Student and Faculty Awareness and Attitudes about Students with Disabilities

Mary Beth Bruder, Ph.D. & Cristina Mogro-Wilson, Ph.D. University of Connecticut Health Center

Abstract: Every year an increasing number of students with disabilities are graduating from high school and entering into postsecondary education. In an effort to assess the university climate for students with disabilities a survey was conducted on a large Northeastern campus. The survey focused on the attitudes, beliefs, and knowledge of university students and faculty on disability-related issues. Results are presented from undergraduate, graduate, and faculty perspectives. Most students and faculty report positive attitudes and interactions with students with disabilities, however these interactions are often limited and awkward. Disability issues are not often presented in the classroom content and the majority of faculty do not announce the availably of accommodations in the classroom. Implications for postsecondary institutions are explored.

Key Words: higher education, faculty, disability

*Editor's note: this article was anonymously peer reviewed.

Introduction

According to the U.S. National Center for Education Statistics (2006) eleven percent of undergraduates reported having a disability in 2003–2004. One in five youth with disabilities that are out of school are currently attending postsecondary education. The rate of people with disabilities attending postsecondary school is less than half that of their peers in the general population (Wagner, Newman, Cameto, Garza, & Levine, 2005). Enrollment in two or four year degree-granting institution for people with disabilities has increased steadily (Gerald & Hussar, 2002). College enrollment includes

close to half a million students with disabilities (Wagner et al., 2005).

Over the past four decades, there have been several laws passed in the United States to protect students with disabilities from discrimination by institutions of postsecondary education. These laws enhance the opportunities available for people with disabilities and allow them to participate more fully in society. For example, Section 504 of the Rehabilitation Act of 1973 (504) applies to all colleges that receive federal funds, and The Americans with Disability Act (ADA) of 1990 applies to employers, government entities, such as state universities, and private entities. Before the passage of the ADA, various research studies showed that negative attitudes towards persons with disabilities created obstacles that did not allow people with disabilities to participate in society (Bordiere, & Drehmer, 1986; Elston & Snow, 1986; Minskoff, Sautter, Hoffman, Hawks, 1987).

The ADA requires colleges to make reasonable accommodations for students with disabilities. This has led to changes in architectural barriers on campuses as well as the provision of technical supports in the form of aids, readers, and interpreters. Faculty members at many universities are encouraged to make reasonable changes for students with disabilities. Under the ADA, faculty members must be providing these accommodations, however, few studies have examined if faculty are doing so. In this study, students on campus were asked to provide their perceptions of how faculty members incorporate disability education into their curricula and if they provide accommodations to students with disabilities. In addition, graduate students and faculty members were asked if they provided accommodations in the classroom and



if inclusion of disability-related topics were incorporated into classroom discussion.

Unfortunately, the guarantee of federal laws for non-discrimination, equal opportunity, and reasonable accommodations for students with disabilities in higher education omits the guarantee for full participation or full inclusion in higher education. Few studies have looked at student perceptions of full inclusion in postsecondary education.

Students with disabilities during the schoolaged years are protected by laws such as the Individuals with Disabilities Education Act (IDEA) which requires schools to create Individualized Education Plans. No such plan exists for students when they progress into the college years. According to the U.S. General Accounting Office (1999) youth with disabilities are more likely to enter employment instead of continuing on to postsecondary education after high school. The lack of support during postsecondary schooling and the perception that other students and faculty view disabled students negatively can often contribute to a difficult college experience (Burgstahler, 1994). Negative attitudes toward people with disabilities have been related significantly with a decrease in full usage of skills and abilities, a lowered self-concept, and negative job related outcomes (Madaus, Gerber, & Price, 2008; Piggott & Houghton, 2007).

Students with disabilities are concerned about faculty's lack of awareness of their requirements and often report that professors fail to meet their needs in the classroom (Moore & Nye, 1986). Unfortunately, the information we do have about college students' perceptions of their peers with disabilities is sparse. Hergenrather & Rhodes (2007) reported that undergraduate students have positive attitudes towards persons with disabilities pertaining to interaction with them in the workplace, marriage and dating. However, this study did not look at the attitudes towards students with disabilities in the classroom or university campus.

Grand, Bernier, and Strohmer (1982) discuss the importance of the social context and its influence on attitudes towards people with disabilities. Attitudes towards people with disabilities were different depending on social context. For example, attitudes towards those with disabilities in the workplace were more favorable than in the context of dating or marriage (Grand, Bernier, & Strohmer, 1982). Research is lacking on attitudes towards people with disabilities in a variety of contexts. This information would assist in intervening and modifying attitudes appropriately depending on the context.

There are few research studies that look at faculty attitudes towards students with disabilities in postsecondary education and their willingness to provide accommodations (Fonosch & Schwab, 1981). These early studies found that faculty attitudes are more positive when faculty members have previous contact and more information about students with disabilities (Aksamit, Leuenberger, & Morris, 1987; Sedlacek & Stovall, 1983). Only a few other studies undertaken since 1987 studied faculty awareness in relation to students with disabilities in higher education, and they each have their limitations. For example, one study had a small sample size of nine faculty members (Cook, Hennessey, Cook, & Rumrill, 2007), and another study had 41 faculty members (Burgstahler, Duclos, & Turcotte, 2000). Both studies used a focus group methodology. There are a few dissertations that focus on faculty attitudes towards students with disabilities (Badgett, 1993; Benham, 1995; Lewis, 1998; McGee, 1989; Williamson, 2000). Faculty attitudes towards students with disabilities in postsecondary institutions are one of the important contributors to the success of students enrolled (Rao, 2004). Faculty lack information about the rights and accommodations necessary for students with disabilities, and can have negative attitudes about including students with disabilities in academic programs. Professors are particularly reluctant to include students with learning disabilities (Leyser, 1990) and have little knowledge of the characteristics and needs of students with this type of disability (Dodd, Fischer, Hermanson, & Nelson, 1990).

The purpose of this study was to determine the attitudes, beliefs, and knowledge of university students and faculty on disability-related issues in the university context, including opinions and interactions with students with disabilities and how disability issues are accommodated and addressed in the classroom. The study occurred in a large state university in the Northeast.

Methods

Two surveys were conducted at the same university: 1) survey of undergraduate students and 2) survey of faculty and graduate students. The surveys consisted of between 28 and 33 multiple choice questions that focused on three main areas: 1) Information on interactions with individuals with disabilities; 2) Opinions about disability-related issues; 3) How well the community/classroom treats and provides for individuals with disabilities. The following section describes the methodology and sample for the undergraduate survey and then the methodology and sample for the faculty and graduate survey.

Undergraduate Student Survey

The first survey was administered in March, 2006 to a total of 881 undergraduate students or 4% of the total student body (191 freshmen, 258 sophomores, 241 juniors and 191 seniors). The university student body for Fall 2007 was 20,846 undergraduate students. The survey was an intercept survey, which is an accepted methodology that is frequently used in many fields of study, including consumer marketing research (Wright, Gendall & Lewis, 1999; Jin & Gu Suh, 2005), the social sciences (Spooner, Bishop & Parr, 1997), and public health (Miller et al., 1997). Interviewers intercepted students and administered the survey at a wide variety of locations on campus (e.g., dining halls, the Student Union, the Co-op, the library, and various campus cafes) during different days of the week and times of the day to capture a cross-section of undergraduate students at the university.

The undergraduate sample of 881 students was comprised mainly of students who lived on campus (79%), and their years in school were fairly evenly distributed (Freshman-19%, Sophmores-23%, Juniors-27%, and Seniors-32%). More than half of the undergraduate respondents were Liberal Arts and Sciences students. Only a small percentage of undergraduate students considered themselves to have a disability (6%), yet almost half (45%) of them reported having close friends or family members with a disability.

A review of the data from the student survey across class groups (i.e., freshmen, sophomore, juniors and seniors) shows the findings to be somewhat similar. The freshmen surveyed had a higher incidence of uncertainty in their responses ("Not Sure"), probably given their limited experience on the university campus. To ensure that overall results are representative of the total population of students based on college, a weight was designed to account for differences between the number of students observed in each category and the estimated population parameters. Results presented are based on weighted analysis to account for students in different majors and class years.

Faculty and Graduate Student Survey

A second survey, at the same university as the previous undergraduate survey, was conducted of faculty and graduate students. The survey was created and administered via the Web in December, 2006 and January, 2007. All current university faculty members and graduate students, on all campuses including the Law School and Medical School, were sent email invitations with a link to the online survey. The total population of graduate student body for Fall, 2007 was 7,831 graduate students and 1,766 faculty members.



A total of 2,056 faculty and graduate students completed the survey. Thirty-six percent of respondents were faculty members, 38% were graduate students without teaching responsibilities, and 25% were graduate students with teaching responsibilities. The faculty and graduate student survey showed that 40% of respondents were from the College of Liberal Arts and Sciences, with 11% from the School of Education, 10% from the School of Medicine, 9% from the School of Business Administration and the remainder from a variety of different schools and programs. Only a small percentage of faculty members and graduate students with and without teaching responsibilities considered

naire such as this, which solicited respondents' opinions on people with disabilities, there was a concern that people might answer questions with a positive bias. The Marlowe-Crowne Index contains 10 true/false questions. An example of two of the questions is: I have never intensely disliked anyone, and I am always courteous even to people who are disagreeable. If the respondent answered true to one of these questions then they received one point, scores ranged from 0 to 10 with 10 being a high score, indicating high social desirability. The index was calculated and run by every question in the survey to see if there were discrepancies across the responses.

Table 1. Feelings towards Students with Disabilities

	Undergraduate	Graduate	Faculty
Admiration		-	
Often	24%	27%	29%
Occasionally	48%	52%	54%
Never	17%	14%	9%
Not Sure	10%	8%	9%
Pity			
Often	16%	12%	5%
Occasionally	63%	57%	55%
Never	17%	26%	33%
Not Sure	4%	5%	7%
Awkwardness/Embarrassment			
Often	3%	5%	3%
Occasionally	63%	52%	58%
Never	29%	37%	35%
Not Sure	4%	5%	5%

themselves to have a disability (5%, 7%, and 5% respectively), and about half (51%) of them reported having close friends or family members with a disability.

The faculty and graduate student survey included the Marlowe-Crowne Social Desirability Index (Crowne & Marlowe 1960) which was calculated and run against each survey question. This scale measures peoples' internal desire to answer questions in a way that they feel their answers will be viewed favorably. On a question-

Social desirability had little effect on the overall results of the survey. It did have a slight impact on the following two questions: (1) When you encounter a person who appears to have a disability, how often do you feel a) awkward or embarrassed, and b) pity. People who had a high level of social desirability were found to be more likely to answer as never having these feelings as opposed to those with low social desirability; (2) when talking with a person with a disability, I find myself looking away more than you usually do in conversation, agree or dis-

Table 2. Interactions with Students with Disabilities

	Undergraduate	Graduate	Faculty
Close friends or family members with a disability	45%	47%	58%
Co-worker with a disability	n/a	22%*	34%
Interact almost every day with someone with a disability during work hours	n/a	8%*	20%
Student with a disability in their classroom	n/a	39%*	52%
No social interaction with people with disabilities (either outside of class or work)	45%	45%	41%
Social interaction with 3 or more individuals with a disability in past month	n/a	7%	8%

^{*}only graduate students with teaching responsibilities are reported

agree. People with a high social desirability score were more likely to say that they do not look away more compared to those with a low score.

Results

A total of 881 undergraduate students and 2,056 faculty and graduate students participated in the survey.

Opinions & Interactions with Students with Disabilities

An overwhelming majority of undergraduates (72%), graduate students (79%), and faculty members (83%) polled, occasionally or often felt admiration for persons with disabilities. The majority of undergraduates, graduate students and faculty reported feelings of pity (students 79%; graduate students and faculty 60%), awkwardness, and/or embarrassment (students: 66%; graduate students and faculty 61%), often or occasionally when encountering a person with a disability (Table 1). Fifty-four percent of the undergraduates surveyed reported having been taught how to approach and interact with individuals having disabilities.

Students and faculty voiced concern that their actions or conversation might have been inappropriate. Almost five in ten students indicated that they were never enthused about encounters with people who are disabled. Nearly eight in ten (79%) faculty and graduate students

said they did not find themselves looking away more in conversations with a person with a disability. When interacting with speech-impaired individuals, one third of students (34%) and 18% of faculty and graduate students reported that they were unsure if it is helpful to finish their sentences or supply words. Twenty six percent of students and 18% of faculty and graduate students indicated they were unsure of how to respond to an assistance dog, such as whether it was appropriate or not to pet the animal.

These concerns and behaviors might be the result of the limited interaction of students and faculty with people with disabilities (Table 2). Although almost half of the undergraduate students surveyed (45%) had family or friendship ties with persons having disabilities, the remaining 55% had limited relationships with individuals with disabilities. Faculty members reported that 34% had a co-worker with a disability, 20% interacted with someone with a disability almost every day in the workplace and 52% reported having a student with a disability in at least one of their classes.

Both students and faculty recounted limited interaction with students with disabilities. Students and faculty were asked about the number of individuals with disabilities with whom they socialized outside of classroom time or outside of work time in the last 30 days. Close to half of the undergraduates surveyed (45%) and almost



half of faculty (41%) and graduate students (45%) reported "none," and 8% of faculty and 7% graduate students indicated that they had socialized with three or more individuals having disabilities in the past month (Table 2).

There was more uncertainty related to equity in social opportunities (joining clubs, attending social events, etc.); 45% of the undergraduates and 34% of faculty and graduate students suggested that individuals with disabilities were treated fairly, 20% of students and 7% of faculty suggested there was not equitable treatment, and over a third (35%) of the students and 59% of faculty were not sure. Almost half of the undergraduate respondents (49%) and 18% of faculty and graduate students felt that the university is doing a "poor" to "fair" job including individuals with disabilities in social organizations and co-curricular activities. Twenty five percent of undergraduates, graduate students and faculty suggested university efforts are "good" to "excellent," while 25% of undergraduates and 58% of graduate students and faculty answered that they were not sure.

Disabilities in the Classroom

The efforts of the university to provide accommodations to those with disabilities were perceived positively. As such, 87% of the undergraduates surveyed believed these efforts did not give unfair advantage to students with disabilities. When asked more specifically about academics and social opportunities, a clear majority (63%) of undergraduates believed that individuals with disabilities received fair treatment in the academic arena.

When faculty were asked about individuals with disabilities being treated fairly in the classroom, 55% of faculty and graduate students reported that they were treated fairly, yet 40% were not sure. Faculty and graduate students with teaching responsibilities were polled about their use of the university's Academic Accommodations Policy for students with disabilities. Faculty members were more likely to have ap-

plied this policy (43%) than graduate students (28%) (Table 3).

Thirty-two percent of undergraduate students had no professors this semester who asked, either through announcements or through a syllabus, about accommodations in the classroom (Table 3). However, 46% of faculty members and 53% of graduate students who teach waited until the end of class for a student with a disability to approach them about accommodations, 18% of faculty and 35% of graduate students announced the availability of accommodations during the first class of the semester, and 18% of faculty and 34% of graduate students included this policy in their class syllabus (Table 3).

The majority of faculty (65%) and half of the graduate students (51%) who teach have provided accommodations for students with disabilities. Of these, 71% said that it required little to no extra preparation time to make these accommodations available. A very small percentage (7%) viewed making the accommodations inconvenient, as they created disruptions to class flow and caused feelings of unfairness in other students.

More than half (65%) of the undergraduates felt that courses and classroom discussions at the university had not prompted greater awareness of disability-related issues. Sixty-five percent of faculty and graduate students did not include discussions that promoted awareness of disability-related issues in their classes, and about half (45%) felt that disability-related topics were not relevant to their class. Of the 24% who included these topics in class discussion, 36% said they worked these issues into one or more classes each semester.

The majority of faculty and graduate students (88%) did not think they should do anything different for students with disabilities compared to what they are doing now. However, when asked what the university can do to make the campus more hospitable for individuals with disabilities, 37% reported better accessibility,

22% thought more support and accommodations should be given, 19% reported transportation improvements, 13% cited improvement in the Center for Students with Disabilities, 6% thought increasing disability awareness and 3% said there should be more opportunities for people with disabilities overall.

Discussion

The ADA of 1990 requires that all state universities make reasonable accommodations to students with disabilities. Under the ADA, faculty members must provide students with disabilities accommodations. Fewer than half of the faculty members in this study and only 28% of graduate students reported applying the

are not receiving the required accommodations. In another study, students with disabilities reported that most professors failed to meet their needs in the classroom (Morre & Nye, 1986). More research is needed to ask disabled students how their needs are being met in the university.

The university does have a disability resource center that serves to enhance the post secondary experience for students with disabilities. The university also has a variety of outreach programs for students, so it is unclear if students would not otherwise know about services available to them if faculty members did not announce it in class. However, it can be argued that by mentioning the availability of supports in class or including it in the syllabus

Table 3. Communication of Availability of Accommodations in the Classroom

Undergraduate	Graduate*	Faculty
n/a	28%	43%
		-
32%	n/a	n/a
nla	530%	46%
11/ a	J3 /0	40 /0
nla	35%	18%
11/ a		10 /0
n/a	3/10/2	18%
11/ a	3470	1070
	n/a	n/a 28% 32% n/a n/a 53% n/a 35%

^{*}only graduate students with teaching responsibilities are reported

University's Academic Accommodations Policy. One third of undergraduates reported that professors did not mention the availability of accommodations either through announcements or in the syllabus. About half of the faculty and half of the graduate students did not announce or include the policy in their syllabus and instead waited for students with disabilities to approach them. This does not necessarily indicate that faculty are not providing accommodations when requested. However, if students do not perceive the availability of accommodations, then it is possible that many disabled students

students feel more comfortable approaching a professor and requesting accommodations. There is no university policy that mandates that all faculty members include a section about accommodations on their syllabi. The disability resource center does offer training and technical assistance to faculty; however the training is not mandatory, and is provided mostly as it is requested by a department. Recommendations for moving forward are to integrate disability training into the human resources process for new hiring of faculty at the university, or to create online modules for faculty to access instead



of in-person workshops. Some of the topics should include legal responsibilities, universal design for instruction, disability issues and disability culture.

It has been suggested that transition planning should be included for students with disabilities planning on entering into higher education (Gil, 2007). Transition planning would include collaboration between secondary educators and postsecondary service providers, helping students bridge the gap between high school and higher education (Gil, 2007). This would ensure that students, parents, and professionals at higher education institution have the information necessary to make informed decisions. A collaborative approach to transition services involving all key players will ensure that students are knowledgeable about the postsecondary institution and services available and how to advocate and represent their needs effectively to their professors. In addition it will benefit postsecondary professionals by helping them to accommodate and provide full inclusion services to those students with disabilities.

More than half of faculty and graduate students who teach in this study do not include disability-related topics in the classroom through discussions or classroom activities, and about half feel that disability-related topics are not relevant to their class. Increasing awareness and creating a culture of understanding and inclusion for students with disabilities must begin in the classroom. The inclusion of topics and discussion about disability issues will create a comprehensive curriculum for students. These findings call for a change in the curriculum available for students including more classes about disability topics, and an infusion of disability material into current courses. Possible recommendations include certifications or sequences about disability studies available for undergraduate students. Graduate level training specific to disabilities across the lifespan, not solely in education, and with an emphasis on interdisciplinary training is also recommended.

University awareness and attitudes toward people with disabilities can create a culture of acceptance or negativity for students with disabilities (Bowman, 1987; Burgstahler, 1994; Mullins, Rossler, Schriner, Brown & Bellini, 1997). Interestingly, an overwhelming majority of undergraduates, graduate students and faculty members in this study report feelings of admiration for person with disabilities. While these results may be positive, it is possible that people with disabilities may not want to feel admired or glamorized because of their disability. Just as in any undergraduate students, graduate students and faculty feel pity and embarrassment when interacting with students with disabilities. This finding further enforces the need for increased social and daily interactions with students with disabilities. McCarthy and Campbell (1993) stated that attitudes toward people with disabilities are related to the amount of direct contact individuals have had with disabled people. A campus where half the students and faculty report no social interactions with individuals with disabilities outside of the classroom needs to refocus their efforts on increasing social opportunities in order for students with disabilities to feel more welcomed by the campus community. These findings indicate that students and faculty would benefit from intensive disability integration, for example a disability awareness campaign aimed at students and faculty to increase interaction and understanding of disability.

Inclusion for students with disabilities at the postsecondary level is not guaranteed under federal laws of non-discrimination or equal opportunity. This paper highlights a trend that many students with disabilities are not being included in university activities. Few students and faculty in this study report having interactions with students and others with disabilities either in school, the workplace or social interactions. It is not surprising then that students and faculty feel awkwardness, embarrassment, or pity when interacting with persons with disabilities.

Mary Beth Bruder, Ph.D. is Professor and Director, and Cristina Mogro-Wilson, Ph.D. is Assistant Professor and Research Director at the University of Connecticut Health Center, in the Department of Pediatrics, at the University Center for Developmental Disabilities (UCEDD).

References

- Aksamit, D., Leuenberger, J., & Morris, M. (1987). Preparation of student services professionals and faculty for serving learning-disabled college students.

 Journal of College Student Personnel, 28, 53-59.
- Baggett, D. W. (1993). Study of the University of Massachusetts at Amherst faculty's knowledge of disabilities, experience with educating students with disabilities, and attitudes that faculty possess towards students with disabilities. (Doctoral Dissertation, University of Massachusetts.)

 Dissertation Abstracts International, 54, 06A.
- Benham, N. E. (1995). Faculty attitudes and knowledge regarding specific disabilities and The Americans with Disabilities Act. (Doctoral Dissertation, University of Southern Mississippi, 1995).

 Dissertation Abstracts International, 57, 01A, (1995).
- Bordiere, J., & Drehmer, D. (1986). Hiring decisions for disabled workers:

 Looking at the cause. *The Journal of Applied Psychology, 16*, 197-208.
- Bowman, J. T. (1987). Attitudes toward disabled persons: Social distance and work competence. *Journal of Rehabilitation*, 53(1), 41-44.

- Burgstahler, S. (1994). Improving campus attitudes about students with disabilities. *Speeches and Conference Papers* (150), Paper presented at the Annual Conference of the Association for Higher Education and Disability, Columbus, OH, July 27-30, 1994.
- Burgstahler, S., Duclos, R., & Turcotte, M. (2000). Preliminary Findings: Faculty, Teaching Assistant, and Student Perceptions Regarding Accommodating Students with Disabilities in Postsecondary Environments. (ERIC Document Reproduction Service No. ED456718) Retrieved from ERIC database.
- Cook, L., Hennessey, M.L., Cook, B.H., & Rumrill, P.D. (2007). The views of university members and service providers regarding the increased enrollment of students with learning disabilities. *Learning Disabilities: A Multidisciplinary Journal*, 14(3), 205-216.
- Crowne, D.P., & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychology, 24*, 349-354.
- Dodd, J. M., Fischer, J., Hermanson, M., & Nelson, J. R. (1990). Tribal college faculty willingness to provide accommodations to students with learning disabilities. *Journal of American Indian Education*, 30(1), 8-16.
- Elston, R., & Snow, B. (1986). Attitudes toward people with disabilities as expressed by rehabilitation professionals. *Rehabilitation Counseling Bulletin*, 29, 284-286.



- Fonosch. G. G., & Schwab, L. O. (1981).

 Attitudes of selected university faculty members toward disabled students.

 Journal of College Student Personnel, 22, 229-235.
- Gerald, D. E., & Hussar, W. J. (2002).

 Projections of education statistics to 2012.

 Washington, DC: National Center for Education Statistics.
- Gil, L.A. (2007). Bridging the transition gap from high school to college. *Teaching Exceptional Children*, 40 (2), 12-15.
- Hergenrather, K., & Rhodes, S. (2007). Exploring undergraduate student attitudes toward persons with disabilities: Application of the desirability social relationship scale. *Rehabilitation Counseling Bulletin*, 50(2), 66-75.
- Hill, J.L. (1996). Speaking out: Perceptions of students with disabilities regarding adequacy of services and willingness of faculty to make accommodations. *Journal on Postsecondary Education and Disability, 12*(1).
- Jin, B., & Gu Suh, Y. (2005). Integrating effect of consumer perception factors in predicting private brand purchase in a Korean discount store context. *Journal of Consumer Marketing*, 22, 62.
- Leyser, Y. (1990). A survey of faculty attitudes and accommodations for students with disabilities. *Journal of Postsecondary Education and Disability, 7,* 97-107.
- Lewis, M. L. (1998). Faculty attitudes toward persons with disabilities and faculty attitudes toward to accommodate students with learning disabilities in the classroom. (Doctoral dissertation, Auburn University). *Dissertation Abstracts International*, 59, 08-A, (1998).

- Madaus, J.W., Gerber, P.J., & Price, L.A. (2008). Adults with learning disabilities in the workforce: Lessons for secondary transition programs.

 Learning Disabilities Research & Practice, 23(3), 148-153.
- McCarthy, M., & Campbell, N. J. (1993). Serving disabled students: Faculty needs and attitudes. *NAPSA Journal*, 30(2), 120-125.
- McGee, K. A. (1989). Attitudes of the University of Virginia faculty and administration toward disabled college students (Doctoral dissertation, University of Virginia). *Dissertation Abstracts International*, 50, 10A.
- Miller, K.W., Wilder, L.B., Stillman, F.A., & Becker, D.M. (1997). The feasibility of a street-intercept survey method in a n African-American community. *American Journal of Public Health*, 87, 655-658.
- Minskoff, E., Sautter, S., Hoffman, F., & Hawks, R. (1987). Employer attitudes toward hiring the learning disabled. Journal of Learning Disabilities, 20, 50-52.
- Moore, C.J., & Nye, H. (1986). Faculty awareness of needs of physically disabled students in the college classroom. Bulletin of the Association on Handicapped Student Services Programs in Postsecondary Education, 4, 137-145.
- Mullins, J., Rossler, R., Schriner, K., Brown, P., & Bellini, J. (1997). Improving employment outcomes through quality rehabilitation counseling. *Journal of Rehabilitation*, 63(4), 21-32.

- National Center for Education Statistics, U.S.
 Department of Education. (2006).

 Profile of Undergraduates in U.S.
 Postsecondary Education Institutions:
 2003–04 (NCES 2006-184).
- Piggott, L. & Houghton, A. (2007). Transition experiences of disabled young people. *International Journal of Lifelong Education*, 26(5), 573-587.
- Rao, S. (2004). Faculty attitudes and students with disabilities in higher education:
 A literature review. *College Student Journal*, 38(2), 191-199.
- Sedlacek, W., & Stovall, C. (1983). Attitudes of male and female university students toward students with different physical disabilities. *Journal of College Student Personnel*, 24, 325-330.
- Schoen, E., Usyal, M., & McDonald, C. D. (1986). Attitudes of faculty members toward treatment of disabled students reexamined. *College Student Journal*, 21(2), 190-193.
- Spooner, C., Bishop, J., & Parr, J. (1997).

 Research methods for studying injecting drug users in a rural centre. *Drug and Alcohol Review, 16*(4), 349-355.
- Wright, M., Gendall, P., & Lewis, T. (1999).

 Making survey-based price experiments more accurate. *Journal of Market Research Society, 41*(2), 245.
- Wagner, M., Newman, L., Cameto, R., Garza, N., & Levine, P. (2005). After high school: A first look at the postschool experiences of youth with disabilities. A report from the National Longitudinal Transition Study-2 (NLTS2). Menlo Park, CA: SRI International.

Williamson, P. T. (2000). Attitudes of the Troy State University Dothan faculty toward students with disabilities (Doctoral dissertation, Auburn University). WorldCat, OCLC: 44857670.

Note

The conduct of the study reported in this paper was funded, in part, by the Federal Centers for Excellence in Developmental Disabilities Education, Research, and Service Programs (Grant # 90DD0576).

