLE 7
Employee Benefits Support Needs (N = 54)

<table>
<thead>
<tr>
<th>Employee need</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calling in sick or late</td>
<td>48.1</td>
</tr>
<tr>
<td>Purchasing/selecting/maintaining uniforms</td>
<td>14.8</td>
</tr>
<tr>
<td>Picking up and cashing a paycheck</td>
<td>14.8</td>
</tr>
<tr>
<td>Requesting time off from work</td>
<td>13.0</td>
</tr>
<tr>
<td>Receiving a raise or increased benefits</td>
<td>5.6</td>
</tr>
<tr>
<td>Addressing sexual issues</td>
<td>3.7</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
</tr>
</tbody>
</table>

However, significantly fewer employers (44.2%) offered assistance in the form of instructional classes or departmental training to their workforce to afford individuals the opportunity to advance within the company.

For the individuals participating in the study, pursuing career advancement opportunities, changing something about one's job or changing one's job, and learning how to do something new at work were rarely identified as key support needs. However, this could be attributed to the relatively short period of time captured by the study. For persons with disabilities in the workforce, the idea of changing jobs and pursuing career advancement opportunities is certainly an area that has been frequently overlooked in the delivery of supported employment services (Kregel & Wehman, 1997). Issues related to career advancement or changing an aspect of an individual's job accounted for less than one fifth of all support needs. Table 6 summarizes the reported support needs related to career advancement.

In addition to co-workers and other workplace personnel providing assistance to employees, employees who require some type of accommodation to address support needs may benefit from modification or rearrangement of the physical work environment or changing work stations. When support needs consist of remembering how to do one's job, performing infrequent duties associated with the position, addressing communication issues, and dealing with aggressive, disruptive, or challenging behaviors, modifications to the work setting may benefit employees. However, slightly more than three fourths of the employers participating in the study reported work areas or stations being permanently in place with only minimum changes permitted. Yet, employment specialists reported that employees' work stations or subtle changes to the work environment were made to assist employees in addressing support needs in these areas.

Discussion
The results of the present study describe employers' assessment of the types of workplace supports available within their businesses, the workplace accommodations provided to supported employees, and the role of human service providers in facilitating those accommodations. Employers indicated that a variety of workplace accommodations were available through their business or within the employment environment. This finding is consistent with information reported in the professional literature (e.g., Hanley-Maxwell & Millington, 1992; Wehman et al., 1998). Increasingly, employers are being relied on to provide training to employees with disabilities. Because some employees will require accommodations that will extend throughout the course of the individual's employment, employers are beginning to identify and develop both formal and informal types
of support existing within the workplace to provide assistance to their employees.

For persons with disabilities employed at the participating businesses, workplace accommodations were provided to address a variety of identified support needs in the areas of employee training, career advancement, employee benefits, and workplace culture. This is especially encouraging in that under the ADA guidelines, employers are only required to provide reasonable accommodations that would enable qualified individuals with disabilities to perform the essential functions of the position. The types of workplace accommodations provided by employers in this study go beyond the legal concept of reasonable accommodation. Though almost two thirds of the employee support needs occurred in the area of employee training, employers also accommodated numerous support needs in other areas as well.

These findings are promising given the fact that businesses represented in this study are relatively small; almost two thirds of the businesses employed fewer than 100 employees at the location where supported employees were working. Typically, smaller businesses do not have extensive human resource staff, disability management programs, employee benefit services, or the depth of resources that might be available at larger companies. The small employers' ability to provide workplace accommodations to address the diverse needs of their workforce contradicts the belief that workplace accommodations represent overwhelming challenges to small businesses and that they are less flexible in providing accommodations (Mills, 1997).

One might also infer that if businesses that employ 100 or fewer employees have a variety of workplace accommodations available within their workplaces, then businesses employing larger workforces should, at the minimum, be able to provide similar workplace accommodations. Many large corporations have well-developed and effective human resource and/or disability management programs (Akabas & Gates, 1993; Hunt, Habeck, Owens, & Vandergoot, 1996) that assist supervisors and other workplace personnel in identifying and developing workplace accommodations -- resources that, arguably, smaller, independently owned employers might not have access to and/or the financial or human resources to support. Consistent with the findings reported by Granger et al. (1997) and Miano and colleagues (1996), the vast majority of accommodations provided to employees with significant disabilities in this study were readily available in the employment environment and/or facilitated by employment specialists. For example, an employee with mental illness and moderate mental retardation had to perform a variety of tasks, continuously on a daily basis, in her

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**TABLE 8**

<table>
<thead>
<tr>
<th>Employee need</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dealing with aggressive, disruptive, or problem behaviors</td>
<td>24.2</td>
</tr>
<tr>
<td>Arranging work schedule/hours</td>
<td>22.6</td>
</tr>
<tr>
<td>Taking lunch and/or breaks</td>
<td>19.3</td>
</tr>
<tr>
<td>Getting along with co-workers</td>
<td>11.3</td>
</tr>
<tr>
<td>Recording and monitoring schedule/hours</td>
<td>9.7</td>
</tr>
<tr>
<td>Addressing communication issues</td>
<td>9.7</td>
</tr>
<tr>
<td>Participating in social activities during work hours</td>
<td>1.6</td>
</tr>
<tr>
<td>Developing friendships</td>
<td>1.6</td>
</tr>
<tr>
<td><strong>Total 100</strong></td>
<td></td>
</tr>
</tbody>
</table>
position as a lobby attendant at a popular franchise restaurant. After she had learned how to perform her job with the assistance of a co-worker mentor, she often had difficulty remembering to complete all necessary job duties during the restaurant's busiest times and would forget to do several crucial tasks. Her supervisor provided her with a company checklist of job duties for her position, and co-workers would sometimes prompt her. However, the employee could not read the checklist, and when co-workers were busy they were not available to prompt the employee to do the forgotten task. The employment specialist modified the checklist by designing picture cues and sight words. The employment specialist adhered the picture cues and sight words to index cards that were then placed in sequential order and held together in a small binder. The employee with a disability, or her supervisor, would retrieve the small binder when the restaurant was busy to assist the individual in remembering all of her job duties. The accommodation was available in the workplace (i.e., the company's job duty checklist), and the employer incurred no monetary expenses. In order for the accommodation to effectively meet the needs of the employee, modifications needed to be made to the checklist and the employee had to be instructed on how to use the accommodation. The employment specialist made modifications to the checklist on the basis of her knowledge of the skills and abilities of the employee with a disability. The employee learned how to use the accommodation through instruction provided by coworkers and supervisors.

**Costs of Workplace Accommodations**

The results of this study support the findings of other research showing that the costs of the majority of accommodations are not prohibitive (e.g., Blanck, 1992; Daly & Bond, 1996; President's Committee on Employment of Persons with Disabilities, 1994; JAN, 1995). Additionally, employers making accommodations for employees with disabilities often find that the accommodations are effective and useful for other workers, thereby enhancing the economic value of the company (Kregel, 1999; Magill, 1997).

A number of accommodations for employees in this study relied on either modifications of preexisting employer resources (e.g., training materials, equipment) or work routines or assistance provided by co-workers or other workplace personnel. In situations where accommodations involved the actual purchase of items, equipment, or services, the costs were nominal. For instance, an individual employed at a restaurant received a "carry-all" to enable her to retrieve all of the necessary condiments from the back in one trip so that she could more expediently restock the front lobby area. Another employee benefited from the use of a watch with numerous alarms to prompt him to the next task or to take a break and return from break. An individual with a traumatic brain injury and significant orthopedic impairment employed as a soft lines processor in a large department store was allowed to sit instead of standing when he performed certain tasks. The employment specialist collaborated with the department store’s human resource staff, maintenance department, the employee’s supervisor, and the employee to negotiate certain tasks for the individual to perform such as taking items of clothing from boxes, placing them on a table, removing the plastic wrap, inserting hangers, and then hanging them on a rack. The employer representatives, employment specialist, and employee also worked together to design and develop a work area featuring a pole situated over a table, constructed by the department store’s maintenance department. This accommodation allowed the individual to perform the most prevalent duties of his job while seated. The employment specialist was also able to negotiate with the employee’s supervisor and co-workers to have the co-workers clear the rack when it became full.

**Employment Specialist's Role in Facilitating Workplace Supports**

The data presented above also reflect the critical role the employment specialist plays in facilitating workplace accommodations. Just because a support is available in the workplace does not necessarily mean that employees with disabilities can easily access the accommodation. For example, over one fourth of the employers (28.9%) in this study reported that one of the benefits offered to employees was access to an employee assistance program. However, employee assistance programs were not reported as an
accommodation in addressing the variety of support needs for employees with disabilities in this study. The employer may be aware the program exists, but may be less familiar with the services offered through the program or how employee assistance programs can be used in less typical capacities (e.g., job carving, job restructuring, modifying employee schedules, etc.) to provide workplace accommodations to employees with disabilities. Supervisors may also dismiss the employee assistance program as a potential source of accommodations because they believe the services offered through the program cannot meet the support needs of the employee with a disability. In order to maximize existing employer supports, employment specialists and other human service personnel must be able to successfully identify, assess, negotiate, and modify accommodations or supports existing in the workplace, while considering the abilities and preferences the training period. The employee's of the employee with a disability. The extent to which employment specialists can assist employers to recognize opportunities for accommodation available in the work setting should assist in alleviating employers' concerns and apprehension surrounding the idea of "reasonable accommodation" and the idea that accommodations are costly. By developing partnerships with employers, employment specialists and rehabilitation professionals play a critical role in fostering the identification and development of workplace accommodations for employees with disabilities.

In attempting to identify and develop workplace accommodations, some employers may brainstorm with co-workers, supervisors, and human resource professionals about the types of accommodations that are readily available in their workplace. Other employers may consult with colleagues in business or trade groups to identify or develop workplace accommodations. As demonstrated by the responses to questions contained on the Employer Support Questionnaire, employers may be knowledgeable about accommodations available within their organization. However, as the results of this study also confirm, they are less aware of how to access, modify and utilize the resources they have identified within their businesses to provide accommodations to employees with disabilities. The experiences of project employment specialists indicate that employers are not unwilling or unable to provide workplace accommodations, but they may not (a) be aware that the need for accommodation exists, (b) know how to best assist individuals with disabilities in identifying and developing workplace accommodations, and (c) be able to formulate some type of workplace accommodation that might address the individual's needs.

For example, an individual with a traumatic brain injury performed data processing for a federal agency. During training, the employee demonstrated that he was able to enter the data accurately and in a timely manner, and the employee's work was frequently monitored during workstation was located in an open cubicle among many other cubicles. Because the individual could hear other people's conversations, he would frequently become distracted and lose his place on the long forms that needed to be entered into the database. Then he would enter invalid data and not meet his production quota. After the training period and frequent monitoring ended, the employee's work performance declined. The supervisor could not determine why even after communicating with the individual. After the employment specialist observed and communicated with the employee, they worked with the supervisor to brainstorm potential accommodations. One of the options offered by the employer was to move the employee's office to one of the cubicles that was enclosed in order to cut down on the noise. Additionally, the employee highlighted the information contained on the forms that needed to be entered into the computer prior to entering the forms. Switching the location of the employee's workstation and highlighting the information enabled the employee to better perform his job duties. Upon initial observation the supervisor was not aware of the need for an accommodation or why the employee was having difficulty in successfully completing his job duties.

Employers may also overlook workplace accommodations that are ready available within or through their business. In most instances when a support need was identified, such as assisting employees in remembering how to do their jobs, or punching in and out of work and taking breaks, the employer had both the capacity and the resources available to provide accommodations to workers with disabilities. However,
their limited experience in the areas of employing persons with significant disabilities and identifying and developing workplace accommodations may prohibit their ability to identify and develop needed accommodations that may be readily available. For instance, a large national department store chain developed a formal training program designed to address the problem of illiteracy in its workforce and training new employees. Prior to implementing the training program, in which they desired to retrain entry-level workers such as cashiers, snack-bar attendants, and others, they revised the employees' training manuals by removing almost all the words and replacing them with photos, diagrams, and icons. The training manual, with photos, diagrams, and icons, could be modified to aid an employee with a disability in remembering how to complete all necessary job tasks. It is vital that supervisors and co-workers understand that the support needs of employees with disabilities are analogous to the variety of employment-related issues that occur among individuals with no apparent disabilities (Miano et al., 1996).

Role of Supervisors and Co-workers in Providing Workplace Supports
The data also confirm the instrumental role of supervisors and co-workers in providing support to their co-workers with disabilities. Supervisors and coworkers were the primary providers of support for individuals with disabilities in a number of areas, including learning how to do the job, completing all regular job duties, being able to perform infrequent duties associated with the position, learning how to do something new at work, and taking lunch and other breaks. These findings are consistent with the ideas described in the supported employment literature that advance and/or describe the use of workplace personnel to provide support to employees with significant disabilities (e.g., Fabian & Luecking, 1991; Hagner, Butterworth, & Keith, 1995; Unger et al., 1998).

The employment of persons with disabilities is evolving, due in part to more favorable employer attitudes toward persons with disabilities in the workforce, workplace cultures that embrace workforce diversity, assistive technology, progressive laws designed to ease the entry of persons with disabilities into the workforce, and the perseverance of individuals with disabilities. In the mid-1980s, supported employment and human service professionals were uncertain whether persons with severe disabilities could perform to the expectations of employers or whether employers would embrace the idea of persons with disabilities in their workforce. In an effort to get persons with significant disabilities into the workforce, employment specialists and human service professionals convinced skeptical, but willing, employers of their ability to identify appropriate jobs for persons with disabilities, then provide the necessary training and support to ensure that the individual would be successful in performing his or her job. Now, after the success of millions of Americans with disabilities, supported employment providers find themselves collaborating with potential employers who feel confident and are willing and able to provide training and support to persons with disabilities in the workforce.

Summary
The results of the present study depict employers who have gone above and beyond mere compliance with the Americans with Disabilities Act. By addressing a variety of employee support needs for the duration of the employment relationship, employers have demonstrated the willingness to provide accommodations that assist in retaining valuable employees. Not only are employers providing support for initial job site training, but they are also assisting employees with disabilities in pursuing career advancement opportunities, accessing in-house employee workshops and personal development seminars, and assisting in or arranging transportation.

Overall, the findings of this study parallel the results of other research describing the types of accommodation in the workplace for persons with disabilities. For example, Granger and colleagues (1997) described the types of job accommodations provided to employees with psychiatric disabilities as benign and relatively non-intrusive—often subtle shifts in workplace procedures that employers who wish to keep valued employees might make for those without defined disabilities. The present findings are unique in that they demonstrate
that employers are quite capable of providing workplace accommodations for workers with significant disabilities by drawing on existing employer resources. Additionally, this study has shown that the types of workplace accommodations provided by the employers in the survey go beyond the legal concept of reasonable accommodation and address employee needs in such areas as career advancement, changing something about one's job, and social integration. However, assistance is sometimes needed to bridge the gap between employers' knowledge of their own company resources and workplace accommodations that will effectively address the needs of employees with significant disabilities. Until the employment of persons with significant disabilities is common practice among American businesses and industry, the role of employment specialists and rehabilitation professionals will assist in bridging the gap.

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Darlene D. Unger, MEd, is a research associate with Virginia Commonwealth University’s Rehabilitation Research and Training Center on Workplace Supports. She has been employed with the VCU-RRTC for the past 11 years and has coordinated demonstration projects focusing on the use of natural supports to assist persons with severe disabilities in becoming competitively employed. Her research-related activities have focused on employer attitudes toward hiring persons with disabilities and work supports for persons with disabilities. Address: Darlene D. Unger, VCU-RRTC on Supported Employment, 1314 W Main St., Richmond, VA 23284-2011.

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