

Supporting Individuals with Disabilities in Postsecondary Education

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This paper is composed of two strands: The first strand provides an overview of issues and the latest research related to postsecondary education and students with disabilities. Each overview is followed by a related personal perspective from the paper's co-author, Megan Conway, who is deafblind and who recently graduated with her Ph.D. It is hoped that this personal perspective will add to the reader's understanding of the relationship between the issues and research presented, and the real-life experiences of postsecondary students with disabilities and Vocational Rehabilitation clients.

Introduction

Federal legislation such as the *Americans with Disabilities Act* (ADA) in 1990 (PL 101-336), along with the reauthorized *Individuals with Disabilities Education Act (IDEA) Amendments of 1997* (PL 105-17), has increased accessibility for youth with disabilities to postsecondary education. As a result, the number of postsecondary students reporting a disability has increased dramatically (Horn & Berkold, 1999). The proportion of first-time, full-time students with disabilities attending colleges and universities tripled between 1978 and 1994 from 2.6% to 9.2% (Henderson, 1999; Leahman, Davies, & Laurin, 2000; National Council on Disability, 2000; Vogel, Leyser, Wyland, & Brulle, 1999). By 1998, the full range of students with disabilities (i.e., part-time students and students enrolled in graduate programs) had risen to 10.5% of the postsecondary student population (Gajar, 1998). And in their report, the National Council on Disability (2000) reveals that as many as 17% of all students attending higher education programs in the United States are now identified as having a disability (learning disabilities are by far the most common type of disability reported by college students). Further, more than one half of all the students with disabilities who enroll in postsecondary education persist in the completion of their program of study. Within five years of starting postsecondary education, 41% of students with disabilities report they

had earned a degree or credential, and another 12% remained enrolled in their course of study (National Center for Education Statistics, 1999, August). Given this new level of interest and participation in postsecondary education, it is important to further understand issues and concerns surrounding the provision of educational supports to students with disabilities in postsecondary education, as well as to understand related services and supports offered through vocational rehabilitation and other community based agencies.

Nature of Postsecondary Educational Support Provision

The differences between educational support provision in high school and in postsecondary educational environments are more than cosmetic (Gajar, 1998; Stodden, Jones, & Chang, 2002). Students with disabilities graduating from high school move from a protective environment in which school personnel are legally responsible for identifying and providing appropriate services under the *IDEA*, to an environment in which the students are expected to self-identify as a person with a disability and request specific accommodations under *Section 504* and the *Americans with Disabilities Act* (ADA) (Brinckerhoff, 1994; Izzo, Hertzfeld, & Aaron, 2001; Stodden, Whelley, Chang, & Harding, 2001).

Under Section II and Section III of the ADA, postsecondary institutions “are required by law to provide any reasonable accommodation that may be necessary for those persons with an identified disability to have equal access to the educational opportunities and services available to non-disabled peers” (Stodden, Jones, & Chang, 2002). Unquestionably, postsecondary students with disabilities are charged with the bulk of the responsibility for initiating, designing, and ensuring their own educational

accommodations (Battle, Dickens -Wright, & Murphy, 1998; Gajar, 1998; Tucker, 1997). It is their responsibility to inform school officials of their disability, provide documentation of the disability, and propose viable options for meeting the unique accommodation needs specific to their disability (Izzo & Lamb, 2002; Lamb, 2002; Stodden et al., 2002). For students with disabilities, this means that in order to be able to access, participate and perform successfully in postsecondary education and other life-long learning programs, they must be personally skilled and responsible for acquiring and linking any accommodations they may require in their course of study (Stodden, 2000). Thus, self-advocacy/self-determination skills, or the ability to understand and express one's needs and to make informed decisions based upon those needs, is considered to be one of the most important skills for students with disabilities to have before beginning their postsecondary experience (Battle et al., 1998; Benz, Doren, & Yovanoff, 1998; Izzo & Lamb, 2002; Rusch & Chadsey, 1998; Skinner, 1998; Stodden et al., 2002; Wehmeyer & Schawartz, 1998). Izzo and Lamb (2002) write that, because of a lack of the opportunity to practice self-determination skills in high school, many students with disabilities are ill-equipped to request and negotiate accommodations at the postsecondary level. The authors recommend strategies for integrating self-determination into the secondary school curriculum, such as encouraging greater participation by students with disabilities in the IEP process and developing specific programs that teach self-determination and self-advocacy skills.

Decreases in contact among teachers and students, increases in academic competition, changes in student support networks, and a greater expectation that students will achieve on their own are among the differences found between

postsecondary education institutions and secondary education institutions (Shaw, March, 2002; Stodden et al., 2002). Postsecondary educational services, supports, and programs available to students with disabilities: (a) vary extensively across states as well as from campus -to-campus; (b) are generally not well developed or linked programmatically to instruction, and (c) tend to lean toward advocacy, informational services, or remediation of content rather than support in the compensation areas necessary for independent learning and self-reliance (Gajar, 1998; Izzo & Lamb, 2002; National Center for the Study of Postsecondary Educational Supports (NCSPEs), 2000; Stodden et al., 2001).

Though variable in quantity and quality, educational supports and services for students with disabilities are available at most of the nations' 3,000 postsecondary institutions (Stodden et al., 2001). Required to meet the access mandates of Section 504 of the amended Rehabilitation Act of 1973, and the Americans with Disabilities Act, postsecondary schools have had to insure that the programs they offer, including extracurricular activities and avenues of communication, are accessible to students with disabilities. Such access is to be supported through the provision of "academic adjustments and reasonable modifications" and "auxiliary aides and services" in the form of "reasonable accommodations" (Lee, 1996; Thomas, 2000) (See also Section 504 of the Rehabilitation Act, 45CFR Subtitle A § 84.12, and the Americans with Disabilities Act SEC. 101 [9]) and SEC. 3 [1]). For example, academic adjustments include classroom and testing modifications, such as extra time on examinations. Auxiliary aids and services include practices that create access to information for persons with sensory impairments, such as providing sign language interpreters for

students who are deaf and readers for students who are blind. Accommodations less likely to be sustained, but within the range of accommodations that may be required in a particular set of circumstances, are more than double time on examinations, long-term leaves of absence, course substitution or waiver, and reduced participation and attendance in the classroom. Accommodations unlikely to be sustained are (a) unlimited time for examinations, (b) unlimited time for degree completion, (c) unlimited leaves of absence, (d) permission to entirely avoid attendance expectations applied to students in general, (e) reassignment to another teacher, (f) provision of examinations or instructional services off campus, except when generally provided to students, (g) individualized instruction or tutoring, again, except when commonly provided to students, and (h) restructuring of the curriculum to address the student's individual learning style. Sustained accommodations must be provided free of charge unless doing so would result in a fundamental alteration of the program or would result in undue financial or administrative burdens.

Personal Perspective: Importance of Support Provision to Postsecondary Success

I was very fortunate because the Department of Rehabilitation provided me with support through the completion of my Ph.D. I have heard stories of others who were not so fortunate, where the completion of a technical or associate degree was seen as all the individual should expect to achieve, because "that is all that is needed in order to get a job." I suspect that the reason for my success with Rehabilitation was a combination of timing in the availability of funds, changing policies in the department, the clarity of my goals, and Rehabilitation counselors who had high expectations of what I could achieve. My goal was to become a university professor and I achieved this goal.

This not only gives me tremendous satisfaction but embodies the intent of the Rehabilitation Act; to increase the participation of individuals with disabilities in the workforce and society.

The services that I required from the University included personal assistance with notetaking, research, reading, writing and communication, as well as books on tape, the use of computer and communication technology, and extra time on exams. I also utilized services provided by the Department of Rehabilitation, including payment for books and fees and the provision of some technology, and negotiated Social Security benefits and health-related issues. This was in addition to services such as housing, academic and career counseling, financial aid, and registration that most postsecondary students without disabilities must negotiate.

I strongly believe that the level of disability-related supports that students receive and their overall experience with the support provision process can either make or break their chance of success in postsecondary school. My experience with Rehabilitation was generally positive - my experience with disability support as a doctoral student at my University was disheartening. I encountered problems with service provision when I moved from my undergraduate to my graduate studies. These problems were due in part to my changing needs as a graduate student and in part to changes in the administration of the student services for students with disabilities. I experienced both inadequate services and difficulties with key personnel. As a result, I often went without needed services, or was forced to depend upon family members for these services, because personnel and administrators became defensive rather than helpful when approached with my needs.

In retrospect, while the lack of services made it difficult to participate in my classes or complete my coursework, interactions with personnel were equally as important. If the institutional atmosphere around service provision had been one of enhancing student success rather than one of providing no more than “reasonable accommodations”, I think I would have had greater opportunities for wider participation during my graduate studies and my experience would have been much more positive.

Aligning Type/Level of Disability with Type/Intensity of Support Provision

Attributes of the individual are an important variable in the provision of educational supports within postsecondary education and employment situations. The type of disability and the level of severity of that disability will likely influence not only the specific educational support needed by a student, but an entire support strategy. For example, students with severe cognitive disabilities will need significantly different services and supports than will students who are visually impaired or who are experiencing a mental health disability (Bergin & Zafft, 2000, Spring; Marks & Schanapp, 2000; Sharpe & Johnson, 2001; Sharpe & Johnson, 2000). Students with learning disabilities, who need varying levels of support, are often successful if their level of support is tailored to meet their abilities (Getzel, Stodden, & Briel, 2001, March). And students with physical challenges may profit from a barrier-free environment and a campus climate that has an attitude of disability friendliness (Wilson & Getzel, 2001). Further, students with sensory disabilities or health related disabilities may choose to use correspondence courses offered through online instruction and distance education to facilitate their learning and conserve their physical energy for studying and other activities (Kim-Rupnow, Dowrick, & Burke, 2001). Factors such as one’s self-belief, level

of independent thinking and action, and level of socialization are crucial in accessing supports and attaining personal goals. Individual factors such as ethnicity and cultural background may also significantly impact one's successful participation, self-advocacy, and progress in postsecondary education environments (Leake, July, 2002). The influence of individual factors upon one's needs and ability to successfully access and apply accommodations and supports in postsecondary education is an important area of exploration (Izzo & Lamb, 2002).

Personal Perspective: Looking to the Individual

The contradiction between the severity of the effect of my disability and the minor appearance of my disability (I don't "look" disabled) has often caused me difficulty in securing supports and accommodations. I am still surprised by how individuals are expected to be "typical" according to a disability label when at the same time disability is often regarded as the antithesis of "typical." My most stunning memory of my postsecondary experience, unfortunately, is when a disability support provider at my university told me that I was not "deaf-blind enough" because I could carry on a conversation without the use of a sign language interpreter and could walk into the room without bumping into a wall.

In my case, the answer to the question, "What do you need?" cannot be achieved simply by skimming down the list of what to provide to people who are blind and what to provide for people who are deaf. My favorite explanation for why this is so comes from a colleague in the United Kingdom who said something along the lines of: "Just as red plus blue does not equal 'redblue', but comes out in varying shades of purple, vision loss plus hearing loss manifests itself differently for each individual." Take the

consideration of the kinds of adaptations I need in order to use a computer. Because of my vision loss, my eyes become extremely fatigued when looking at a computer monitor, even with large print. But because of my hearing loss, I cannot easily hear voice output. The solution for me is to use both enlargement software and the clearest (and most expensive) speech output available. The difficulty arises when I have to explain this to the a support provider who wants me to exercise my choice, but the choice is between enlargement and speech because that is what “typical” people with vision loss receive.

Being regarded as a disability label rather than as an individual is not unique to someone with a severe disability. Students with all kinds of disabilities ranging in level of complexity and severity often encounter this problem because it is easier to determine need based upon perceptions of a label rather than upon perceptions of the individual. But the fact remains that failure to regard each student with a disability individually decreases the effectiveness of services.

Role of Technology as a Support in Postsecondary Education

Access to technology and other learning supports is critical to the success of students with disabilities in postsecondary education. Advances in information technology and assistive devices have made a considerable contribution to persons with disabilities seeking to access postsecondary education (Luetke-Stalman, 1998). These devices may be as basic as a page-turner or as involved as a computer assisted communication device. It is well documented that these devices and services improve the physical and learning capabilities of individuals with disabilities (Cunningham & Coombs, 1997; Thompson, Bethea, Rizer, & Hutto, 1997). In fact, it has increasingly

become apparent that the benefits of the use of technology may be even greater for individuals with disabilities than it is for individuals without disabilities (Anderson-Inman, 1999; Blackhurst, 1999; Burgstahler, 2002, (in press); Goldberg, 2001; Hasselbring, 2000). For example, computer technology allows individuals who are blind to access print material that they otherwise would have had to depend upon others to access for them, etc. However, despite evidence of the benefits of technology for individuals with disabilities, there is also evidence that individuals with disabilities are less than half as likely as their non-disabled counterparts to own a computer and about one-quarter as likely to use the Internet (Kaye, 2000). Besides the fundamentals of computer ownership and use, Burgstahler (2002) discusses how the design of web pages, instructional software programs, productivity tools, and telecommunication products can also make a difference in terms of an individual's ability to access technology.

In fact, students with disabilities find technology of such value that they view lack of access as a political problem, focused around funding, which postsecondary educational institutions refuse to address (National Center for the Study of Postsecondary Educational Supports (NCSPEs), 2000). This is interesting in light of the fact that the significant increase in the number of persons with disabilities enrolled in institutions of higher education and pursuing careers of their choice over the past two decades has been due partly to the use of advanced technological devices and services (Ringaert, 1998). Burgstahler (2002) offers a number of reasons why technology can enhance postsecondary and career participation by individuals with disabilities, including the individuals ability to (a) maximize their independence in academic and employment tasks, (b) participate in classroom discussions, (c) gain access to peers,

mentors and role models, (d) self-advocate, (e) gain access to the full range of educational options, (f) succeed in work-based learning experiences, (g) secure high levels of independent living, (h) master academic tasks that they cannot master otherwise, and (i) enter high-tech career fields.

One emerging form of technology, distance education, can now be found in over one third of all postsecondary institutions, each providing specific programs and degree offerings that increase access to educational opportunity for all students (National Center for Education Statistics, 1997). This mode of education has grown from print correspondence, through TV courses, to the most current Web based course delivery formats. Courses can be interactive and use multiple media, as well as be linked to endless web-based data and information sites.

Accommodations provided for students with disabilities using distance education have followed three major trends in technology in recent years (Kim-Rupnow, Dowrick, & Burke, in press). First, interactive devices have evolved to be highly user friendly, maximizing the use of home computers and the internet, and providing immediate access to materials and lectures for all users (Ferrell, Persichette, & Lowell, 2000; Hine, Harper, Beattie, & Arnott, 1998; Luetke-Stalman, 1998). Second, transcribed or interpreted text is available almost simultaneously to regular instruction through the use of advanced technology (Ferrell et al., 2000). Third, the use of multiple media within distance education to promote communication among all users; e.g. video mediated delivery systems, can create virtual classrooms and the internet, and can enhance classroom participation (Ferrell et al., 2000; Luetke-Stalman, 1998). It is likely that technological advances such as compressed video links and the internet will make

distance education a dominant form of higher education world wide in the years to come (Phillips, 1999).

Personal Perspective: Technology as an Equalizer

Recent advancements in technology have allowed me to participate in many realms of school, work and society that would have been closed to me even ten years ago. While technology by no means “cures” my disability or makes the need for other supports unnecessary, it does allow me to perform many tasks that are next to impossible for me to perform without its use. I use a number of gadgets and gizmos to allow me to read the computer monitor, talk on the phone, etc., but the most useful technology that I use is not that complicated; the combination of my hearing aids and an FM assistive listening device. Particularly because of my dual sensory loss, I depend entirely upon the ability of this technology to maximize my residual hearing in order to communicate. The sad thing is that I was not even aware of the existence of FM technology until I was at the start of my graduate studies and realized that I was missing three quarters of the classroom discussion because of my hearing loss and that, unlike my undergraduate studies, the classroom discussion encompassed a good deal of the curriculum. I came across the FM system quite by chance in an assistive technology catalogue.

I cannot help but wonder what I missed in the classroom during all those years of undergraduate study. It would have made a great difference if someone in a counselor’s role had provided me with more information about this technology. While a Rehabilitation or other disability support counselor cannot necessarily be a technology expert, they should most certainly be a technology advocate.

Role of Vocational Rehabilitation as a Support in Postsecondary Education

Postsecondary education opens up a world of opportunities for high school graduates, and can be acquired in many different contexts. Postsecondary education programs vary in the skills students can learn and in the time students are expected to complete a program. But any type of postsecondary education benefits students by allowing them to explore their interests and by teaching them skills they might not gain in high school or subsequent work experiences. The American labor force has been shown to benefit as a result of people's pursuit of postsecondary education, because these workers participate in the labor force at a higher rate and generally have higher earnings than those who do not continue beyond high school (National Center for Education Statistics, 1997). Labor force trends and increased enrollment in postsecondary education demonstrate that students also see further education as a benefit to their earnings level and career success (National Center for Education Statistics, 1997).

For people with disabilities, the importance of enrolling in and completing a postsecondary education program is magnified in relation to employment outcomes and earnings. The National Longitudinal Transition Study (Blackorby & Wagner, 1996) indicates that people with disabilities participate in postsecondary education in smaller numbers than do people without disabilities and frequently do not complete these programs. This discrepancy leads to low participation in competitive employment and much lower earnings than average for people with disabilities (Stodden & Dowrick, 2001). However, for people with disabilities, there is a 50.4% labor force participation rate for those who have completed at least four years of college (Getzel et al., 2001,

March). In fact, Stodden (1998) presents information indicating a stronger positive correlation between disability and employment and level of education than the trend for the general population (Stodden, 1998). People with disabilities with even less than four years of postsecondary education are employed at double the rate of those with just a high school diploma (Getzel et al., 2001, March). These findings show that access to the opportunities afforded by a postsecondary education makes an enormous difference in the employability of people with disabilities.

The Vocational Rehabilitation (VR) system exists to provide assistance to individuals with disabilities seeking employment. Vocational Rehabilitation's services include postsecondary education supports to eligible consumers, which makes the VR system a good source of support for individuals with disabilities seeking to access higher education. The Rehabilitation Services Administration (RSA), within the US Department of Education, allocates resources to state VR offices and collects information from them using the RSA-911 database, its record of national closures from the VR system. Of interest to the authors of this paper is: (1) the extent to which VR provides postsecondary education services; (2) the rate of individuals within the VR system receiving postsecondary education services compared to the rate of individuals within the general population participating in postsecondary education; and (3) whether there is an association between postsecondary education services and VR outcomes (Gilmore, Bose, & Hart, 2001). For example, further examination of the data from RSA-911 that addressed people with disabilities and postsecondary education might focus on understanding the findings in relation to several other studies of trend data conducted from within the general population,. A valid comparison of VR data with other measures

contributes to a broader understanding of the ways in which people with disabilities have participated in postsecondary education over time, and the extent to which they have benefited, and whether or not they were receiving postsecondary education supports through VR.

The RSA data-base has, in fact, been used to examine participation in postsecondary education by VR clients (Gilmore, Schuster, Zafft, & Hart, 2001). In 1997, 35% of persons with disabilities closed from VR services were found to have participated in postsecondary education. VR provided postsecondary education services to 21% of people closed in 1998, although 14.5% of people already had some postsecondary education when beginning to receive services. The VR postsecondary education participation rate is comparable with the Blackorby & Wagner (1996) study, the National Longitudinal Transition Study (NLTS), which concludes that 37% of students with disabilities who complete secondary education participate in postsecondary education. Both of these participation rates (VR and NLTS) are lower than the NCES National Education Longitudinal Study of 1988, (NELS), which found that 63% of eighth graders in 1988 with disabilities went on to some form of postsecondary education by 1994 (Myers, Heiser, & Wu, 1995). In spite of differences between these statistics, they all demonstrate the lower participation rate for people with disabilities when compared with the NELS statistic that 72% of eighth graders in 1988, who did not report having a disability, entered some type of postsecondary education by 1994.

Table: Percent of Secondary School Students with and Without Disabilities who Go on to Postsecondary School: Results of Three Studies

<i>Name and Year of Study</i>	<i>Percent Secondary Graduates with Disabilities Going on to Postsecondary School</i>	<i>Percent Secondary Graduates without Disabilities Going on to Postsecondary School</i>
NELS, 1988-1994	63% 1988 Eighth Graders by 1994	72% 1988 Eighth Graders by 1994
NLTS, 1996 RSA, 1997	37% 35% Persons Closed from VR Services	

Personal Perspective: Employment Opportunities During Postsecondary Education

Working while going to school is a challenge for any student. As a student with a disability, when coupled with the struggle to obtain and coordinate services, health issues, transportation difficulties, and the prospect of employment discrimination, working while going to school can seem next to impossible. I had to struggle to obtain work experience that was valuable, not only for financial independence, but for my overall career development. I was fortunate to have parents who were willing to assist with living expenses and to have a Rehabilitation system that was willing to assist with school expenses. This allowed me to work during the summer and during an occasional semester off from school. But this also meant that I had to live with my parents, not always a cheery prospect for a young woman in her twenties. I had tried meeting my living expenses with Social Security benefits, but grew frustrated when I was penalized for any additional income that I received from summer work or the odd scholarship. An attempt to try and take advantage of "work incentive" programs

resulted in so much paperwork and additional monitoring of my income that I soon gave up my benefits.

Although I did manage to gain some work experience during my graduate studies, I very much regret not having been able to live on my own during college or to take advantage of work opportunities such as working as a graduate instructor or research assistant, common lines of work for graduate students in academia. Essentially I had to make a choice between succeeding at school and employment opportunities.

Conclusion

In conclusion, while systems of support are in place for individuals with disabilities who wish to pursue a postsecondary education, including those within universities and those within the Department of Rehabilitation, there is still much to be done to enhance the effectiveness of these supports. While the number of students with disabilities who pursue a postsecondary education is increasing, their participation is still well below that of students without disabilities. This is true despite the fact that a postsecondary education can significantly increase the chances of employment for individuals with disabilities. It is increasingly apparent that there are still many issues related to postsecondary participation by students with disabilities that need to be addressed in order for them to succeed, including expectations of achievement, individualization, quality and intensity of support provision, self-determination and self-advocacy, full utilization of technological advancements, and the role of the Department of Rehabilitation. Specifically, there is a need for support providers both within and outside of the VR to consider the need to:

- Acknowledge the important role of support provision in the success of students with disabilities in postsecondary education.
- Prepare students to better negotiate their supports and services after high-school.
- Assist students with coordinating and managing supports and services.
- Recognize the importance of technology as an equalizer in both educational and employment environments.
- Recognize the importance of viewing the student as an individual rather than as a disability category.
- Encourage students, and provide them with the necessary support that they need, if they want to work while pursuing a postsecondary degree.

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