With the passage of Section 504 of the Rehabilitation Act of 1973 and later, the Americans with Disabilities Act of 1990, a core of academic adjustments and auxiliary aids and services began to emerge to meet the challenge of including students with disabilities in postsecondary education. Stodden, Jones, and Chang (2002) performed an analysis of the terms “services,” “supports” and “accommodations” used in practical contexts across secondary education and transition, postsecondary education, and employment. They found that the terms “services” and “accommodation” are commonly used by Disability Student Services (DSS) coordinators to describe assistance to students with disabilities at the postsecondary level. Their analysis further suggested that when “services” were described, they tended to address the needs of categories of students rather than individual students (e.g. interpreting services are provided students who are deaf). They also reported that the qualifier “reasonable” as part of the term “reasonable accommodations” is commonly used by many postsecondary institutions as a guide to the type and scope of assistance that they offer to students with disabilities.

In a study of students with disabilities in selected community and technical colleges, Berry and Mellard (2002) found that the factors considered in making decisions about accommodations were availability, ease of use, previous effectiveness, and most importantly, cost to the college. Results of a survey performed by the National Center for the Study of Postsecondary Educational Supports (2000) of more than 650 different support coordinators at postsecondary institutions reported that according to those surveyed funding for disability support services and accommodations was a low priority with many postsecondary institutions. The survey respondents further reported that the process for determining what services and accommodations to offer is often influenced by what the institution has available and is able to provide. This result suggests that funding for assistance is often limited and disability services are often based on available funds and resources rather than...
appropriateness for the student. According to Stodden, Jones, & Chang (2002) when a postsecondary school provides a student with “accommodations,” it is based on the student’s type of disability (i.e., learning disability, visual impairment, etc.) and on a narrow interpretation of the concept of “reasonableness” by meeting the minimum acceptable standard under the law rather than what that student may need in order to succeed at college.

Several studies indicate that the most common accommodations used were extended time on tests, student notetakers, student readers, modified examination formats, and preferential seating (Berry & Mellard, 2002; Lewis & Farris, 1999). Some of the student-requested accommodations included taking tests in a quiet room or having tests read to them, extended or untimed tests, the wording of test questions in a simplified straightforward manner, alternative ways of being tested on the material (i.e. oral or essay), more frequent exams covering less material, the substitution of written papers for tests, notetakers, wheelchair accessible desks, tutoring, and tape recorded lectures (Elacqua, Rapaport, & Kruse, 1996).

Two surveys (Elacqua, Rapaport, & Kruse, 1996; Berry & Mellard, 2002) describe student attitudes toward the accommodations process. Postsecondary students with disabilities were generally satisfied with the accommodation selection process and felt that they were given the same opportunity to learn when accommodations were provided. However, the survey performed by Elacqua, Rapaport, and Kruse (1996) noted several areas of concern. A majority of students felt that requesting accommodations was stressful and that they were singled out by instructors who violated their confidentiality. Some students believed that if they did not receive the accommodations, it would take longer to complete their degree. Many students felt that instructors were not familiar with the accommodation process. Students with ‘invisible’ disabilities (e.g., learning or emotional disabilities) were more embarrassed and anxious when requesting accommodations than students with more ‘visible’ disabilities (Elacqua, Rapaport, & Kruse, 1996).

In a second survey performed by Jensen, McCrary, Krampe, & Cooper (2004), college instructors indicated a willingness and duty to make classroom accommodations. At the same time, they expressed an overriding concern to protect academic integrity. Their comments reflected concerns regarding how learning disabilities are assessed and the extent faculty and instructional staff should be expected to go to accommodate students with learning disabilities.

While postsecondary institutions are required to provide academic adjustments and auxiliary aids and services to students with documented disabilities, most provide a range of services and accommodations based on students’ documented disabilities and learning needs. Some speculate, however, that the services and accommodations offered may not meet students’ needs. The 2004 National Postsecondary Student Aid Survey (NPSAS) captured data about the types of services and accommodations students with disabilities received and need in postsecondary settings. A look at this data may help to identify whether a gap exists between services requested...
and received for students with disabilities in postsecondary education.

The purpose of this article is to report on accommodations provided to students with disabilities who are attending postsecondary education using data from the National Postsecondary Student Aid Survey (NPSAS) of 2004. The data and discussion compare and contrast services received and services needed. Possible explanations are also discussed as to why students with disabilities may not receive accommodations reportedly needed.

Data

The NPSAS 2004 is the most recent nationally representative survey of students attending both public and private postsecondary education institutions during the 2003-2004 academic year. Samples included approximately 50 thousand undergraduate students and 11 thousand graduate students, representing about 16.5 million and 2.3 million students, respectively. Financial aid, socio-demographic, employment, and related postsecondary education topics are encompassed within the survey (U.S. Department of Education, 2005a).

NPSAS 2004 included questions about accommodations and services for students identified as having disabilities during the 2003-2004 academic year. Disability was identified for each student who reported a long-lasting disability or condition lasting six months or more such as blindness, deafness, severe vision or hearing impairment; or a long-lasting condition that substantially limits one or more basic physical activities such as walking, climbing stairs, reaching, lifting, or carrying; or other physical, mental, emotional, or learning condition that has lasted six months or more. From a list of seven accommodations and services, students with disabilities were asked first if they had received the service or accommodation. For negative responses, students were then asked if the service or accommodation was needed. Therefore, the columns represent responses that are mutually exclusive. Those who received the specific service or accommodation were not counted under those who are in need. Services and accommodations not specified within the list were included in “other” categories.

Alternative exam formats were the most frequently received accommodation/service with 11.8% of students with disabilities reporting that they had received such formats during the academic year. The second and third most common types of accommodations and services were tutoring and

![Bar Chart]

- Tutors: 9.8%
- Interpreters: 0.5%
- Registration Assistance: 4.7%
- Readers / Note Takers: 4.6%
- Course Substitutes or Waivers: 3.0%
- Alternative Exam Format: 4.8%
- Adaptive Technology: 1.6%

service received | services needed
registration assistance, 9.8%, and 7.0% respectively.

A comparison of the percentages indicates that the number of students in need of accommodations or services is almost equal to or greater than the number of those who actually receive them. Factors such as cost or disability determination could account for the discrepancies for items such as interpreters, readers/note takers, alternative exam formats, and adaptive equipment/technology. However, it is difficult to consider that these factors limit registration assistance, which has an insignificant cost and should be available to anyone with a disability.

The NPSAS data also indicate the high need for tutoring. Although this service tends to be costly, the Office for Civil Rights has ruled that it is a personal service and therefore, postsecondary institutions do not have to provide it free of charge under Section 504 and ADA (U.S. Department of Education, 2005b). That nearly a tenth of students do receive tutoring demonstrates that many schools may realize the value of providing this service. Many students with disabilities may expect tutors will be provided for a range of subjects (Henderson, 2001), only to discover that tutoring is not a covered service. Students frequently assume that the same services they used in high school will also be available to them in college. It’s advisable to familiarize students of the many differences between high school and postsecondary education for students with disabilities.

Only a small percentage of students receive or need interpreters, either sign language or oral. Interpreting services are often costly, yet critical for some students to successfully complete their coursework. Finally, while 1.5% of students with disabilities reported receiving a course substitution or waiver, over three times as many indicated that this accommodation was needed but not received. This finding suggests that required course work may pose significant challenges for some students with disabilities that may or may not be reasonably accommodated depending on the academic requirements and flexibilities of postsecondary institutions and/or individual instructors.

**Conclusion**

Ensuring that postsecondary students with disabilities receive necessary and appropriate services and accommodations is fraught with uncertainty. Students are expected to be responsible for advocating for and obtaining any and all educational assistance they need to successfully participate in college programs (Brinckerhoff, 1994; Izzo, Hertzfeld, & Aaron, 2001; Stodden, Whelley, Chuan, & Harding, 2001). Students must have the ability to clearly describe their disability and the supports they require in specific learning environments.

The process for identifying and delivering services and accommodations is challenging for both students and postsecondary institutions. However, students with disabilities who do not receive needed accommodations experience much higher dropout rates than students who do (Blackorby & Wagner, 1996; National Organization on Disabilities, 1998; Witte, Philips, & Kakela, 1998). Therefore, addressing accommodation and service needs may facilitate retention and graduation of postsecondary students with disabilities, and thereby help improve employment and independent living outcomes.