Higher Education Opportunities for Students with Disabilities

A PRIMER FOR POLICYMAKERS

Thomas R. Wolanin and Patricia E. Steele
THE INSTITUTE FOR HIGHER EDUCATION POLICY
The Institute for Higher Education Policy is a non-profit, non-partisan research organization whose mission is to foster access and success in postsecondary education through public policy research and other activities that inform and influence the policymaking process. These activities include policy reports and studies, seminars and meetings, and capacity building activities such as strategic planning. The primary audiences of the Institute are those who make or inform decisions about higher education: government policymakers, senior institutional leaders, researchers, funders, the media, and private sector leaders.

This report, “Higher Education Opportunities for Students with Disabilities: A Primer for Policymakers,” is one of a series of forthcoming studies designed to examine how and why specific groups appear to be slipping through the cracks of the American system of postsecondary educational opportunity. The series also will explore how the experiences of these groups relate to broader barriers posed by income and race.

Ultimately, the project expects to inform higher education leaders, government policymakers, advocacy groups, and the media about the unaddressed barriers to access and success for underserved student groups, and will move from diagnosis to action through government policy recommendations and other change strategies. This multi-year effort is funded by the Ford Foundation.

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Acknowledgements

The goal of this report is to build a bridge between the worlds of higher education policy and disability policy. We were greatly aided in this task by conversations with thoughtful and sophisticated professionals with knowledge and experience in these two realms. In particular, we appreciate very much the comments and contributions we received from: Mary Ann “Amie” Amiot, U.S. Department of Education; Vickie Barr, People-First Educational Services, Inc.; Stephanie Gordon and Tess Shier, National Association of Student Personnel Administrators (NASPA); Jane Jarrow, Council for Opportunity In Education (COE); Rita Kirshstein, American Institutes for Research (AIR); Sally Lovejoy, Committee on Education and the Workforce, U.S. House of Representatives; Maryln McAdam, McA Enterprises, Inc.; Patricia Morrissey, Administration on Developmental Disabilities, U.S. Department of Health and Human Services; Debra Price-Ellingstad, Bonnie Jones and Marlene Simon-Burroughs, Office of Special Education Programs, U.S. Department of Education; Robert “Bobby” Silverstein, Center for the Study and Advancement of Disability Policy (CSADP); Stephan Smith, Association for Higher Education and Disability (AHEAD); Ann Wade, University of Liverpool, England; and Jane West, Higher Education Consortium for Special Education (HECSE). These individuals all have our deep gratitude, but they bear no responsibility for the accuracy of the information or the policy analysis and recommendations contained in this report.

During the time that this report was being prepared two of our very dear friends and colleagues, Amie Amiot and Maryln McAdam, died. They both inspired and helped to guide this report, and they both were committed and effective advocates for the disadvantaged, especially students with disabilities. This report is dedicated to their memories.

Special thanks are also due to the staff of the Institute who provided outstanding support and assistance with respect to the research, editorial, dissemination, and administrative tasks associated with this report: President Jamie Merisotis, Senior Associate Jane Wellman, Director of Research Alisa Cunningham, Director of Communications Loretta Hardge, and Senior Research Analyst Melissa Clinedinst.

We are also very pleased to acknowledge the Ford Foundation for providing generous financial support for this project.
DEDICATED IN HONOR OF THE MEMORIES OF OUR FRIENDS AND COLLEAGUES


Maryln McAdams (1948 — 2004)
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Students with disabilities are the most recent marginalized group to move toward equal opportunity in education. They are following in the path of low-income persons, racial and ethnic minorities, and women. Federal laws prohibit discrimination against students with disabilities and seek to provide them with appropriate services and supports. Providing more educational opportunities for students with disabilities began with elementary and secondary education and now increasingly emphasizes opportunities for higher education.

This report focuses on the special barriers to equal educational opportunity in higher education faced by students with disabilities as they are educated in elementary and secondary schools, transition to higher education, and receive accommodations in higher education. The report also discusses the special topics of architectural barriers, student financial aid, and students with learning disabilities (LD). Each of these topics is treated from the point of view of policymakers starting with the requirements and options available under current federal law and considering how the law and practice can be changed to enhance the opportunities of students with disabilities.

The worlds of elementary and secondary education and higher education are fundamentally different with respect to educating students with disabilities. Where elementary and secondary education is compulsory and no student with a disability may be rejected, higher education is voluntary and rejects many aspirants. Higher education also routinely terminates students with disabilities for substandard academic performance in contrast to the principle of “no cessation of services” in K-12 education.

According to the Census 2000, almost 50 million people (about 19 percent of all Americans over age five) reported having a disability. Among children and youth under age 21, the percentage receiving federally mandated education services for students with disabilities has steadily risen to 13 percent or 6 million students in 2000. Students with LD constitute the largest single group and range in various studies from 46 percent to 61 percent of all students with disabilities. The percentage of students with disabilities who have completed high school has increased from 61 percent in 1986 to 78 percent in 2001. These students increasingly graduate with standard diplomas and are academically qualified to attend higher education. About 9 percent of all undergraduates in higher education report having a disability, a percentage that has tripled in the last two decades. This amounts to about 1.3 million students.

Despite these favorable trends, students with disabilities do not receive the same level of academic preparation in K-12 education as their peers without disabilities and consequently do not go on to higher education in larger numbers.

- In 2001, 78 percent of adults with disabilities reported that they had a high school diploma compared to 91 percent of the general population.
- Only 57 percent of youth with disabilities received standard high school diplomas.
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- By 2000, 73 percent of high school graduates with disabilities enrolled in some form of postsecondary education compared to 84 percent of their peers without disabilities.

- On the other hand, students with disabilities who were highly qualified academically enrolled in four-year colleges at the same rate (79 percent) as their peers without disabilities.

Among the K-12 barriers faced by students with disabilities are the low expectations of some teachers, inadequate pedagogy and services to meet the educational needs of students with disabilities, and failure to provide these students with access to the full core academic curriculum and the standard diplomas necessary for access to higher education.

Students with disabilities in higher education are protected by a legal framework that is significantly different from the one they experienced in elementary and secondary education. In higher education there is no legal guarantee of a “free appropriate public education,” no individual education plan (IEP), no significant parental involvement, no publicly-provided assessments, and no “modifications” to the curriculum that change it in any “fundamental” or “substantial” way. Students with disabilities in K-12 have a structured process provided for them to lead to successful outcomes. In higher education, the student is protected against discrimination and provided an equal opportunity, but there is no process aimed at achieving success.

In the 1990s IDEA was amended to include “transition services” in the IEP for students with disabilities planning for higher education. The failure to provide clear explanations of the differences in the legal frameworks between K-12 and higher education in transition services results in false expectations, disappointment, and frustration for students with disabilities and their parents. In addition, the transition services currently provided often fail to sufficiently involve the students with disabilities and to provide them with self-confidence and self-advocacy skills.

For many students with disabilities the path to higher education is not an orderly march from K-12 education guided by a transition plan and an IEP. Of those with disabilities in the primary college-going years (birth to 39), about half did not have the benefit of the IEP transition process because the onset of their disability occurred after they left secondary school. Other students with disabilities delay higher education, entering on average three years later than students without disabilities.

The federal Vocational Rehabilitation (VR) program is an important source of support to students with disabilities in the transition to higher education. About a quarter of all undergraduate students with disabilities, between 300,000 and 400,000, annually receive postsecondary education assistance through VR. Sufficient funds are not available to serve all who could benefit from VR services.

Colleges may not discriminate against students with disabilities in admissions or programs. This means that these students must be able to meet the academic standards of the school in spite of their disabilities if they are provided reasonable accommodations. Accommodations which are a “fundamental alteration” of a program or which would impose an “undue” financial or administrative burden are not required.
To receive accommodations students with disabilities must disclose their disabilities and take the initiative in requesting accommodations. They must also, often at their own expense, document their disability. Accommodations aim to give students with disabilities an equal opportunity for all the benefits of higher education. Accommodations tailored to the needs of the individual student can include an extended time for timed examinations, special parking spaces, and large print software.

Faculty attitudes and the academic culture are the major barriers to the successful implementation of accommodations for students with disabilities. Faculty are often ignorant about their responsibilities and about how to relate to students with disabilities. Faculty resent being told what to do by low-level administrators in the disability services offices and not being able to review or question the legitimacy of a student’s disability or the accommodation that is prescribed.

On many campuses in-service training in pedagogy including useful skills and techniques relevant to the education of students with disabilities is provided to both faculty and graduate students. The U.S. Department of Education’s Demonstration Projects to Ensure Students with Disabilities Receive a Quality Higher Education has also supported model projects, technical assistance, and professional development for faculty.

Students with LD are the largest group of students with disabilities (about 40 percent of the freshmen with disabilities). The number of freshmen with LD has increased by a factor of ten since 1976, and students with LD constitute about one in 25 undergraduate students. More dependent college students with LD are in the highest income quartile than any other disability category. Some suspect that it is the result of affluent parents buying fake LD diagnoses to gain an educational advantage for their children. While widespread, there is no evidence to support this suspicion. LD is also an “invisible” disability that is not readily apparent to lay observers. Thus, students with LD bear a special burden of proof to establish their special needs. LD is also a relatively new phenomenon. Thus, students with LD are a large, rapidly growing and new group of students with disabilities whose disability is “invisible” and who are disproportionately from affluent families. Therefore, faculty and administrator resistance and skepticism is compounded.

Federal laws also require that all higher education programs be physically accessible to students with disabilities. In recent decades the removal of architectural barriers such as by providing curb cuts and ramps has been the most visible and successful front in making higher education more inclusive for students with disabilities.

Students with disabilities generally have lower incomes than their peers without disabilities. These students rely on the same federal, state, and institutional programs that serve low-income students generally. Therefore, their opportunities have been diminished by the inadequate levels of financial aid, particularly grants, that affect all low-income students.

In addition, it is expensive for low-income students with disabilities to meet the special needs associated with daily life and academic life. These additional costs are often not met because financial aid funds are limited or the financial need of students with disabilities exceeds the maximum awards in various programs. Students with disabilities also generally need more time for self-care, daily living, and academic tasks than their peers without
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disabilities. This results in students with disabilities taking twice as long to complete their degrees as their peers without disabilities. The longer time that students with disabilities need to complete their studies increases their costs and the financial barriers they face. In addition, federal student aid programs, particularly the Pell Grant program, do not provide the flexibility to offer a maximum full-time award to students with disabilities who are making their full-time effort.

Students with disabilities often face difficulties in assembling a financial aid “package” from diverse sources because of standard expectations for employment and borrowing that are unrealistic as well as the complex coordination of outside sources of support.

Summary of recommendations

General recommendations:

▷ To increase the number of students with disabilities prepared for higher education, teachers and administrators in K-12 education should continue the improvements in the acceptance of students with disabilities as full-fledged learners for whom there are high expectations. Continuous development in pedagogy and services for these students should be encouraged. In addition, a greater proportion of the education of students with disabilities should include exposure to the core curriculum in regular classrooms and be aimed at preparation for standard high school diplomas.

▷ To overcome financial barriers to higher education faced by low-income students with disabilities, student financial aid, especially grants adequate to pay college costs, should be available.

Specific recommendations:

▷ In the transition process, students with disabilities and their parents should be apprised in clear and unambiguous terms of the differences in the rights and responsibilities of students and schools in K-12 versus higher education.

▷ Transition activities should place a much greater emphasis on providing effective self-advocacy skills to students with disabilities who are interested in higher education.

▷ Students with disabilities interested in higher education should be required to play a more active leadership role in the development and execution of their transition plans.

▷ Appropriate updating of disability documentation should become a routine aspect of transition programs for students with disabilities planning to attend higher education.

▷ In-service training and professional development opportunities for faculty members and graduate students devoted to the education of students with disabilities should be strengthened and expanded.
College presidents and other academic administrators should provide more aggressive and explicit advocacy on behalf of educational opportunities for students with disabilities, comparable to that which now addresses low-income, multicultural, and gender concerns.

The Advisory Committee on Student Financial Assistance should conduct a study and provide recommendations to Congress and the Secretary of Education on the issue of providing full-time amounts of federal student aid to students with disabilities who are studying “full time” given their capability.

Professional organizations of student financial aid administrators should provide in-service training opportunities to improve the understanding of their members of the special issues and circumstances facing low-income students with disabilities.
Introduction

Inclusion in education of students with disabilities

One of the most significant threads in American history is the progressive inclusion of all people into the social and political mainstream as equal partners and participants treated with dignity in light of their fundamental equality as human beings. This narrative applies in particular to the history of education in the United States as the story of a sometimes halting but ultimately steady expansion of educational opportunities to more and more Americans. In the first century of its history as a nation America accepted as a basic responsibility of government the obligation to provide a free public elementary and secondary education for all. Education for the elite gave way to popular education. In its second century, those on the margins of society have been increasingly included in the mainstream of education. Racial segregation in education was dismantled by court cases such as Brown v. Board of Education (1954) and legislation such as the Civil Rights Act of 1964. Title IX of the Education Amendments of 1972 is one landmark in the expansion of educational opportunities for women.

Students with disabilities, long marginalized in education, are the most recent group to be designated for full participation. Prior to 1975 a million or more young people with disabilities per year were simply refused entry into public schools. In the early 1970s, two federal court cases relying on the equal protection clause of the 14th Amendment established the right to a free appropriate public education in the most appropriate mainstream setting for all children with disabilities.1 Inspired by the civil rights movement that fought Jim Crow, people with disabilities and their advocates emerged politically to demand civil rights for people with disabilities.2 The independent living movement signaled the determination of these people to be included in the American mainstream. The crucial breakthroughs for educational opportunity for students with disabilities came with the enactment of two pieces of federal legislation. The first is Section 504 of the Rehabilitation Act of 1973, which prohibits discrimination against otherwise qualified persons with disabilities in any program or activity receiving federal funds, including education.3 The second is the Education for All Handicapped Children Act (1975), which mandates a free appropriate public education for all children with disabilities and establishes a set of procedures to ensure that the appropriate education is in fact provided to these

2 One of the rallying cries of persons with disabilities demanding political participation and control over their own destiny was: “Nothing about us without us.” See, J.I. Charlton, Nothing about Us without Us: Disability, Oppression and Empowerment (Berkeley: University of California Press, 1998). This has historical resonance as identical to the call of advocates for the recreation of a Polish state at the 1919 post-World War I peace conference in Paris, who demanded to be consulted in drawing new central European borders. In Polish it is: “Nic o nas bez nas.”
3 PL 93-112.
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The inclusion of students with disabilities in elementary and secondary education has not automatically transferred to their inclusion in higher education. In this country elementary and secondary education and higher education are two quite separate realms in admissions, curriculum, governance, finance, and policy. However, the inclusion of these students in elementary and secondary education has created three strong forces to include these students in higher education as well.

First, inclusion of students with disabilities in elementary and secondary education is a clear precedent that creates an obvious expectation that they will be included at the next level of education. There is no acceptable principle that would deny higher education opportunities to students with disabilities, particularly since higher education has increasingly become a necessary step on the path to full participation in American life.

Second, in 1990, IDEA was amended explicitly to require that students with disabilities be provided with transition services to lead them to life beyond secondary school including higher education, independent living, and employment. Thus, there is now a clear legislative path from secondary school to higher education.

Third, the inclusion of students with disabilities in elementary and secondary education has resulted in growing numbers of these students who have the appropriate secondary school diplomas and academic preparation to qualify for higher education. Increasing numbers of students with disabilities are now knocking on the doors of higher education and demanding entrance.

This report discusses the size and composition of this population of students with disabilities who are now claiming access to higher education. The report also examines the stages through which students with disabilities must pass to reach the goal of success in higher education — preparation in elementary and secondary schools, transition to higher education, and accommodations to provide equal educational opportunity. The report focuses on the special barriers faced by these students at each stage and reviews the programs now in place to facilitate access to and achievement in higher education. Special topics of architectural barriers, student financial aid, and students with learning disabilities (LD) also are discussed. Each of these topics is approached from the point of view of policymakers starting with the requirements and options available under current federal law and considering how the law and practice can be changed to enhance opportunities for students with disabilities.

4 PL 94-142.
5 PL 101-336.
The medical and social models of disability

This inquiry concerning access to higher education for persons with disabilities must start by defining “people with disabilities.” The traditional view, and probably still the view of the average person, is that disabilities are defects or deficiencies in individuals that set them apart from “normal” people. The number of people with various defects can be identified and counted, and the appropriate public policy response is to fix or remedy what is “wrong” or to “care for” the disabled. This is often called the “medical model.” Among the problems of this model are its failure to consider the degree to which those with physical or mental impairments feel that they are “disabled” and what “help” or “care” they want.

More recently a “social model” of disability has been advanced that views persons with disabilities as full-fledged members of society, who are not to be marginalized or stigmatized. For example, the “Findings” of IDEA state: “Disability is a natural part of the human experience and in no way diminishes the right of individuals to participate in or contribute to society.” In the view of the social model, these persons live in a social environment that fails to meet their needs. Much of this “disabling environment” is artificial, produced by human art rather than by nature. This applies, for example, to housing, transport, communications, public services, and education programs and institutions. In this view, there are not a number of disabled persons there are instead a number of disabling environments or social circumstances. Proponents of the social model believe that disability is not personal tragedy; it is social oppression and that “if you change society, disability will disappear.”

Taking the social model a step further, a post-modern view of disability is: “If norms are a product of society, and disability is defined as a departure from the norm, then disability is a social construct.” One direction that this thinking leads is to observe that everyone is born “disabled” and in the course of a life cycle again becomes or remains “disabled” at different individual rates and times. Thus, there is not a dichotomy between the disabled and the non-disabled; disability is, in fact, normal for all.

These are intriguing and challenging considerations. However, the federal legislative framework that deals with persons with disabilities defines them in terms of “impairments.” And, more importantly for this policy analysis, all of the data generally follow the categories of impairment specified in federally-funded studies grounded in current law. Therefore, as a practical matter, this report must deal with the issue in terms of individuals with various impairments who face obstacles and barriers to full opportunities for higher education. In this report the population of persons with disabilities is generally defined as those having a “disability” as defined in the Americans with Disabilities Act. This definition is:

“The term ‘disability’ means, with respect to an individual — (A) a physical or mental impairment that substantially limits one or more of the major life activities of such individual; (B) a record of such an impairment; or (C) being regarded as having such an impairment.”

6 IDEA, Section 601(c)(1).
8 Ibid., p. 136.
9 ADA, Section 3(2). This definition is basically identical to the definition of “individual with a disability” in the Rehabilitation Act of 1973, Section 7(20).
While this analysis is to some extent trapped in the medical model by the laws and the data that are gathered pursuant to them, the social model nevertheless provides an important context for this study. In particular, the social model leads to an understanding that the policy objective is not to “fix” those with disabilities but to respect them. In addition, this model also encourages recognition that the obstacles to educational opportunities faced by those with disabilities are largely man-made and should yield to the civil and human rights of individuals with disabilities.

**College qualified students with disabilities**

Having a definition of persons with disabilities, the next basic question is which of those persons constitute the universe of those seeking higher education opportunities. Answering this question highlights one of the important differences between the legislative and legal regimes governing elementary and secondary education for persons with disabilities and education for these persons in higher education. Elementary and secondary education is, of course, compulsory; all must attend. The dominant philosophy of the current laws takes the compulsory nature of elementary and secondary education to its necessary conclusion with respect to the education of those with disabilities. All such persons, regardless of the severity of their disability, are to be educated. There are to be “zero rejects.” If education is so important that all must be compelled to attend, then it follows that all should be accepted and educated. In addition, the prevailing view is that there is to be no “cessation of services” to students with disabilities during their time in elementary and secondary education. Therefore, in particular, students with disabilities should not be expelled from elementary and secondary education for disciplinary reasons. More appropriate interventions may be used and the student’s placement may be changed, but the student should not be denied educational services.\(^1\)

Higher education attendance is voluntary, not compulsory. Those admitted to higher education must meet specified academic and other standards, and in the case of selective institutions even many of those who meet the standards are not admitted. “Zero rejects” does not apply. It is also commonplace for students to be terminated at a higher education institution, most commonly for substandard academic performance. “No cessation of services” also does not apply in higher education. Thus, in general, attention must be focused on providing higher educational opportunities for those persons with disabilities who can meet the academic standards for admission, progress, and graduation, who are, in short, “college qualified.”

Limiting the universe to the college qualified generally excludes those secondary school students with disabilities who have significant mental retardation or other developmental impairments that leave them without the intellectual capacity to succeed academically in higher education. Of course, the instruments and measures used to determine whether a student with a disability is college qualified must themselves not be discriminatory. They

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must, in fact, measure what they claim to measure rather than simply reflect a person’s disability. To take an obvious example, a blind person should not be denied access to higher education on the basis of a test that is only administered in printed form.

There is clearly no bright line separating those who have the intellectual capacity to participate in higher education from those who do not. This is particularly the case since American higher education offers a very broad spectrum of courses of study, including a variety of vocational, athletic, and artistic programs, in which those with many levels of mental ability can succeed. However, the basic points are two. First, higher education is fundamentally different from elementary and secondary education: compulsory versus voluntary, and zero rejects versus elective. Second, in considering opportunities for higher education this report will focus on a subset rather than all of the students with disabilities in secondary schools.  

Some higher education institutions host programs and activities for individuals with mental retardation and other significant disabilities. These persons can benefit from an age-appropriate setting and programs and activities designed for their needs such as independent living, social, personal, and employment skills development, recreational and cultural enrichment, and improved self-esteem. However, these activities and programs generally do not produce credit in a higher education program leading to a credential. While these programs are certainly very valuable, those who participate in them are not among the subjects of this report, which focuses on those with disabilities who are participating in higher education. See, Debra A. Neubert, M. Sherrill Moon and Vanessa Redd, “Post-secondary educational practices for individuals with mental retardation and other significant disabilities: A review of the literature,” *Journal of Vocational Rehabilitation*, v. 16 (2001) and Meg Grigal, Debra Neubert and M. Sherrill Moon, “Postsecondary Options for Students with Significant Disabilities,” *TEACHING Exceptional Children*, v. 35, no. 2 (Nov./Dec. 2002).
CHAPTER 1

Population of Students with Disabilities: Size and Characteristics

This chapter provides descriptive statistics drawn from a variety of sources about students with disabilities. First, an overview of people with disabilities in the entire U.S. population age five and over is presented to provide a broad perspective of population statistics based on the Census. Current samples from other national data sets are discussed for children, high school students, high school completers, students transitioning to college, students in college, and students post-degree completion. In most cases the average experiences of students with disabilities are compared to their peers without disabilities. In this way, the successive samples provide a snapshot of today’s educational pipeline and postsecondary experience for students with disabilities.

Because several different data sources are used throughout this section, no single definition of disability applies. Table 1 illustrates the variety of disability categories used in different data sets. However, the source of the data, whether or not the data are self-reported, and specifics about the defining characteristics are described. Inconsistencies exist in the data because of differences in survey definitions, methods of survey, and sample selection. Key patterns or differences that may have implications for policy are emphasized.

Overview of the population with disabilities

According to the Census 2000, almost 50 million people (about 19 percent of the total population over age five) reported having some type of a disability¹ (Table 2). The population breaks down into the following categories of disability: about 4 percent reported having a sight or hearing disability; 8 percent reported a physical condition that limited their basic life activities; 5 percent reported conditions that limit their abilities in learning, remembering, or concentrating; and 3 percent had a physical, mental, or emotional condition that made it difficult to function inside their home. Among respondents who were aged 16 to 64, about 6 percent reported that they were limited in their ability to leave home, and about 12 percent of respondents 16 to 64 reported that their condition affected their ability to work. Close to half of individuals with disabilities reported having more than one disability so these categories were not mutually exclusive.

Figures about disability by race and by age revealed some differences (Table 2). Asians, age five and older had the smallest percentage of disabilities (17 percent) and then Whites.

¹ Census excluded people in the military and institutionalized populations (people under formally authorized, supervised care or custody) such as those in correctional institutions or nursing homes.
### Table 1: Disability categories used in surveys cited in this report

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<td>Attention Deficit Disorder</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other health impairment</td>
<td>Other health impairment</td>
<td>Other health impairment-includes autism and traumatic brain injury</td>
<td>Other health problem (mental retardation, emotional problem, other physical disability)</td>
<td>Some other limiting condition</td>
<td>Considers self a person with a disability/ would be considered a person with a disability by others</td>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

**NOTE:** None of these data sources use the categories of disability outlined in the Americans with Disabilities Act (ADA). Not only do they not use the same categories of impairments that are specified in the ADA regulations, but they also fail to account for those who have “a record of such an impairment” and those who are “regarded as having an impairment.”

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\(^2\) 28 C.F.R. Sec. 36.104.
Higher Education Opportunities for Students with Disabilities

(19 percent). Blacks and Native Americans had the highest percentage of disabilities (24 percent for both). Hispanics of any race had a 21 percent rate of disability. A lower rate of disability among Asians and Whites was constant in all age categories.

Rates of disability also increase with age among certain types of disability such as sensory or physical disabilities (Table 3). Among the populations age five to 15, 6 percent reported having a disability. This figure rose to 19 percent for those age 16 to 64, and 42 percent for those age 65 and older.

Census data were useful for describing some aspects of disability in the general population. However, there were limitations with using the data to examine educational opportunity because secondary and postsecondary achievement are not captured in each disability category. Data on disabilities also were not comparable from the 1990 to 2000 Census because the questionnaire was changed to include more categories of disability, and the 1990 Census asked only about those 15 years old or older (versus five and older in Census 2000). Despite these limitations the data captured information about the current magnitude of disability in the U.S. population.

Table 2: Percentage of the Population with Any Disability by Age and Race

<table>
<thead>
<tr>
<th>Race and Hispanic or Latino origin</th>
<th>Total aged 5 and older</th>
<th>5 &amp; older</th>
<th>5 to 15</th>
<th>16 to 64</th>
<th>65 &amp; older</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>257,167,527</td>
<td>19.3</td>
<td>5.8</td>
<td>19.6</td>
<td>41.9</td>
</tr>
<tr>
<td>White alone</td>
<td>195,100,538</td>
<td>18.5</td>
<td>5.6</td>
<td>16.8</td>
<td>40.6</td>
</tr>
<tr>
<td>Black or African American alone</td>
<td>30,292,703</td>
<td>24.3</td>
<td>7.0</td>
<td>26.4</td>
<td>50.8</td>
</tr>
<tr>
<td>American Indian and Alaska Native alone</td>
<td>2,187,507</td>
<td>24.3</td>
<td>7.7</td>
<td>27.0</td>
<td>57.6</td>
</tr>
<tr>
<td>Asian alone</td>
<td>9,455,058</td>
<td>16.6</td>
<td>2.9</td>
<td>16.9</td>
<td>40.8</td>
</tr>
<tr>
<td>Native Hawaiian and Other Pacific Islander alone</td>
<td>337,996</td>
<td>19.0</td>
<td>5.1</td>
<td>21.0</td>
<td>48.5</td>
</tr>
<tr>
<td>Some other race alone</td>
<td>13,581,921</td>
<td>19.9</td>
<td>5.2</td>
<td>23.5</td>
<td>50.4</td>
</tr>
<tr>
<td>Two or more races</td>
<td>6,206,804</td>
<td>21.7</td>
<td>7.1</td>
<td>25.1</td>
<td>51.8</td>
</tr>
<tr>
<td>Hispanic or Latino (of any race)</td>
<td>31,041,269</td>
<td>20.9</td>
<td>5.4</td>
<td>24.0</td>
<td>48.5</td>
</tr>
<tr>
<td>White alone, not Hispanic or Latino</td>
<td>180,151,084</td>
<td>18.3</td>
<td>5.7</td>
<td>16.2</td>
<td>40.4</td>
</tr>
</tbody>
</table>


Children with disabilities

According to the U.S. Department of Education, the percentage of children under age 21 being served through federally supported programs for youth with disabilities has steadily increased. Since the law requires that all students with disabilities receive support through these programs, these participation figures were used as a proxy in order to provide data describing the number of students with a disability. In 1990, approximately 5 million children received such federal support, and in 2000 the

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3 The 1990 Census had only three types of disability questions with three subparts that addressed the individual’s ability to work, leave the home, or care for themselves.
4 Students are served under the Individuals with Disabilities Education Act (IDEA).
Higher Education Opportunities for Students with Disabilities

figure rose to 6 million, an increase from about 12 percent to 13 percent of children under age 21. Among the explanations for this are increased incidence of disability, better diagnosis and identification of disability, and improved compliance with the law.

In 2000, among those with disabilities, the largest portion had specific learning disabilities (46 percent). Speech or language impairments made up nearly 17 percent of these students, mental retardation comprised 10 percent, and emotional disturbance was 8 percent. Much smaller percentages of children fell into categories such as hearing, visual, orthopedic, deaf-blindness, autism, developmental delay, traumatic brain injury, other health impairments and multiple disabilities. About 9 percent of children with disabilities were preschoolers.

High school-aged students with disabilities

Based on data compiled for the annual report to Congress from the Department of Education’s Office of Special Education Programs, the number of youth aged 14 to 21 served by federal programs for youth with disabilities in the 2000-01 school year was two million, making up 13 percent of all ninth through twelfth grade students. More than half of these youth had learning disabilities.

Another way of capturing information about students with disabilities in high school is with the National Longitudinal Transition Study–2 (NLTS2), a nationally representative sample of about 11,000 youth that was designed as follow-up to the National Longitudinal Transition Study of 1987 (NLTS: 1987). The NLTS2 looked at 13 to 16 year old students receiving special education services in order to examine how this population had changed, and the longitudinal data will examine how students persist in education and what outcomes they achieve beyond education.

### Table 3: Characteristics of population by age, disability status, and type of disability: 2000

<table>
<thead>
<tr>
<th></th>
<th>TOTAL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percent</td>
</tr>
<tr>
<td>Population 5 years and over</td>
<td>257,167,527</td>
<td>100</td>
</tr>
<tr>
<td>With any disability</td>
<td>49,746,248</td>
<td>19.3</td>
</tr>
<tr>
<td>Population 5 to 15 years</td>
<td>45,133,667</td>
<td>100</td>
</tr>
<tr>
<td>With any disability</td>
<td>2,614,919</td>
<td>5.8</td>
</tr>
<tr>
<td>Sensory</td>
<td>442,894</td>
<td>1</td>
</tr>
<tr>
<td>Physical</td>
<td>455,461</td>
<td>1</td>
</tr>
<tr>
<td>Mental</td>
<td>2,078,502</td>
<td>4.6</td>
</tr>
<tr>
<td>Self-care</td>
<td>419,018</td>
<td>0.9</td>
</tr>
<tr>
<td>Population 16 to 64 years</td>
<td>178,687,234</td>
<td>100</td>
</tr>
<tr>
<td>With any disability</td>
<td>33,153,211</td>
<td>18.6</td>
</tr>
<tr>
<td>Sensory</td>
<td>4,123,902</td>
<td>2.3</td>
</tr>
<tr>
<td>Physical</td>
<td>11,150,365</td>
<td>6.2</td>
</tr>
<tr>
<td>Mental</td>
<td>6,764,439</td>
<td>3.8</td>
</tr>
<tr>
<td>Self-care</td>
<td>3,149,875</td>
<td>1.8</td>
</tr>
<tr>
<td>Going outside the home</td>
<td>11,414,508</td>
<td>6.4</td>
</tr>
<tr>
<td>Employment disability</td>
<td>21,287,570</td>
<td>11.9</td>
</tr>
<tr>
<td>Population 65 years and over</td>
<td>33,346,626</td>
<td>100</td>
</tr>
<tr>
<td>With any disability</td>
<td>13,978,118</td>
<td>41.9</td>
</tr>
<tr>
<td>Sensory</td>
<td>4,738,479</td>
<td>14.2</td>
</tr>
<tr>
<td>Physical</td>
<td>9,545,680</td>
<td>28.6</td>
</tr>
<tr>
<td>Mental</td>
<td>3,592,912</td>
<td>10.8</td>
</tr>
<tr>
<td>Self-care</td>
<td>3,183,840</td>
<td>9.5</td>
</tr>
<tr>
<td>Going outside the home</td>
<td>6,795,517</td>
<td>20.4</td>
</tr>
</tbody>
</table>


6 This percentage is derived from the portion of students with a disability aged 14 to 21 and enrollment numbers of 9th to 12th grade students from the NCES, Digest of Education Statistics (2002) Table 56. A portion of these two million may include high school aged students who are not enrolled in a high school, but this figure is being used as a proxy for determining the number of students with a disability in high school.
7 This study is sponsored by the U.S. Department of Education, Office of Special Education Programs.
8 This national study was initiated through the Office of Special Education Programs in the U.S. Department of Education. In 1987, it was one of the first efforts to study the experiences and outcomes of youth with a disability in the U.S.
Higher Education Opportunities for Students with Disabilities

Similar to the Department of Education figures, researchers with the NLTS2 found that almost 13 percent of those aged 13 to 16 received special education services. Among those with disabilities more than six out of 10 students (61 percent) had learning disabilities (Table 4). Speech and language impairments consisted of 3 percent, students with mental retardation made up 13 percent, and emotional disturbances were 12 percent of those with disabilities. Other health impairments made up 5 percent of the population and the remaining disability categories combined made up 6 percent (including hearing, visual, orthopedic, and deaf-blindness). More than half of all youth with disabilities had more than one kind of disability.

The NLTS2 indicated that boys were slightly more likely to have disabilities than girls. White youth were represented at similar percentages to the general population, but African Americans made up 21 percent of youth with disabilities compared to 16 percent of the general population in this age range. Slightly fewer Hispanics were represented (14 percent) among youth with disabilities compared to the general population (16 percent). The NLTS2 also indicated that youth with disabilities had lower income levels than their peers without disabilities. Thirty-five percent came from families with household incomes less than $25,000, whereas only 20 percent of their peers without disabilities came from households below this income level. Those with ethnic minority backgrounds were more likely to have lower income levels than White youth.

### High school completion

The gap in educational achievement between adults with disabilities and non-disabled adults appears to have decreased over time, but substantial differences are still evident. According to a 2001 Harris Poll Survey of Americans with Disabilities, high school participation and completion among adults with disabilities has improved in the last 15 years. Researchers found that 78 percent of adults with disabilities reported they had received a high school diploma compared to 91 percent of the general population, a difference of 13 percentage points. In 1986 that figure was 61 percent compared to 85 percent of the general population, a difference of 24 percentage points. Increasingly more youth with disabilities are completing high school.

According to a recent General Accounting Office (GAO) study, during the 2000-01 school year, almost 57 percent of youth with disabilities completed high school with a standard diploma and 11 percent with an alternative credential. Students with mental retardation,

| Table 4: Distribution of youth with disabilities by main disability (NLTS/NLTS2 ages 15-17) |
|---------------------------------|-------|-------|
| Learning disability             | 60.4  | 61.4  |
| Speech/language impairment      | 4.4   | 3.2   |
| Mental retardification          | 18.0  | 13.0  |
| Emotional disturbance           | 11.4  | 11.9  |
| Hearing impairment              | 1.4   | 1.4   |
| Visual impairment               | .6    | .6    |
| Orthopedic impairment           | 1.0   | 1.2   |
| Other health impairment         | 1.4   | 5.3   |
| Multiple disabilities           | 1.3   | 2.2   |

NOTE: Some changes in “other health impairment” category contributed to the increase in 2001. Figures may not add to 100 due to rounding.


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Higher Education Opportunities for Students with Disabilities

other cognitive disabilities, sensory impairments, and multiple disabilities were more likely to obtain an alternative credential, and those with emotional disturbances, learning disabilities, speech language impairments, and mental retardation were more likely to drop out. Youth with emotional disturbances had a dropout rate of 53 percent, twice that of youth with other disabilities.

Although dropout rates among youth with disabilities appear to be decreasing over the last decade, these youth still drop out at a higher rate than their peers without disabilities. There are a number of ways to calculate dropout rates. The method used by the Office of Special Education Programs in its 2002 Annual Report to Congress determined that the dropout rate of youth with disabilities aged 14 and older, was 29 percent, down from 34 percent five years earlier. It is difficult to compare students with disabilities to their peers without disabilities because comparable data are not available using the same definitions of dropout. GAO indicated that data collected by NCES from 33 states showed that “high school completion rates ranged from about 63 percent to 89 percent…among 37 states, dropout rates ranged from about 3 percent to 9 percent.”

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12 Ibid.
14 One method used by the U.S. Department of Education’s Office of Special Education Programs in their annual report to Congress is to divide the number of students who are age 14 and older who dropped out by the total number of students in the same age group who are known to have left school (graduated with a standard diploma, received a certificate of completion, reached the maximum age for services, died, or dropped out).
Transition to college

IDEA has required that schools create a transition plan for each student with a disability as part of the student’s Individual Education Plan (IEP). These transition plans are intended to systematically prepare students with disabilities for college, employment, and independent living based upon an agreement between the school, students, and parent, when the child reaches age 14.\(^\text{16}\) Youth with disabilities are much more likely to enter employment than postsecondary education after high school.\(^\text{17}\)

Education researchers say it is difficult to determine how many students with disabilities transition from high school to postsecondary education.\(^\text{18}\) One cannot simply look at the figures of students with a disability who have graduated and examine who enrolls in college. First, every student with a disability who completes high school is not college qualified. Second, many high school graduates with a disability delay entry to college, and data about students with disabilities in college who start in a given year do not adequately capture this delay. Third, some students with disabilities may not indicate a disability on self-reported surveys and therefore would be missing from data, and college students with a disability sometimes choose not to seek disability services while enrolled in college. This differs from K-12 where the law requires that students are identified and served through special education programs. Finally, some students are diagnosed with disabilities for the first time when they begin college, while others are diagnosed while enrolled in college.\(^\text{19}\)

One data set that does track student progress over time is the National Education Longitudinal Study of 1988 eighth graders (NELS:88). NELS:88 is the most recent

\(^\text{16}\) IDEA, Section 612 (a)(1).
\(^\text{17}\) U.S. General Accounting Office.
longitudinal survey data available with a nationally representative sample of eighth grade students who were periodically followed through 2000 when the majority of the cohort was eight years out of high school.\textsuperscript{20}

Based on the NELS, among 1988 eighth graders about 11 percent had a disability, and among this group close to half had a learning disability (Figure A). Students with disabilities in this cohort were less likely to complete high school by 1994 (72 percent) than their peers without disabilities (84 percent). Because students with disabilities tend to take longer to attain a high school diploma it is important to look at figures beyond 1994. By 2000, among these 1988 eighth graders, 88 percent had a high school diploma or equivalent compared to those without a disability, 94 percent (Table 5).

Transition to postsecondary education was less likely for students with a disability (Table 6). By 2000, high school graduates with disabilities were less likely to enroll in some form of postsecondary education (73 percent) than their peers without disabilities (84 percent). Students with disabilities also were less likely than their counterparts to ever attend a four-year institution (56 percent versus 69 percent).

Looking at degree attainment by the year 2000 (Table 7) among 1988 eighth graders who completed high school, students with disabilities were less likely to have a bachelor’s degree than their peers (27 percent versus 37 percent), more likely to have some postsecondary education with no degree attained (46 percent versus 40 percent), and more likely to have a certificate or license (15 percent versus 10 percent).\textsuperscript{21} Those with learning disabilities were more likely to have some postsecondary experience with no degree (53 percent).

The majority of youth with disabilities among 1988 eighth graders aspired to obtain a college degree.\textsuperscript{22} However, many of these students did not have the appropriate academic preparation needed for college (Figure B). Among 1988 eighth graders, 56 percent of students with disabilities were not qualified for enrollment in a four-year college versus 37 percent of students without disabilities. Among those who were highly qualified for enrollment in a four-year college, those with and without a disability enrolled in four-year colleges at the same rate of 79 percent.\textsuperscript{23}

\begin{table}[h]
\centering
\caption{Percentage of 1988 eighth graders who completed high school according to postsecondary education experience as of 2000, by disability status and type}

\begin{tabular}{|c|c|c|}
\hline
 & EVER ATTENDED PSE & EVER ATTENDED 4-YEAR PSE \\
\hline
Total & 82.7 & 67.4 \\
\hline
Does not have a disability & 84.2 & 68.9 \\
\hline
Has a disability & 72.9 & 56.4 \\
\hline
Visual impairment & 65.6 & 46.9 \\
\hline
Hearing impairment or deafness & 73.4 & 50.3 \\
\hline
Orthopedic impairment* & 74.8 & 75.1 \\
\hline
Learning disability & 69.9 & 54.5 \\
\hline
Speech impairment & 59.2 & 64.6 \\
\hline
Other health related disability & 75.9 & 57.6 \\
\hline
\end{tabular}


*NOTE: Subcategories of disabilities have small N in the sample which may have created some discrepancies in the data. In this case the data indicated that a larger percentage of students with an orthopedic impairment ever attended a 4-year institution that any PSE.

\end{table}

\textsuperscript{20} The NELS:88 is sponsored by the U.S. Department of Education. Follow ups were done in 1990, 1992, 1994 and 2000. Students with disabilities sometimes take longer to graduate from high school and delay enrollment in college, therefore, the latest follow-up is useful for examining educational outcomes.

\textsuperscript{21} These figures may be a reflection of the fact that Vocational Rehabilitation support for students with disabilities is frequently oriented toward vocational training at less-than-two-year institutions.

\textsuperscript{22} U.S. Department of Education (1999).

\textsuperscript{23} \textit{Ibid.}
Table 7: Percentage distribution of 1988 eighth graders who completed high school according to highest postsecondary education degree attained as of 2000, by disability status and type, and type of first institution attended

<table>
<thead>
<tr>
<th>Disability Status</th>
<th>SOME PSE, NO DEGREE</th>
<th>CERTIFICATE OR LICENSE</th>
<th>ASSOCIATE’S DEGREE</th>
<th>BACHELOR’S DEGREE</th>
<th>MASTER’S DEGREE OR EQUIVALENT</th>
<th>DOCTORAL OR PROFESSIONAL DEGREE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>40.6</td>
<td>10.4</td>
<td>8.8</td>
<td>35.6</td>
<td>3.8</td>
<td>0.7</td>
</tr>
<tr>
<td>Has a disability</td>
<td>46.0</td>
<td>15.1</td>
<td>8.1</td>
<td>26.7</td>
<td>3.6</td>
<td>0.5</td>
</tr>
<tr>
<td>Visual impairment</td>
<td>25.4</td>
<td>28.7</td>
<td>5.9</td>
<td>34.7</td>
<td>5.3</td>
<td>0.0</td>
</tr>
<tr>
<td>Hearing impairment</td>
<td>46.5</td>
<td>21.4</td>
<td>4.9</td>
<td>27.2</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Orthopedic impairment</td>
<td>43.7</td>
<td>6.9</td>
<td>3.8</td>
<td>43.7</td>
<td>2.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Learning disability</td>
<td>53.2</td>
<td>14.1</td>
<td>9.4</td>
<td>21.6</td>
<td>1.3</td>
<td>0.4</td>
</tr>
<tr>
<td>Speech impairment</td>
<td>36.7</td>
<td>12.8</td>
<td>9.2</td>
<td>33.5</td>
<td>6.6</td>
<td>1.1</td>
</tr>
<tr>
<td>Other health related disability</td>
<td>43.0</td>
<td>14.8</td>
<td>7.3</td>
<td>27.9</td>
<td>6.4</td>
<td>0.6</td>
</tr>
<tr>
<td>Public, 4-year or above</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does not have a disability</td>
<td>30.3</td>
<td>3.3</td>
<td>4.5</td>
<td>55.3</td>
<td>5.6</td>
<td>0.9</td>
</tr>
<tr>
<td>Has a disability</td>
<td>31.0</td>
<td>2.8</td>
<td>1.1</td>
<td>61.5</td>
<td>3.5</td>
<td>0.0</td>
</tr>
<tr>
<td>Private, non-profit, 4-year plus</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does not have a disability</td>
<td>20.6</td>
<td>2.2</td>
<td>2.9</td>
<td>63.7</td>
<td>8.8</td>
<td>1.8</td>
</tr>
<tr>
<td>Has a disability</td>
<td>21.9</td>
<td>1.6</td>
<td>3.9</td>
<td>53.1</td>
<td>15.3</td>
<td>4.1</td>
</tr>
<tr>
<td>Public, 2-year</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does not have a disability</td>
<td>58.5</td>
<td>12.5</td>
<td>14.2</td>
<td>13.9</td>
<td>0.8</td>
<td>0.1</td>
</tr>
<tr>
<td>Has a disability</td>
<td>61.1</td>
<td>14.2</td>
<td>10.0</td>
<td>12.6</td>
<td>2.1</td>
<td>0.0</td>
</tr>
<tr>
<td>Other institutions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does not have a disability</td>
<td>38.7</td>
<td>39.1</td>
<td>17.3</td>
<td>4.9</td>
<td>0.1</td>
<td>0.0</td>
</tr>
<tr>
<td>Has a disability</td>
<td>39.8</td>
<td>43.8</td>
<td>15.5</td>
<td>1.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

NOTE: Percentages will not sum to 100 because of rounding.

The NELS:88 data had some limitations because the initial data collection eliminated some students with severe disabilities. Although students were added to the sample in later follow ups and some original cohort members were added back into the study, all students with disabilities still may not be represented. In addition, this data is parent reported and there may be differences between the identification of a disability between the parents and the researchers. For example, a parent may report a limited English proficient child in the category of “speech disability.” Furthermore, because most schools in 1988 did not recognize students with attention deficit disorder or attention deficit hyperactivity disorder as having a disability, these students may be underreported or categorized under another disability type. Finally, recent improvements in early identification of disabilities and special education programming may not be captured in the NELS:88 due to age of the original cohort. The NLTS2, mentioned earlier in this section, should prove to be a good and more recent study of secondary school students and their progress in postsecondary education. However, NLTS2 began with 13 to 16 year old students in 2000 and data will only become useful for examining postsecondary access and persistence in 2007.
Students with disabilities in postsecondary education

National Postsecondary Student Aid Study (NPSAS)

As a result of the success of IDEA in educating more students with disabilities at the K-12 level, more students with disabilities are prepared for and continuing on to postsecondary education. Based on data from the National Postsecondary Student Aid Study (NPSAS: 2000),24 about 9 percent of all undergraduates reported having a disability. NPSAS is a cross-sectional sample of all students enrolled in all postsecondary institutions. The study looks at how students and their families pay for postsecondary education and provides a great deal of information on a variety of student characteristics.

Among 1999-2000 undergraduates with a disability, 29 percent reported having an orthopedic impairment, 17 percent reported mental illness/depression, 15 percent reported health problems, 7 percent reported a hearing impairment, 6 percent reported attention deficit disorder, 5 percent reported vision impairment, 5 percent reported learning disabilities, 0.2 percent reported speech impairment, and all others made up 15 percent (Figure C).

Figure B: Among 1988 eighth graders who completed high school by 1994, the percentage distribution according to a 4-year college qualification index,* by disability status

*Based on an index of five measures including high school GPA, rank in class, NELS 1992 aptitude test, and SAT and ACT test scores among NELS 1992 high school graduates who enrolled in a 4-year college. "Not qualified"—no value on any criterion that placed them in the top 75 percent of 4-year college students; "Minimally qualified"—had at least one value that placed them in the top 75 percent of 4-year college students; "Somewhat qualified"—had at least one value that placed them in the top 50 percent of 4-year college students; "Very qualified"—had at least one value that placed them in the top 25 percent of 4-year college students; "Highly qualified"—had at least one value that placed them in the top 10 percent of 4-year college students.


24 Sponsored by the U.S. Department of Education
Higher Education Opportunities for Students with Disabilities

There are some important issues to note about the NPSAS 1999-00 figures. Although the percentage of the population with a disability seems comparable to figures in other data sets, the distribution across disability types differs a great deal. High percentages of orthopedic impairment and low percentages of learning disability are unusual findings and contrast sharply with the breakdown in other data sources. Because the NPSAS 95-96 has a completely different survey structure and fewer disability categories, it is not possible to compare older NPSAS data. The unusual findings may be explained by the fact that NPSAS is a sample of all students and it captures older students who, based on Census trends, may have higher rates of orthopedic impairment. Also, in an attempt to gather as much information as possible about students with disabilities the NPSAS 99-00 survey expanded the definitions of disability and captured more students. Thus, the small percentages in the category of learning disabilities and the large figures for orthopedic impairment may simply be related to the structure of the survey. Nonetheless, interesting patterns can be identified with the NPSAS data.

Students with disabilities appeared to attend various types of institutions in proportions that are different from their peers without disabilities (Figure D). Among 1999–2000 undergraduates with disabilities 49 percent attended a public two-year institution (compared to 41 percent of those with no reported disability); 26 percent of students with disabilities attended a public four-year institution (compared to 32 percent of those with...
no reported disability); and 11 percent attended a private four-year institution (compared to 14 percent of those with no reported disability).

Some highlights of the demographic characteristics revealed by the NPSAS 1999-2000 (Table 8) include:

- Female students reported some type of mental illness at significantly higher rates than males (21 versus 11 percent).
- Noticeable differences were evident among racial/ethnic groups of students with disabilities. Asians reported the lowest incidence of disability (4 percent) and American Indian/Alaska Natives reported the highest rates (20 percent).
- Income and disability appear to be inversely related. Those in the lowest income quartile have the highest rate of disability, especially for independent students. For example, 16 percent of independent students in the lowest quartile have a disability, 12 percent in the middle quartiles, and 9 percent in the highest quartile.
- Disability rates for students with learning problems and attention deficit disorder did not conform to this pattern. Instead those in the highest income quartile had the highest rate of disability. Among dependent students with a learning disability 10 percent were in the highest income quartile, 7 percent in the middle quartiles, and 5 percent in the lowest. Among dependent students who reported attention deficit disorder, 5 percent were in the lowest incomes quartile, 15 percent in the middle, and 16 percent in the highest quartile. This pattern may be explained by the fact that costly diagnostic tests for disabilities are less accessible at the postsecondary level to those with lower incomes.
Table 8: Percentage of undergraduates who reported a disability or difficulty and among those who did, the percentage distribution, by type of disability: 1999–2000

<table>
<thead>
<tr>
<th>Institutional and student characteristics</th>
<th>Any* disabilities</th>
<th>AMONG STUDENTS WITH DISABILITIES</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Visual</td>
<td>Hearing</td>
<td>Speech</td>
</tr>
<tr>
<td>TOTAL</td>
<td>9.3</td>
<td>5.2</td>
<td>6.7</td>
</tr>
<tr>
<td>4-year sector†</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public and private not-for-profit</td>
<td>7.7</td>
<td>4.7</td>
<td>6.6</td>
</tr>
<tr>
<td>Public</td>
<td>7.8</td>
<td>5.0</td>
<td>6.7</td>
</tr>
<tr>
<td>Private not-for-profit</td>
<td>7.5</td>
<td>3.7</td>
<td>6.2</td>
</tr>
<tr>
<td>Institution type‡</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less-than-2-year</td>
<td>13.9</td>
<td>3.2</td>
<td>10.8</td>
</tr>
<tr>
<td>2-year</td>
<td>10.7</td>
<td>5.8</td>
<td>7.1</td>
</tr>
<tr>
<td>4-year nondoctorate-granting</td>
<td>8.2</td>
<td>6.6</td>
<td>6.5</td>
</tr>
<tr>
<td>4-year doctorate-granting</td>
<td>7.5</td>
<td>4.1</td>
<td>6.9</td>
</tr>
<tr>
<td>Private not-for-profit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less-than-4-year</td>
<td>8.1</td>
<td>6.3</td>
<td>11.4</td>
</tr>
<tr>
<td>4-year nondoctorate-granting</td>
<td>8.5</td>
<td>4.1</td>
<td>5.6</td>
</tr>
<tr>
<td>4-year doctorate-granting</td>
<td>6.1</td>
<td>2.9</td>
<td>7.3</td>
</tr>
<tr>
<td>Private for-profit</td>
<td>12.0</td>
<td>3.2</td>
<td>5.0</td>
</tr>
<tr>
<td>More than one institution</td>
<td>8.6</td>
<td>6.3</td>
<td>4.7</td>
</tr>
<tr>
<td>Class level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduating senior</td>
<td>6.7</td>
<td>4.4</td>
<td>7.1</td>
</tr>
<tr>
<td>All other undergraduates</td>
<td>9.6</td>
<td>5.3</td>
<td>6.7</td>
</tr>
<tr>
<td>Attendance intensity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exclusively full-time</td>
<td>8.6</td>
<td>4.5</td>
<td>6.7</td>
</tr>
<tr>
<td>Mixed full-time and part-time</td>
<td>10.1</td>
<td>7.4</td>
<td>3.9</td>
</tr>
<tr>
<td>Exclusively part-time</td>
<td>10.0</td>
<td>5.4</td>
<td>7.7</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>8.7</td>
<td>6.8</td>
<td>7.5</td>
</tr>
<tr>
<td>Female</td>
<td>9.7</td>
<td>4.2</td>
<td>6.1</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>One race</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>9.8</td>
<td>5.4</td>
<td>7.2</td>
</tr>
<tr>
<td>Black or African American</td>
<td>8.7</td>
<td>4.2</td>
<td>3.5</td>
</tr>
<tr>
<td>Asian</td>
<td>4.2</td>
<td>4.9</td>
<td>7.5</td>
</tr>
<tr>
<td>American Indian/Alaska Native</td>
<td>20.0</td>
<td>5.5</td>
<td>1.9</td>
</tr>
<tr>
<td>Native Hawaiian/Pacific Islander</td>
<td>9.6</td>
<td>(#)</td>
<td>(#)</td>
</tr>
<tr>
<td>Other race</td>
<td>7.1</td>
<td>7.2</td>
<td>6.0</td>
</tr>
<tr>
<td>More than one race</td>
<td>10.7</td>
<td>3.5</td>
<td>6.7</td>
</tr>
<tr>
<td>Not Hispanic or Latino</td>
<td>9.5</td>
<td>5.0</td>
<td>6.6</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>8.0</td>
<td>7.4</td>
<td>7.6</td>
</tr>
</tbody>
</table>

SEE FOOTNOTES AT END OF TABLE (CONTINUED ON THE FOLLOWING PAGE)
Students with disabilities were on average older than their counterparts without disabilities (31 years old compared to 26). About 30 percent of all undergraduates with disabilities were age 30 or older. In general, students with disabilities were older because they delay entry into college and can often take longer to complete college. Students with disabilities on average have a higher number of dependents than their peers without disabilities, an observation consistent with their average older age.

Also consistent with their older average age, the average time that students with disabilities waited to begin college was longer than that of their peers without disabilities.
Higher Education Opportunities for Students with Disabilities

Of all undergraduates with disabilities, only about 66 percent matriculated within one year after high school graduation compared to 76 percent of their peers without disabilities. Among 1999-2000 undergraduates, 22 percent of students with disabilities waited six or more years to begin college studies after high school graduation compared to only 13 percent of their peers without disabilities. In general, students with disabilities who reach college did not appear to be less prepared for academic work than their peers without disabilities. About a third of both groups had to take a remedial class in college.

Table 9: Percentage distribution of 1999–2000 undergraduates according to number of years delayed postsecondary enrollment, by disability status and type

<table>
<thead>
<tr>
<th></th>
<th>NO DELAY</th>
<th>1</th>
<th>2–3</th>
<th>4–5</th>
<th>6+</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>63.2</td>
<td>11.5</td>
<td>7.6</td>
<td>4.0</td>
<td>13.6</td>
</tr>
<tr>
<td>Does not have a disability</td>
<td>64.4</td>
<td>11.6</td>
<td>7.6</td>
<td>4.0</td>
<td>12.5</td>
</tr>
<tr>
<td>Has a disability</td>
<td>54.9</td>
<td>11.4</td>
<td>7.2</td>
<td>4.8</td>
<td>21.7</td>
</tr>
<tr>
<td>Visual impairment</td>
<td>58.5</td>
<td>16.2</td>
<td>6.6</td>
<td>1.5</td>
<td>17.3</td>
</tr>
<tr>
<td>Hearing impairment or deafness</td>
<td>59.1</td>
<td>6.2</td>
<td>3.8</td>
<td>5.0</td>
<td>25.9</td>
</tr>
<tr>
<td>Orthopedic impairment</td>
<td>44.4</td>
<td>11.9</td>
<td>8.1</td>
<td>4.3</td>
<td>31.4</td>
</tr>
<tr>
<td>Learning disability</td>
<td>65.1</td>
<td>8.6</td>
<td>8.4</td>
<td>3.2</td>
<td>14.8</td>
</tr>
<tr>
<td>Attention deficit disorder</td>
<td>69.0</td>
<td>13.7</td>
<td>6.2</td>
<td>5.0</td>
<td>6.1</td>
</tr>
<tr>
<td>Mental illness</td>
<td>55.3</td>
<td>13.1</td>
<td>7.0</td>
<td>6.4</td>
<td>18.2</td>
</tr>
<tr>
<td>Other health related disability</td>
<td>60.1</td>
<td>9.5</td>
<td>7.4</td>
<td>3.7</td>
<td>19.3</td>
</tr>
</tbody>
</table>


Improvements in the NPSAS student questionnaire provided greater detail of disability categories and other related characteristics in the 1999-2000 survey than in the 1995-1996 survey. Overall, the profile is useful for describing students in the 1999-2000 academic year, but it is not longitudinal data and is not useful for determining trends or looking at student persistence.

Cooperative Institutional Research Program (CIRP)

Another source of information on postsecondary students with disabilities is the Cooperative Institutional Research Program (CIRP). This on-going national study surveys a sample of fall semester college students selected among first-time, full-time freshman at four-year institutions. Six percent of students in this sample reported a disability, totaling 66,000 students nationally.25

In 2000, students with disabilities were broken down into hearing disabilities (9 percent), speech (3 percent), orthopedic (7 percent), health-related (15 percent), visual (16 percent) and other disabilities (17 percent). The fastest growing category of disability in 2000 was learning disabilities, representing 40 percent of freshman with disabilities compared with 16 percent 12 years earlier.

---

According to CIRP data, about 54 percent of first-time, full-time freshmen with disabilities at four-year colleges attended public institutions, 42 percent attended independent institutions. The CIRP survey separated out all Historically Black Colleges and Universities as a category, and the remaining 4 percent of students with disabilities attended these institutions.

Some of the limitations of the CIRP data are that the survey does not offer definitions of the different categories of disability and only looks at first-time, full-time students at four-year institutions. At the same time almost half of all college students attend two-year community colleges, therefore CIRP figures do not provide a comprehensive representation of students with disabilities across postsecondary education.

Degree attainment and beyond for students with disabilities

Beginning Postsecondary Students Study (BPS)

The Beginning Postsecondary Students study (BPS:96/01) is another source of information about students with disabilities. In order to examine how well students do in completing a postsecondary degree, the Beginning Postsecondary Students (BPS) study looks at students who began college in the 1995-1996 academic year, five years after they enrolled. Sponsored by the U.S. Department of Education, the BPS is a sub-sample cohort of the NPSAS 95-96 followed through college and beyond.

Consistent with the NPSAS data, students with disabilities in the BPS sample are more likely to attend a public two-year college (52 percent versus 46 percent) and less likely to attend a four-year public institution (16 percent versus 27 percent) or a four-year private institution (14 percent versus 15 percent).

Table 10: Percentage distribution of 1995–1996 beginning postsecondary students according to postsecondary persistence status, by disability status and type: 2001

<table>
<thead>
<tr>
<th>Disability Status and Type</th>
<th>Persisted</th>
<th></th>
<th>Not Enrolled/No Degree or Certificate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Attained Degree or Certificate</td>
<td>Enrolled in 2001</td>
</tr>
<tr>
<td>Total</td>
<td>70.5</td>
<td>51.6</td>
<td>14.4</td>
</tr>
<tr>
<td>Does not have a disability</td>
<td>66.6</td>
<td>52.3</td>
<td>14.3</td>
</tr>
<tr>
<td>Has a disability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visual impairment</td>
<td>59.7</td>
<td>42.3</td>
<td>16.4</td>
</tr>
<tr>
<td>Hearing impairment or deafness</td>
<td>62.0</td>
<td>29.4</td>
<td>32.6</td>
</tr>
<tr>
<td>Orthopedic impairment</td>
<td>57.6</td>
<td>40.3</td>
<td>17.3</td>
</tr>
<tr>
<td>Learning disability</td>
<td>53.9</td>
<td>39.1</td>
<td>14.8</td>
</tr>
<tr>
<td>Speech impairment</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Other health related disability</td>
<td>52.6</td>
<td>40.7</td>
<td>11.9</td>
</tr>
</tbody>
</table>

*Sample size too small for a reliable estimate.
NOTE: Percentages will not sum to 100 because of rounding.
Consistent with the NELS data, degree attainment rates for students with disabilities in this sample may reflect the tendency of students with disabilities to complete a degree over more than five years (Table 10). The likelihood of obtaining a degree within five years is higher for students without disabilities. After five years, 42 percent of students with disabilities had attained a degree or certificate and 16 percent were still enrolled, a completion rate of 59 percent. Among students without disabilities, 52 percent had attained a degree or certificate and 14 percent were still enrolled, a completion rate of 67 percent. Students with disabilities had left college without earning a degree more often than their peers without disabilities (41 percent versus 33 percent).

Differences between students with disabilities and their peers without disabilities also appear in the types of degrees that each group obtains (Table 11). Students with disabilities were as likely as their peers without disabilities to have obtained a certificate within five years (about 13 percent), but less likely to have obtained a bachelor’s degree (30 percent versus 15 percent). Looking at these students by sector, those in public four-year institutions with disabilities were less likely to achieve a bachelor’s degree than those without disabilities (54 percent versus 28 percent). Simultaneously, these students were more likely than their peers without disabilities to have obtained an associate’s degree within that period (8 percent versus 4 percent). This is consistent with the pattern of students earning associate’s degrees at two-year colleges and then transferring to four-year institutions. This also is consistent with the larger proportion of the population with disabilities attending two-year institutions.

Researchers at NCES (1999) looked at students with disabilities and their persistence rates compared to students without disabilities and their persistence rates. Controlling for student background characteristics known to be associated with low persistence rates such as

| Table 11: Percentage distribution of 1995-1996 beginning postsecondary students according to highest undergraduate degree attained by 2001, by disability status and first institution attended |
|-----------------|-----------------|-----------------|-----------------|-----------------|
|                  | NONE | CERTIFICATE | ASSOCIATE’S | BACHELOR’S |
| Total            | 48.5 | 12.3        | 10.3         | 28.9         |
| Does not have a disability | 47.7 | 12.5        | 10.0         | 29.8         |
| Has a disability | 57.7 | 12.7        | 14.7         | 15.0         |
| Public, 4-year   |      |             |              |              |
| Does not have a disability | 39.2 | 2.6        | 4.1          | 54.1         |
| Has a disability | 55.5 | 8.9        | 7.6          | 28.0         |
| Private, not-for-profit, 4-year |      |             |              |              |
| Does not have a disability | 26.2 | 1.9        | 2.9          | 69.1         |
| Has a disability | 33.8 | 1.0        | 2.4          | 62.8         |
| Public, 2-year   |      |             |              |              |
| Does not have a disability | 62.9 | 10.6       | 16.0         | 10.5         |
| Has a disability | 68.1 | 6.4        | 21.6         | 3.9          |
| Other institutions |      |             |              |              |
| Does not have a disability | 38.3 | 49.6       | 9.8          | 2.3          |
| Has a disability | 46.4 | 43.5        | 9.4          | 0.7          |

NOTE: Percentages will not sum to 100 because of rounding.
Higher Education Opportunities for Students with Disabilities

Table 12: Percentage distribution of 1992–1993 bachelor’s 75 degree recipients according to their employment status in April 1997; and average full-time salary in 1996 for employed recipients, by disability status and type

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>80.9</td>
<td>8.3</td>
<td>2.7</td>
<td>8.1</td>
<td>$30,727</td>
</tr>
<tr>
<td>Does not have a disability</td>
<td>81.3</td>
<td>8.2</td>
<td>2.6</td>
<td>7.9</td>
<td>30,882</td>
</tr>
<tr>
<td>Has a disability</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visual impairment</td>
<td>75.0</td>
<td>15.4</td>
<td>2.3</td>
<td>7.4</td>
<td>28,854</td>
</tr>
<tr>
<td>Hearing impairment or deafness</td>
<td>73.9</td>
<td>10.6</td>
<td>4.6</td>
<td>10.9</td>
<td>28,046</td>
</tr>
<tr>
<td>Orthopedic impairment</td>
<td>72.6</td>
<td>9.3</td>
<td>9.4</td>
<td>8.7</td>
<td>24,509</td>
</tr>
<tr>
<td>Learning disability</td>
<td>74.4</td>
<td>17.0</td>
<td>3.9</td>
<td>4.6</td>
<td>27,435</td>
</tr>
<tr>
<td>Speech impairment</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Other health related disability</td>
<td>65.8</td>
<td>16.4</td>
<td>6.4</td>
<td>11.4</td>
<td>26,959</td>
</tr>
</tbody>
</table>

*Sample size too small for a reliable estimate.

NOTE: Percentages will not sum to 100 because of rounding.


delayed enrollment, high school graduation by GED, has dependents, single parent, part-time enrollment, worked full-time while enrolled, and financially independent, students with disabilities still had a lower five year persistence rate than their peers without disabilities.26

Baccalaureate and Beyond Longitudinal Study (B&B)

The Baccalaureate and Beyond Longitudinal Study (B&B), sponsored by the U.S. Department of Education, is another national sample of college seniors taken from NPSAS students who graduated in a given year and are then followed with a survey one year and four years after graduation.

Looking at the cohort of students who graduate in 1993, their outcomes in 1997 appeared to show some differences between students by their disability status (Table 12). Those with a disability were less likely to be employed full-time than those without a disability (73 percent versus 81 percent). Graduates with a disability, four years after graduation had an average full-time salary of about $27,400 versus $30,800 among those with no disability. Those with orthopedic impairments had the lowest average salary of $24,500.

Differences still were evident in the cohort of 2000 graduates, but data are only available for the first follow up in 2001 (Table 13).27 Graduates with disabilities were employed full-time at a rate of 70 percent, whereas their peers without disabilities were employed at a rate of 77 percent. Graduates with attention deficit disorder, orthopedic impairments, mental illness, and other health related disabilities had employment rates under 70 percent. Average full-time salaries in 2001 showed small differences, but some disability categories had higher average salaries than the total population. Graduates with attention deficit disorder had an average salary of $43,000, and graduates with learning disabilities $34,800, and the total population average salary was $33,100.

27 Earlier B&B years are not comparable because of the changes in the survey regarding disability status.
Table 13: Percentage distribution of 1999–2000 bachelor’s degree recipients according to their employment status in 2001; and average full-time salary in 2001 for employed recipients, by disability status and type

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>76.5</td>
<td>10.9</td>
<td>5.1</td>
<td>1.0</td>
<td>6.4</td>
<td>$33,130</td>
</tr>
<tr>
<td>Does not have a disability</td>
<td>77.0</td>
<td>11.4</td>
<td>4.5</td>
<td>0.9</td>
<td>6.1</td>
<td>32,968</td>
</tr>
<tr>
<td>Has a disability</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visual impairment</td>
<td>79.8</td>
<td>3.3</td>
<td>12.8</td>
<td>0.0</td>
<td>4.1</td>
<td></td>
</tr>
<tr>
<td>Hearing impairment or deafness</td>
<td>73.5</td>
<td>5.0</td>
<td>8.8</td>
<td>0.0</td>
<td>12.7</td>
<td>30,583</td>
</tr>
<tr>
<td>Orthopedic impairment</td>
<td>68.8</td>
<td>12.6</td>
<td>5.7</td>
<td>3.4</td>
<td>9.5</td>
<td>30,563</td>
</tr>
<tr>
<td>Learning disability</td>
<td>83.5</td>
<td>9.2</td>
<td>3.1</td>
<td>2.6</td>
<td>1.7</td>
<td>34,861</td>
</tr>
<tr>
<td>Attention deficit disorder</td>
<td>65.3</td>
<td>18.3</td>
<td>5.9</td>
<td>2.9</td>
<td>7.6</td>
<td>43,043</td>
</tr>
<tr>
<td>Mental illness</td>
<td>69.5</td>
<td>17.2</td>
<td>1.9</td>
<td>2.9</td>
<td>8.4</td>
<td>28,268</td>
</tr>
<tr>
<td>Other health related disability</td>
<td>66.0</td>
<td>13.4</td>
<td>12.9</td>
<td>1.4</td>
<td>6.4</td>
<td>28,119</td>
</tr>
</tbody>
</table>

− Sample size too small for a reliable estimate.

NOTE: Percentages will not sum to 100 because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2000 Baccalaureate and Beyond Longitudinal Study, First Follow-up [B&B:00/01], Data Analysis System.

Enrollment in graduate school programs was another indicator of how students were persisting into different paths (Table 14). It appears as though once students achieve a baccalaureate degree there were fewer differences between those with and those without disabilities. Among graduates without disabilities 23 percent enrolled in graduate school, and among graduates with disabilities 22 percent enrolled. Some differences were evident when graduates were broken down by specific disability categories. Among those with visual impairments, only 11 percent enrolled in graduate programs. Graduates with a learning disability and attention deficit disorder enrolled at low rates as well (14 percent and 15 percent respectively). Graduates with mental illnesses had the highest rate of graduate school enrollment (29 percent).

Table 14: Percentage distribution of 1999–2000 bachelor’s degree recipients according to enrollment in further education in 2001, by disability status and type

<table>
<thead>
<tr>
<th></th>
<th>Enrolled in Graduate School</th>
<th>Enrolled in Nongraduate Program</th>
<th>Not Enrolled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>21.3</td>
<td>5.6</td>
<td>73.1</td>
</tr>
<tr>
<td>Does not have a disability</td>
<td>22.8</td>
<td>5.6</td>
<td>71.6</td>
</tr>
<tr>
<td>Has a disability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visual impairment</td>
<td>22.3</td>
<td>6.1</td>
<td>71.6</td>
</tr>
<tr>
<td>Hearing impairment or deafness</td>
<td>11.0</td>
<td>0.0</td>
<td>89.0</td>
</tr>
<tr>
<td>Orthopedic impairment</td>
<td>23.4</td>
<td>5.0</td>
<td>71.7</td>
</tr>
<tr>
<td>Learning disability</td>
<td>14.1</td>
<td>3.7</td>
<td>75.7</td>
</tr>
<tr>
<td>Attention deficit disorder</td>
<td>14.8</td>
<td>8.6</td>
<td>76.6</td>
</tr>
<tr>
<td>Mental illness</td>
<td>28.5</td>
<td>3.1</td>
<td>68.5</td>
</tr>
<tr>
<td>Other health related disability</td>
<td>21.6</td>
<td>10.6</td>
<td>67.9</td>
</tr>
</tbody>
</table>

NOTE: Percentages will not sum to 100 because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2000 Baccalaureate and Beyond Longitudinal Study, First Follow-up [B&B:00/01], Data Analysis System.
Key findings

This section summarizes some of the existing data sources about students with disabilities at different stages of their academic life. Several problems became apparent moving from one source to the next. Differences in definitions and categorizations of disabilities made it difficult to compare data. Surveys change a great deal from year to year and although these changes may improve the quality of data, trends in data over time are lost. The self-reported nature of data in surveys may skew figures, especially if an individual chooses to maintain privacy about a disability. Finally, the snapshots of information available from each source showed somewhat different pictures such as students with disabilities among first-time, full-time freshman at four-year institutions versus students with disabilities in the whole post-secondary population. Overall, there are some findings that were consistent throughout many of the different sources of information:

- Approximately 10 percent of the total student population had some kind of disability, and of those with disabilities roughly half have more than one disability.
- Learning disabilities appear to be the most common disability type at the secondary school level, and among first-time, full-time freshman at four-year colleges.
- Minority students (other than Asians) and low-income students are more likely to have a disability than other groups.
- Although the gap in achievement is improving between those with disabilities and their peers, students with disabilities are underrepresented among those graduating from college due to a variety of factors: low high school graduation rates, inadequate preparation, and unique challenges with transition to college.
CHAPTER 2

K-12 Academic Preparation

There have been significant gains in the academic preparation of students with disabilities in elementary and secondary education. The percentage of these students graduating with a standard diploma has increased steadily in recent years and reached 56 percent in 1999-2000. At the same time, the percentage of these students who drop out has generally declined.

The single-most important factor in a college's decision to accept or reject an application for admission is the applicant's high school academic record. Therefore, gains in the academic preparation of students with disabilities are a central factor in the increasing number of these students in higher education. Indeed, in the last two decades the percentage of college freshmen reporting a disability tripled to nearly 10 percent. The number of undergraduate students with disabilities in higher education is a significant and growing number now about 1.3 million students.

However, while these are positive trends, students with disabilities have a significantly lower level of academic achievement in secondary school than their peers without disabilities. A recent comprehensive survey of special education notes that “large gaps remain between the performance of special education students and the general student population, with special education students as a group performing well below general education students in every state.” Students with disabilities drop out of secondary school at twice the rate of their peers. In fact, in 1999, 85 percent of secondary school dropouts had some kind of disability. Therefore, students with disabilities are still less likely to attend higher education than their peers without disabilities. For example, two years after completing secondary school, about 63 percent of high school graduates with disabilities were enrolled in higher education, compared to about 72 percent of their peers. In the U.S. population as a whole about one in 10 people with disabilities have graduated from college compared to about two in 10 people without disabilities.

2 Ibid., p. IV-5.
8 National Council on Disability, p. 4.
9 Twenty-Five Years of Educating Children with Disabilities, p. 52.
**Barriers to K-12 academic achievement for students with disabilities**

There are four reasons why students with disabilities in secondary education do not receive the same level of academic preparation as their peers and therefore do not go on to higher education in larger numbers. First, these students are still subject to residual attitudes and practices that do not accept them as full and legitimate participants in the educational process. A long-time advocate in the field noted, for example, that high school teachers often do not refer students with disabilities to the Talent Search and Upward Bound programs that provide a variety of services to encourage participation in higher education. Some teachers simply write these students off as not having college potential. Over time such attitudes and practices will continue to yield to advocacy, enforcement, and broader cultural tolerance.

Second, some of these students, such as those who have significant mental retardation or other developmental impairments, do not have the intellectual capacity to reach a level of academic achievement and preparation that would qualify them for higher education. The boundary line between those who are “college material” and those who are not has steadily moved in the direction of greater inclusiveness. However, it is most likely that not all students with disabilities can ever be college qualified.

Third, how some students with disabilities are educated at the elementary and secondary levels is deficient. Students with disabilities may not receive the pedagogy and services that would be most appropriate and effective for them to become academically college qualified. Teachers may not be well trained in special education. The best educational technology may not be available. As more students with disabilities receive a state-of-the-art education, it should follow that a larger proportion will be college qualified. In addition, it is reasonable to expect that the state-of-the-art in education also will improve in the future and that more students with disabilities can be reached with instruction that prepares them for higher education.

Fourth, what some students with disabilities are taught does not prepare them for higher education. The curriculum content for these students is less than that received by their peers without disabilities. Students with disabilities are not receiving the full core academic curriculum that is a basic precondition for participation in higher education. The President’s Commission on Excellence in Special Education heard testimony that “students with disabilities are less likely than students without disabilities to complete courses in high school to prepare them to succeed in college.”

For example, while 96 percent of elementary and secondary students with disabilities are served in regular school buildings, they “spend an average of 70 percent of their school day in general education classrooms being exposed to general academic curricula.” By another measure about half of the students with disabilities spend 20 percent or more of the school day outside of their regular class. When served outside of their regular classroom, these students are less likely to be receiving instruction in the core academic curriculum.

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College preparation and the Individual Education Plan (IEP)

Most importantly, however, the basic system for providing education to students with disabilities is not focused on maximum academic performance or achievement. Whether maximum academic achievement should be the central objective of K–12 education for students with disabilities is a policy issue beyond the scope of this report. However, currently it is not, and this fact reduces opportunities for higher education for students with disabilities.

Exploring this topic in somewhat more detail: the centerpiece of federal law governing the education of elementary and secondary students with disabilities is the Individual Education Plan (IEP). The IEP is a written statement produced by consultation between the parents of a student with a disability, the student (whenever appropriate), a regular teacher, a special education teacher, a representative of the local school district, and other appropriate specialists. Given the child's current level of education performance, the IEP establishes annual educational goals for the child and the supports, services, and strategies that will be used to reach those goals. The emphasis is on an individual program related to “meeting the child's needs...to enable the child to be involved in and progress in the general curriculum; and ... meeting each of the child's other educational needs...”[emphasis added] The focus clearly is not on achievement in the general curriculum. In fact, the law explicitly provides that the IEP may include “program modifications,” that is, in effect, an altered curriculum that is different from and usually less than the general curriculum.

The end result for students with disabilities is that their curriculum is often different from and less academically rigorous than the curriculum of their peers. For example, “students with disabilities are less likely than their peers ... to complete a full secondary school academic curriculum, especially in math and science curriculum areas.” Therefore, not only do these students less frequently graduate from high school than their peers, but those who do graduate are often less prepared for higher education.

In addition, students with disabilities may receive a credential that does not qualify them for higher education. As noted above, 56 percent of students with disabilities graduated with a “standard diploma” in 1999–2000, which generally signifies satisfactory completion of a core academic curriculum as defined by the state or school district. Attainment of this diploma is a standard requirement for higher education admission. However, in some cases students... not only do these students less frequently graduate from high school than their peers but, those who do graduate are often less prepared for higher education.

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15 IDEA Section 614(d)(1)(A)(ii).
16 Ibid. Section 614(d)(1)(A)(iii). For the last two decades, standards-based reform has been the dominant trend in K–12 educational reform. The latest and most prominent iteration of this reform movement is the federal No Child Left Behind Act (NCLB) enacted in 2001. The main thrust of standards-based reform is to have all children meet the same high standards of academic achievement. This presumption that all children will meet the same high standards at the same time. This puts NCLB in basic conflict with IDEA and the IEP, which center on an individualized and often modified curriculum that each student with a disability is to achieve at his or her own rate rather than at the same rate as everyone else. IEPs also often emphasize procedural compliance rather than academic outcomes.
17 National Council on Disability, People with Disabilities and Postsecondary Education, p. 4.
with disabilities receive a standard diploma for completing their IEP goals, which may be significantly less than the academic requirements met by their peers who receive the same diploma. In other cases, students with disabilities may receive a certificate of attendance, completion, or achievement. Such a certificate may be awarded to various kinds of students including those with disabilities, but it is generally not acceptable for higher education admissions. Finally, students with disabilities may receive a certificate only for those with IEPs, which is also generally not acceptable for admission to higher education.  

Clearly much remains to be done to improve the academic preparation of students with disabilities in elementary and secondary education to prepare them for higher education. High expectations are needed for these students and encouragement for their higher education aspirations. Pedagogy, teacher training, and educational technology need continuous improvement so that increasing numbers of students with disabilities can be effectively delivered high level academic content. Students with disabilities need more exposure to the general curriculum that leads to a standard diploma and eligibility to participate in higher education.  

CHAPTER 3

Transition

To have opportunities for higher education students with disabilities clearly need strong academic preparation. However, as the President’s Commission on Excellence in Special Education notes, “…academic achievement alone will not lead to successful results for students with disabilities.” These students also require non-academic skills that will enable them to be successful in higher education. These skills include “self-determination, self-advocacy, social skills, organizational skills, community and peer connection, communication, conflict-resolution, career skill building and career development and computer/technological competency.” It is particularly important that these skills be acquired in secondary school to facilitate the transition to higher education or to other post-high school activities.

In the late 1980s policy makers recognized that students with disabilities were emerging from secondary school lacking the skills to effectively take advantage of education, training, employment, and other opportunities. For example, the House committee report to accompany the 1990 reauthorization of IDEA (then titled Education of the Handicapped Act) noted:

[Special education students exiting secondary school] will move from school into adult life with varying degrees of success. Some will go to college, some will enter vocational training programs, while others will enter the workforce and some will qualify for vocational rehabilitation services. Unfortunately, others will exit our nation’s schools into nothing. Years of special education will be wasted while these individuals languish at home, their ability to become independent and self-sufficient [therefore making a positive contribution to society] placed at significant risk. The Committee sees such an outcome as highly undesirable. … [S]chool systems must do more to address the transition of special education students to adulthood.

Therefore, in the reauthorizations of IDEA in 1990 and 1997 the IEP requirements were amended to include “transition services.” IDEA now requires that beginning at age 14 the IEP must include a “statement of the transition service needs” of the student, and beginning at age 16 a “statement of needed transition services.” A senior congressional staffer with long experience in disability issues explained that this opaque distinction was intended to require that students begin to be made aware of transition issues beginning at age 14 and be provided with actual transition services beginning at age 16. “Transition services” are defined as “a coordinated set of activities … designed within an outcome-

\[2\] Ibid.
\[4\] IDEA section 614(d)(1)(A)(vii).
oriented process, which promotes movement from school to post-school activities, including post-secondary education, vocational education ..., continuing and adult education, adult services, independent living, and community participation." The basic idea of the new IEP requirements is to ensure that the education received by a student with disabilities in secondary school is clearly linked to the life-long aspirations and needs of the student after secondary school.

Transition plans and activities focus on the acquisition of non-academic skills. However, these plans also are linked to achieving appropriate academic preparation. Transition plans can include, for example, the selection of appropriate courses and sequences of courses that will lead a student to be qualified for college admission.

Preparation for a different legal framework

A critical dimension of transition services is to prepare students with disabilities and their parents for the dramatically different rights and responsibilities they will have in higher education compared to those they experienced in secondary school. Many students with disabilities and their parents believe that as they progress from secondary school A to higher education institution B, the same legal framework governs at both institutions since, after all, both are schools. This is not the case. Secondary education and higher education are different planets for students with disabilities.

One way to pinpoint the difference is to describe those rights, requirements, and processes that pertain at the secondary school level but do not apply in higher education.

In secondary school, students with disabilities are protected by Section 504 of the Rehabilitation Act of 1973. Specifically, those protections are set out in Subpart D of the regulations to implement Section 504, which applies to preschool, elementary, and secondary education. The regulation provides that each school will “provide a free appropriate public education to each qualified handicapped person ... regardless of the nature or severity of the person's handicap.” The regulation further provides that the IEP under IDEA will be the primary mechanism for ensuring that each student with a disability receives an “appropriate education.”

On the other hand, Subpart E of the Section 504 regulations applies to students with disabilities in higher education. The regulation only provides that “handicapped persons” may not be subject to “discrimination” in admissions, academic programs and other programs, services and activities at higher education institutions. In sum, there is no

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1 IDEA Section 602(30)(A).
3 34 C.F.R. 104.31-39.
4 34 C.F.R. 104.33. The requirement of a free appropriate public education is often referred to by the acronym FAPE.
5 Ibid.
6 34 C.F.R. 104.41-47.
requirement that students with disabilities be provided with a “free appropriate public education” at the postsecondary level. Higher education, as noted above, is voluntary not compulsory and it need not be made available to everyone, including everyone with a disability. In addition, higher education is not free and there is no obligation to meet all of the expenses of students with disabilities at all institutions or at any specific institutions. Finally, the “no rejects” philosophy that pertains to students with disabilities in secondary school does not apply in higher education.

In secondary school, IDEA and the IEP are the primary means for achieving an appropriate education. Since the requirement to provide a free appropriate public education does not apply in postsecondary education, IDEA and the IEP also do not apply. The IEP is required for all students with disabilities in secondary school, and its basic purpose is to maximize the likelihood of academic and non-academic success in school for students with disabilities. The IEP seeks to achieve this through a structured process that results in a detailed program through which educational success for students with disabilities will be charted, taking into account their individual needs. The IEP must involve regular and special education teachers, parents of the student, the student (if appropriate), a representative of the local school district, and other relevant specialists. None of this is required in higher education. There is no mandatory IEP-like process in higher education designed to lead students with disabilities to academic and non-academic success, taking into account their individual needs.

Colleges and universities, of course, may offer extensive counseling services, advising, and academic success programs. The point is that for students with disabilities in secondary school IDEA places the burden on the school to find and serve the student through an IEP. In higher education the burden is on the student, not the school, to find the appropriate services and navigate through higher education to a successful outcome.

In addition, where parental involvement is required in the IEP, parents have no assured role in higher education. Indeed, parental involvement in planning a student’s academic program and non-academic activities is not an accepted part of the culture of higher education. The assumption in higher education is that students are adults who are in charge of managing their own lives. In fact, federal student privacy laws require the student’s written permission to allow information about any student’s academic progress and non-academic activities, including students with disabilities, to be shared with parents.  

In secondary school, tests and assessments that guide an IEP team in designing a program to meet the needs of students with disabilities are provided at public expense. This is not the case in higher education. The costs of these diagnostics usually fall on the students and their families. In some cases help to meet these costs may come through student financial aid, a social service program such as vocational rehabilitation, or the college. However, the student is responsible for arranging for any needed tests and for finding a way to pay for them rather than having such services routinely paid for by the local school district.

Secondary education and higher education are different planets for students with disabilities.
In both elementary and secondary education and higher education students with disabilities are permitted to have appropriate “modifications” in their educational program. However, this term has two quite different meanings depending on the level of education. In the elementary and secondary context, the program established in the IEP to meet the special needs of students with disabilities may include substantial modifications of the standard curriculum. In higher education, students with disabilities are entitled to modifications or accommodations to help them meet the demands and requirements of the curriculum. Higher education institutions are required to provide students with disabilities with a level playing field to meet the college’s academic requirements. However, colleges are not required to make “a fundamental alteration in the nature of a program.” In short, in secondary school the curriculum can be substantially changed to meet the needs of students with disabilities but, in contrast, in higher education the curriculum itself need not be modified in any “fundamental” or “substantial” way, although reasonable accommodations must be provided.

**Failings of the current transition process**

The 1990 and 1997 amendments to IDEA that include “transition services” in the IEP certainly have improved the IEP by adding a focus on planning for the future beyond secondary school. However, the transition process mandated by IDEA has received widespread and strong criticism. In general, critics often find that transition plans are a pro forma exercise — weak and lacking in serious substantive content.

Specifically, critics have emphasized two major failings of the transition process. First, students with disabilities and their parents are not well-informed about the substantial differences in the rights and responsibilities of schools and students between secondary school and higher education. The National Council on Disability notes “the lack of awareness among educators and parents regarding the policy contrast between IDEA at the secondary level and … Section 504 at the postsecondary level.” The result is that students are often harshly surprised rather than prepared for the disparity between the two levels of education. The National Council on Disability notes further “that students themselves, (and) parents … are often ‘caught unawares’ when the level of service provision drops off and/or is not automatically extended following high school.”

Second, in elementary and secondary school people other than the students with disabilities have primary responsibility for the educational success of these students. In contrast, in higher education it is the students with disabilities themselves who are primarily responsible for their own success. Therefore, they must be self-sufficient and have well-developed skills to be able to advocate for themselves. These crucial skills often are not provided in the transition process in secondary school. The President’s Commission on

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14 For example, President’s Commission on Excellence in Special Education, p. 43.
Excellence in Special Education found “that students with disabilities entering college are often ill prepared to negotiate the complexities of college life.”17 “Without the skills of self-advocacy and self-determination, students with disabilities seeking secondary education will find this an extremely difficult goal to achieve,” observes the National Council on Disability.18 A General Accounting Office report notes “that less than two thirds of special education teachers frequently teach self-determination skills.”19 Most students with disabilities age 14 and above attend their IEP meeting, but students rarely exercise a leadership role in designing their future. They are more often passive observers.20

Transition services for students with disabilities in secondary schools must be improved. Students and their parents need to be apprised in clear and unambiguous terms of the differences in the rights and responsibilities of students and schools in secondary school versus higher education. More importantly, a much stronger emphasis needs to be placed on providing students with disabilities who are interested in higher education with effective self-advocacy skills. An appropriate start might be to require that students with disabilities play a more active leadership role in the development of the transition component of their IEPs to reflect their future responsibility in higher education.21

**Alternative routes to higher education for students with disabilities**

The discussion thus far has centered on students with disabilities who follow a standard or traditional road to higher education. Traditionally, students have their disabilities recognized while they are in elementary and secondary education (or even earlier). Their education is designed to meet their special needs through the IEP, and then they proceed to higher education directly after high school. This group is large and growing rapidly.

At least four other groups of persons with disabilities follow different paths to higher education. First, there are those who like their peers on the traditional road have their disability recognized early in life or while in elementary or secondary school and who have an IEP and receive special education. However, this group delays their entry into higher education. Perhaps they are taking time to organize their finances or to gain enough self-sufficiency and self-confidence to continue with their education. On average, students with disabilities entered higher education nearly three years later than students without disabilities.22

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18 National Council on Disability, p. 7.


Second, the onset of disability for some persons is early in life but the disability is not recognized until they leave secondary school. The student receives no pre-college special education services, but later goes on to higher education. For example, those who serve or advocate on behalf of persons with disabilities relate anecdotes about the parents of young students who are diagnosed with a disability. When these parents learn about the disability faced by their child and the educational implications, they recognize a parallel to their own experience, seek appropriate services, and belatedly continue their own education in college. One advocate said, “With new social attitudes toward disabilities, some adults with disabilities finally get tested or feel confident and empowered enough to enter the higher education system.”

Third, the onset of disability for some persons occurs later in life. It may cause them to lose their job and then seek new skills through higher education. Examples include persons with chronic illnesses such as diabetes and multiple sclerosis (MS) that frequently attack adults, those who are victims of workplace accidents, and soldiers who are wounded in combat. For all of these persons, higher education in adulthood may become part of building a new future.

Fourth, some students in college, particularly those who are young, are casualties of the recklessness of youth. They are severely injured in car crashes, sports events, or as a consequence of high risk behavior. Some may develop severe emotional problems triggered by the pressure to succeed academically, life away from home, or alcohol and drug abuse.

In short, there are many students with disabilities in higher education who have not followed the direct path from secondary school to college. They also have not had the benefit of the secondary school IEP transition services designed to facilitate and smooth the passage to higher education. Some take advantage of the services provided by the Talent Search program or Educational Opportunity Centers, both of which are federally funded TRIO programs that seek to connect youth and adults to higher education. Others receive guidance and assistance from a variety of social service agencies. Many navigate their way largely on the strength of their own wits and determination.

The number of students with disabilities who follow each of these alternative routes to higher education is difficult to estimate. However, a national survey of individuals with disabilities indicates that among those for whom the onset of disability occurred between birth and age 39, approximately half experienced the onset of disability between ages 20 and 39. In other words, of those with disabilities in the primary college-going years about half did not have the benefit of the IEP transition process because the onset of their disability occurred after they left secondary school. For this group the transition to higher education is much more ad hoc and uncertain.

Some types of disabilities are much more likely to occur in young adults than in children and elementary and secondary school students. For example, for spinal cord injuries the average age at injury is 33 years, and more than 50 percent of these injuries occur among persons in

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the 16 to 30 age group.\textsuperscript{24} The peak age group for the onset of traumatic brain injuries is 15 to 25.\textsuperscript{25} Those who work in the field note that most hearing, visual, and learning disabilities seem to be early onset, but most emotional and psychological disabilities begin later in life.

The basic point is that persons with disabilities seeking higher education opportunities are a very diverse group. There may be a common assumption that the onset of most disabilities is early in life, and those with disabilities usually receive an IEP special education leading to a transition to higher education. The reality is that this pattern reflects the experience of the largest single group of those with disabilities. It is, however, far from the typical experience for all or even most persons with disabilities.

**Vocational Rehabilitation**

Vocational Rehabilitation (VR) is one important path of transition to higher education for persons with disabilities coming through special education in high school or through other non-standard routes. VR is a federal program administered by the Rehabilitation Services Administration in the Department of Education, which in FY 2000 spent $3.2 billion serving 1.4 million persons with disabilities.\textsuperscript{26}

The primary goal of VR is to promote employment and independent living for individuals with disabilities. To achieve this goal state vocational rehabilitation agencies receive annual block grants from the federal government based on a formula which considers the state population and its per capita income. State vocational rehabilitation agencies enjoy substantial latitude in designing programs and services, and offer various combinations of career assessment, vocational guidance and counseling, job training, medical rehabilitation services, technology support, transportation, maintenance, and other services.

Participation in postsecondary education or training is a proven route to employment and independence for those with disabilities. Therefore, when judged appropriate, VR provides assistance to persons with disabilities to help them gain access to postsecondary education and progress to completion. Approximately 300,000 to 400,000 persons with disabilities annually receive postsecondary education services through VR. This is about a quarter of all undergraduate students with disabilities in postsecondary education.\textsuperscript{27} Thus,

\begin{itemize}
  \item Background information on VR unless otherwise noted is from the Rehabilitation Services Administration website retrieved on March 1, 2004 at http://www.ed.gov/about/offices/list/osers/rsa/index.html and statistics about VR unless otherwise noted were retrieved on March 1, 2004 from http://www.ed.gov/rschstat/eval/rehab/statistics.html. VR expenditures include a state match at a ratio of approximately 4 to 1.
  \item Unfortunately, VR does not collect data on the number of those who are being served by VR who are receiving postsecondary education and training. However, the NPSAS: 2000 Undergraduate Students Survey of undergraduates indicates that of the students who reported a disability, 21 percent indicated that they received VR services. The product of this percentage times the number of students with disabilities reported in NPSAS yields the 300,000 estimate. See, “Vocational Rehabilitation Services” retrieved on March 8, 2004 from http://nces.ed.gov/dasol/tables/showPrintTable.asp. In addition, data from VR indicate that of the cases closed in FY 2001, 30 percent had received either a college education (13 percent) or postsecondary vocational or business education (17 percent). One might assume that the percentage of those receiving higher or postsecondary education is roughly the same as the percentage of those whose cases were closed. Using that assumption, the product of this percentage (30 percent) times the number of persons receiving VR services yields the 400,000 estimate.
\end{itemize}
VR is clearly an important source of educational opportunities beyond high school for persons with disabilities.

Persons with a physical or mental disability whose disability is a substantial impediment to employment are eligible to be served by VR. The person with a disability also must be expected to benefit from the VR services and be of working age. Thus, depending on the state working age, youth in high school could be served. In practice, most VR clients are served after secondary school, and secondary schools are, indeed, a major referral source to VR. Other major sources of referral are medical institutions, community organizations, and federal, state, and local social service agencies. Self-referral is the largest single source illustrating the key role played by self-advocacy for persons with disabilities beyond high school.

Those referred to VR agencies meet with counselors who make an eligibility determination on a case-by-case basis and work with those determined to be eligible to devise an Individual Written Rehabilitation Plan (IWRP). Federal law requires that those with the most significant disabilities be selected for service first. Beyond that, however, the states establish criteria for the most severely disabled and devise the order of selection. Limited resources influence the age at which services are first provided as well as the order of selection followed. For example, youth with learning disabilities, the largest category of students with disabilities in secondary school, tend not to receive VR services since they present the fewest functional limitations to employment.

In devising the individualized plan the VR counselors consider the results of the client’s psychological and career assessments, interest in higher education, and prior academic record as well as job availability in the prospective field of study. If postsecondary education is determined to be the appropriate course leading to employment, VR can provide an extensive and comprehensive range of services. These may include: counseling and assistance in identifying an appropriate program and completing applications, paying for assessments to document a client’s disability, paying for direct educational expenses such as tuition, fees, books, and supplies in coordination with other sources of financial aid including federal student aid programs, paying for maintenance (room and board) costs in coordination with other sources of support, determining the need for and paying for assistive technology, finding appropriate housing and arranging for transportation.

Some VR services are free and others require payment of a fee. However, this fee is usually reduced or waived according to the client’s ability to pay.

VR services may last for one or several years. A recent study found that for clients receiving “college only” services the mean number of days to case closure totaled nearly four years at a cost for purchased services of $5,538, and for those receiving “business or vocational services only” case closure occurred at nearly two and a half years at a cost of $3,614. Clearly VR can be a source for sustained and substantial support for persons with

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VR counselors provide continuing advice and advocacy until the client has completed postsecondary education or training and obtained a job or until the client’s rehabilitation plan is modified.

More students with disabilities could be effectively served by VR and provided with support for a transition to postsecondary education. However, services to students with disabilities interested in postsecondary education are limited because of “insufficient program capacity to serve all eligible populations requesting services.”30 In fact, according to a General Accounting Office Report, in 2001, 25 states had waiting lists for their VR services to these students.31

30 United States General Accounting Office, p. 25.
31 Ibid., p. 29
CHAPTER 4

Admission and Accommodation

Discrimination prohibited in admissions of students with disabilities

Section 504 of the Rehabilitation Act prohibits discrimination in higher education admissions. Institutions may not deny admission to anyone because of their disability, and institutions may not have a quota for the number or proportion of those admitted who have disabilities.

If the institution uses an admission test, that test must “accurately reflect the applicants aptitude or achievement level or whatever other factor the test purports to measure, rather than reflecting the applicant’s impaired sensory, manual, or speaking skills (except where those skills are the factors that the test purports to measure).”¹ Thus, a test that purports to measure reading comprehension skills must be available in a form accessible to those with impaired vision, since it is reading comprehension and not vision that is being tested. On the other hand, a test designed to assess the fine motor skills and spatial perception abilities of prospective dentists need not be modified for those with manual or visual impairments.

In short, applicants for admission with disabilities must meet “the academic and technical standards requisite to admission.”² These “technical standards” may include reasonable physical qualifications, where such qualifications are necessary for participation in the program for which the student is applying. The leading Supreme Court case explained that a person entitled to the protections against discrimination of Section 504 “is one who is able to meet all of a program’s requirements in spite of his handicap.”³

Institutions of higher education may not inquire whether an applicant has a disability. An applicant with a disability for whom a standard admission test would be inappropriate and discriminatory must request the test in an alternative form.⁴ Applicants with disabilities are generally encouraged to inform the school as early as possible about their disability if they desire to have an academic adjustment or accommodation.

Disclosure of a disability is always voluntary. Some individuals with disabilities, who received special education under the terms of an IEP in secondary school, choose not to disclose their disability and make their way like students without disabilities. The issue of

¹ 34 C.F.R. 104.42.
² 34 C.F.R. 104.3(j)(3).
³ Southeastern Community College v. Davis 442 U.S. 407 (1979) emphasis added.
“disclosure” is a difficult and sensitive one for many students with disabilities. Whereas “others” identified and defined them as having a disability in elementary and secondary school, if students with disabilities as adults want accommodations they must choose to identify themselves as having a disability. This is an option that many reject.

The requirement that persons with disabilities meet admission’s standards “in spite of” their disability would seem to be a rather harsh and unwelcoming standard that would do little to broaden opportunities for higher education for those with disabilities. However, the prohibition against discrimination includes a requirement that “academic adjustments” be provided to individuals with disabilities. A postsecondary institution must “make such modifications to its academic requirements as are necessary to ensure that such requirements do not discriminate … on the basis of handicap.” The regulations to implement Section 504 indicate that academic requirements will not be regarded as discriminatory if they “are essential to the instruction being pursued” or “to any directly related licensing requirement.”

In addition, the leading Supreme Court case held that non-discrimination did not require a postsecondary institution to make “a fundamental alteration in the nature of a program.” A subsequent federal case held that “we can no longer take literally the assertion … that ‘an otherwise qualified person is one who is able to meet all of a program’s requirements in spite of his handicap.’ The question … is… whether some ‘reasonable accommodation’ is available.” Also, accommodations which would impose an “undue” financial or administrative burden on the institution of higher education are not required.

Thus, the standard boils down to the following: There is no discrimination by a postsecondary institution in its admissions and academic programs if persons with disabilities are required to meet academic program requirements in spite of their disabilities with reasonable accommodations provided by the institution. Accommodations which fundamentally alter the nature of a higher education program or impose undue financial or administrative burdens are not required. For example, a federal court found it acceptable for an institution to refuse to admit a deaf person to a nursing program on the grounds that she could not carry out nursing duties safely and could not effectively participate in the clinical program. In another case, a federal court held that a student with retinitis pigmentosa, which restricted his field of vision, and a neurological condition which limited his motor skills could be excluded from an optometry program because he could not meet proficiency requirements for operating optometric instruments. In these cases, the courts found that the accommodations that would have been required to enable these persons to participate in the nursing or optometry programs were not reasonable and would have fundamentally altered the nature of the programs.

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6 34 C.F.R. 104.44.
7 Ibid.
9 *Doherty v. Southern College of Optometry*, 862 F. 2d 575 (6th Cir. 1988).
Knocking on the door and documentation

What does all this mean as a practical matter for students with disabilities seeking opportunities for a higher education? First, a student with a disability must be proactive and take the initiative to receive accommodations in the admissions process and the academic program. As one advocate put it, students with disabilities “must put the disability in play.” The Office for Civil Rights observes:

You must inform the school that you have a disability, and need an academic adjustment. Unlike your school district (in secondary school), your postsecondary school is not required to identify you as having a disability or assess your needs.12

Practitioners in the field tell students that they have the responsibility for starting the process of accommodation by “knocking on the door.” According to the Office for Civil Rights, “A college has no obligation to identify students with handicaps.” In contrast, elementary and secondary schools have a responsibility “to identify and locate all unserved handicapped children.”13

Depending on the college, there are many different signs on the door on which students with disabilities must knock, including the Office for Disability Services, the Adaptive Learning Division, Disability Support Services, or Student Academic Services.14 The appropriate office can generally be readily identified on the institution’s website or in its student handbook.

Once the student with a disability has knocked on the door, the usual next step is to meet with a disability counselor to whom documentation of the student’s disability must be provided. One widely used source of information for students with disabilities puts it as follows: “NO accommodations will be provided to you until and unless you identify yourself to be a student with a disability, and provide documentation of your disability.”15 Some disabilities, such as total deafness or blindness or paraplegia, are obvious and often need not be formally documented, at the discretion of the institution. However, many disabilities are not readily apparent. These include low vision, poor hearing, emotional disturbance, chronic illness, and specific learning disabilities that are often called “hidden disabilities” or “invisible disabilities.”

The student must document not only the presence of one or more physical or mental conditions but also document sufficient severity to constitute “disability” — “a physical or mental impairment that substantially limits one or more of the major life activities.”16

12 Office for Civil Rights, Know Your Rights and Responsibilities, p. 3.
14 These are respectively the appropriate offices to be contacted by students with disabilities seeking accommodation at Ohio State University, Foothill College (CA), Prince Georges Community College (MD), and Oberlin College (OH).
16 Americans with Disabilities Act, Section 3(2), The Section 504 regulations define “major life activities” as “functions such as caring for one’s self, performing manual tasks, walking, seeing, hearing, speaking, breathing, learning and working.” 34 C.F.R. 104.3.
Postsecondary institutions establish the standards for documentation and students seeking accommodation must meet them. Generally, the documentation must be “recent” or “current.” What this means in practice depends on the institution of higher education and the type of disability. Institutions also vary in the degree to which they will accept a student’s secondary school IEP as adequate documentation. For example, a student may have a very recent IEP that provided him or her with special education on the basis of emotional disturbance. However, the most recent actual professional diagnosis of their condition may be five years ago. In this circumstance, some institutions will accept the student as having a disability and others will require a more current diagnosis and documentation. Institutions also generally require that the diagnosis or evaluation and documentation be provided by a qualified and impartial professional.

Opportunities for higher education for students with disabilities would be enhanced if they had an updated assessment and documentation of their disability before they left secondary school. IEP transition plans should include updated assessments documenting the students’ disabilities for those students who are planning to attend higher education.

How current documentation must be, what must be included and who must do the diagnosis are frequent issues of contention between students and institutions of higher education.

One expert in the field characterized the issue of documentation as a “rat’s nest.” There is a broad and evolving consensus among institutions about the best and appropriate practices for documentation, but there is no definitive legislative, regulatory or judicial guidance from the federal government. The general trend is for institutions to require more recent and more extensive documentation. This is in part the result of a desire to provide the most appropriate and effective services to students with disabilities. It also stems in part from the institution’s desire to avoid providing costly services to those who do not qualify for them or compromising academic standards by furnishing accommodations to those who do not need them.

Documentation not only must be provided by students with disabilities, but it also must also be paid for by them. The costs of required diagnoses and assessments can range from hundreds to thousands of dollars. For some students with disabilities the payment of these costs may be made by social service agencies such as Vocational Rehabilitation or by the institution of higher education. In other cases, the expense must be borne by the student or the student’s family. The need to pay for assessments erects a new and often formidable economic barrier to access to postsecondary education for students with disabilities, especially those with hidden or invisible disabilities. Since, as reported in Chapter 1, students with disabilities are disproportionately low-income, the requirement that they pay for documentation of their disability is a major barrier to higher education opportunities. Low-income students with disabilities may simply be priced out of higher education by their inability to afford the necessary documentation.

Accommodation options

Having knocked on the door and documented his or her disability, the next step is for the student with a disability and the counselor or other appropriate representative of the

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17 See, for example, Oberlin College, Services for Students with Disabilities, Documentation of Disability and Eligibility retrieved Dec. 9, 2003 from http://www.oberlin.edu/learning/DOCUMENTATION.html.
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college to decide on the accommodation the student will need.\(^{18}\) They are expected to work together in an “interactive process to identify an appropriate academic adjustment.”\(^{19}\)
The basic goal of the accommodation is “to afford an individual with a disability an equal opportunity to participate in, and enjoy the benefits of (the higher education program).”\(^{20}\)
Or, in the words of one advocate, the goal is to “level the playing field” in higher education between students with disabilities and their peers without disabilities.

The guarantee of non-discrimination, equal opportunity, a level playing field, and reasonable accommodations for students with disabilities in higher education fall far short of a guarantee of full participation or full inclusion in higher education. The National Council on Disability (NCD) provides a vision of what full participation might look like. It is a useful standard against which to compare what students with disabilities actually experience in higher education. NCD notes:

> For most students, participation in postsecondary education is not limited to being physically present in a lecture hall. It is the possibility to ask questions, to discuss ideas with classmates, to have a critical conversation with professors about papers, to reflect upon readings, to explore the library, to have access to information in accessible formats at the same time as their non-disabled classmates, to work on a research project, to have coffee with friends, to participate in campus social and cultural events, and really take part in the college experience. …. Most critically, it is about being able to do these things without the kind of hardship that exceeds that of the typical student during the postsecondary educational year.\(^{21}\)

The variety and combinations of accommodations received by students with disabilities are almost infinite depending on the nature and severity of the student’s disability, the physical topography of the institutions, the particular buildings and classrooms the student will use, and the nature of the program in which the student is enrolled. Thus, for example, two students with identical disabilities on the same campus may receive different accommodations if one will receive instruction in large lectures and the other will be in small seminars given the different programs in which they are enrolled.

Generally, there are two basic types of accommodations — academic adjustments and auxiliary aids and services. Academic adjustments are modifications to the academic program such as its requirements or method of delivery to accommodate the needs of a student with a disability. These could include:

- substituting courses that do not pose disability-related barriers for those required for a degree, such as a foreign language sequence,
- lengthening the time for degree completion,

\(^{18}\) The accommodations that are agreed to by the student with a disability and representatives of the institution are sometimes informally referred to as a “504 Plan.” These plans are not comparable in their comprehensiveness, formality, or legal status to the IEP in elementary and secondary education.

\(^{19}\) Office for Civil Rights, *Know Your Rights and Responsibilities*, p. 4.


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- scheduling classes and other activities to provide adequate time for a student with mobility problems to get from class to class on time, for a student to get necessary medical or psychological treatment or for a student to adequately rest and recuperate between academic activities,
- extending the time for examinations,
- offering examinations in alternative locations, such a place that is quieter and has fewer distractions than the regular examination location, or
- providing examinations in alternative formats, such as oral instead of written.

Auxiliary aid and services are accommodations to meet the needs of students with disabilities who have impaired sensory, manual, or speaking skills or other requirements. These could include:
- priority access to course registration,
- a special parking space for a person with, for example, a chronic medical problem such as kidney disease that makes walking distances difficult,
- a notetaker or tape recorder for a person with impaired vision or hearing or a learning disability,
- braille calculators, printers, or keyboards,
- interpreters or real-time captioning for the deaf,
- reaching devices for library use,
- readers and scribes for testing,
- academic, personal and vocational counseling,
- wheelchair-accessible desks and tables,
- calculators or keyboards with large keys, or
- materials provided in alternative media such as large print.  

The requirement that institutions of higher education not discriminate against persons with disabilities obliges the institutions to make these accommodations at their expense. However, it must be recalled, as noted above, that accommodations need not be made to academic standards that are “essential to the instruction” nor does non-discrimination require “a fundamental alteration in the nature of a program.” According to the Office for Civil Rights, “The school is not required to lower or waive essential requirements.”  

22 See, for example, 34 C.F.R. 104.44; Office for Civil Rights, U.S. Department of Education, Auxiliary Aids and Services for Postsecondary Students with Disabilities; Prince George’s Community College, Disability Support Services, retrieved Nov. 11, 2003 from http://www.pgcc.edu/pgrweb/pglocss/student_services/disability_support.html; Foothill College, Disability Resource Center, retrieved from http://foothill.fhda.edu/al/drc.html; and Oberlin College, Services for Students with Disabilities, Sample Services, retrieved Dec. 9, 2003 from http://oberlin.edu/learning/sampleServicesStudents.html.  

23 Office for Civil Rights, Know Your Rights and Responsibilities, p. 4.
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secondary education may be based on attainment of IEP objectives or the amount of student effort or improvement rather than the achievement of academic objectives relative to other students both those with disabilities and those without disabilities.

There are, of course, occasions when accommodations agreed to by the student with a disability and the institution and provided by the institution do not work as planned or expected. Institutions must have procedures for correcting or adjusting the accommodations they are providing.

There are also cases when a student with a disability and an institution do not agree on the appropriateness of a particular accommodation. For example, institutions are not required to provide the best or most sophisticated auxiliary devices, only those that are effective in meeting the needs of the student. Therefore, what the student wants and what the institution is obliged to provide may differ. Indeed, “22 percent of students with disabilities reported not receiving the services or accommodations they needed.”

The student with a disability and the institution also may disagree about whether a proposed modification is a reasonable accommodation required for non-discrimination or a change which constitutes a “fundamental alteration” to an “essential” part of the academic program. Institutions are required to have a person who coordinates the school’s compliance with disability laws, and this person is generally the first point of contact for a student who is dissatisfied with the accommodation provided by the school. The school also must have a grievance procedure through which the student can raise his or her concerns and seek to have them resolved. If these internal processes do not lead to a satisfactory conclusion, the student with a disability can file a complaint against the school with the Office for Civil Rights or in federal court.

In general, if a school has made a substantial and sustained good faith effort to provide appropriate accommodations, the school will be given the benefit of the doubt if it refuses to provide a requested accommodation as unnecessary or unsuitable on academic grounds.

Delivering accommodations

The actual process of providing accommodations to students with disabilities can in many cases be quite straightforward. For example, the student takes a form to the campus parking office and receives a permit to park in a special location. Or, the student receives access to appropriate hardware, software, and training to meet his or her needs with an auxiliary aid.

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26 Kaplin and Lee, pp. 482-83.
More difficulty is often encountered when the student seeks academic adjustments. Generally, the student must take a letter specifying the accommodation to be provided from the disability services office to the appropriate academic staff person to make arrangements for the delivery of the needed academic adjustment. Thus, for example, the student with a disability might need to meet with an associate dean to plan increased time for degree completion, or with a department chairperson to arrange the substitution of alternative courses for those now required for a major, or with a classroom professor to modify the time limit, location, or format for examinations. Such meetings put a heavy burden on students with disabilities because of the disparities in age, status, and expertise. Arrangements are particularly difficult for those whose secondary school experience may have included a dose of “learned helplessness” rather than self-advocacy skills and self-confidence. This is where the weaknesses of the IEP transition plans in providing the skills necessary for self-sufficiency are most evident.

The staff of the disability services office is also low in the campus pecking order. They do not have the same status, for example, that a special education teacher would have compared to a regular classroom teacher in elementary and secondary education. Therefore, the staff of the disability services office may have difficulty advocating effectively on behalf of students with disabilities to the academic staff.

This situation is made even more difficult by resistance and skepticism from the academic staff rather than collaboration and cooperation. One observer noted that “frontline faculty is key to making academic accommodations and educational success for students with disabilities happen.” However, disability experts and advocates were unanimous in identifying faculty attitudes and the academic culture as the major barrier to successful accommodations for students with disabilities in higher education.

In the traditional academic culture, faculty members define academic standards in general by their participation in curriculum development and academic governance. Faculty also generally exercise complete and unchallenged control over the content and conduct of their courses. Faculty see themselves as both creators and guardians of academic standards and values. External intrusions into the curriculum and into classroom practice are seen as violations of these academic norms and as threats to academic freedom.

A letter from the disability services office notifying a faculty member that a particular accommodation is to be provided is not a request or a suggestion. It is an order. Many faculty react negatively from the normal human dislike for being told what to do.

Faculty also are often ignorant about their responsibilities, about how to relate to students with particular disabilities and about how to deliver the required accommodation. This ignorance often is combined with fear of doing the wrong thing in dealing with a student with a disability or in providing an accommodation or fear of legal liability for either the faculty member or the institution. Ignorance and fear create more resistance. To

27 The dissertation by Mary Ann Ferkis, Faculty Members’ Knowledge of Postsecondary Disability Law and Disability Services (Purdue University, 2002) documents the gaps in the knowledge among faculty at Purdue University as well as reporting on similar findings from two studies of other postsecondary institutions (p. 78).
this ignorance and fear is added resentment at a low-level administration bureaucrat who typically is not an academic (the disability office staff) telling the faculty member how to run his or her school, department, or course.

Finally, the ignorance, fear, and resentment bubbles over when the faculty member is denied access to the documentation establishing the student’s disability and right to accommodation. Faculty members often are not told about the nature of a student’s disability. They also may not review (second guess) the determination (documentation) of a student’s disability or the accommodation that has been determined to be appropriate and necessary. Denying faculty access to information about a student’s disability also unfortunately results in a lack of faculty ownership of the accommodation plan, and thus also diminishes their commitment to implementing it. In sum, many faculty members have perceived the necessity of providing academic adjustments to students with disabilities as undermining their academic authority and compromising academic standards and values.

Prevailing on faculty to do a more effective job in meeting the educational needs of students with disabilities is part of a much larger issue of improving the quality of teaching for all students.

Traditional academic culture is less strong and pervasive at community colleges. That may be one reason why students with disabilities are disproportionately enrolled at these institutions. As reported in Chapter 1, among 1999-2000 undergraduates with disabilities 49 percent attended a public two-year institution (compared to 41 percent of those with no reported disability), and conversely 38 percent of undergraduates with disabilities attended a four-year institution (compared to 46 percent of those with no reported disability). Community colleges also generally have a reputation for using highly effective teaching strategies and support services to educate very diverse populations. In addition, community colleges offer a very broad array of academic and occupational courses. These features increase the attractiveness of community colleges for students with disabilities. Finally, since many community colleges are open admissions, they are more accessible to students with disabilities who, as reported in Chapters 1 and 2, generally have lower levels of academic preparation than other students.

Most disability experts and advocates report that faculty resistance and skepticism have diminished substantially in the last decade. Academics have come to better understand their rights and responsibilities under the law. They also have grown more comfortable in dealing with students with disabilities and their needs.

The use of tape recorders as an auxiliary aid for students with disabilities to record lectures is one example of an area in which a modus vivendi has evolved between faculty and students with disabilities and their conflicting needs and values. Some faculty members objected to the use of tape recorders to record their lectures because they believed that such recording was an infringement on their academic freedom and that of other students since what went on in the classroom could be repeated and subject to scrutiny outside of the classroom. In addition, these faculty were concerned about having their intellectual property rights to the content of their lectures violated. Faculty members may

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20 Faculty members can, of course, argue that an accommodation for a student with a disability would constitute a “fundamental alteration” to their course compromising its academic standards.
not prohibit the use of a tape recorder when it has been determined to be an appropriate accommodation for a student with a disability. However, the student using the tape recorder may be required to sign an agreement protecting the academic freedom rights of others in the class and the faculty member’s copyright.\footnote{Office for Civil Rights, Auxiliary Aids and Services for Students with Disabilities, p. 5.}

Despite the evolution of such pragmatic compromises and the general improvement in faculty attitudes toward educating students with disabilities, the faculty ethos and the academic culture remain the primary barriers on campus to success in higher education for students with disabilities.

**Improving the teaching for students with disabilities**

Prevailing on faculty to do a more effective job in meeting the educational needs of students with disabilities is part of a much larger issue of improving the quality of teaching for all students. The presence on increasing numbers of campuses of teaching centers is one means to hasten greater emphasis on the quality of teaching and to provide faculty with useful skills and techniques for instructing all students, including those with disabilities. These centers go by various names, such as the Center for Support of Teaching and Learning (Syracuse University) or the Office of Instructional Support and Development (University of Georgia). These centers provide in-service staff development for faculty in areas such as: course development, syllabus preparation, the use of technology in teaching, test design, evaluation of student writing, and stimulating student participation in class.

The Center for Research on Learning and Teaching (University of Michigan) claims to be the first teaching center (1962). A review of its extensive annual report reveals not a single specific program or publication devoted to issues of providing educational opportunities for students with disabilities.\footnote{University of Michigan, Center for Research on Learning and Teaching, Annual Report 2002-2003 (Ann Arbor, MI: author, 2003).} It is undoubtedly the case that faculty who sought help in dealing with an issue of education for students with disabilities would find assistance at the Center. However, its failure to deal prominently with disability issues perhaps reflects a failure to pay sufficient attention to a population that comprises about 10 percent of the undergraduate student body. In contrast, there is much specific attention devoted to multicultural education and to education of limited English proficient students.

Teaching centers provide an institutional resource that could make important contributions to improving the education of students with disabilities in higher education. However, since disability issues seem to receive little emphasis and since faculty utilization of the services of the centers is voluntary, this potential is as yet unrealized.

Perhaps a more promising development is the trend toward providing preparation in pedagogy for graduate students.\footnote{See, Thomas Bartlett, “The First Thing About Teaching: Colleges try harder to prepare graduate assistants for the classroom, The Chronicle of Higher Education (September 23, 2003) p.A10.} Graduate students, the professors of tomorrow, are often the first line teachers of many undergraduates. Most colleges that use teaching assistants now have some kind of program to orient these teaching assistants.
in instructional techniques. Many of the programs are not mandatory, and they vary substantially in length and intensity. These programs do not currently appear to offer much in the way of information about educational issues of particular concern to students with disabilities. They are, however, at least a growing infrastructure that could be used to provide such information.

Faculty need to understand their rights and responsibilities in teaching and advising students with disabilities. Faculty need to be generally familiar with the varieties of disabilities and the range of accommodations that can be provided. Obviously faculty cannot be expected to be expert in how to most effectively meet the needs of all students with disabilities. Such information needs to be readily available on campus, and faculty need to be willing to seek it out.

In addition, good pedagogy for students in general is usually good pedagogy for students with disabilities. One of the keys to leveling the playing field for students with disabilities is that they have enough time to arrange for accommodations. Therefore a faculty member who makes the course syllabus available a few weeks before the course begins and who communicates clearly the goals of a course, the schedule and format of examinations and other course activities, such as papers or class presentations, will go a long way to meeting the needs of students with disabilities as well as all other students. A small straw in the wind is that the classic text on college teaching in its 11th edition now devotes a part of one chapter to the special needs of students with physical and learning disabilities.32

A specific component devoted to education of students with disabilities should be included in in-service training opportunities for faculty such as those offered in teaching centers and in the programs to prepare graduate students to be teaching assistants and future professors.33

Many college presidents and other academic administrators have provided leadership in urging that full higher educational opportunities be provided to diverse populations at the institutions particularly addressing low-income, multicultural, gender and limited English proficient concerns. This advocacy on behalf of diverse populations should be expanded to more explicitly and aggressively include the interests of students with disabilities.

**Demonstration projects to ensure students with disabilities receive a quality higher education**

Another promising development in teaching higher education faculty about students with disabilities was the enactment of a new federal program, “Demonstration Projects to Ensure Students with Disabilities Receive a Quality Higher Education,” in the 1998

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33 Ferkis (p. 83) recommends that “faculty members at Purdue University may benefit from faculty training programs designed to increase their knowledge of disability law and services.”
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reauthorization of the Higher Education Act.\textsuperscript{34} The program’s purpose is “to support model demonstration projects to provide technical assistance or professional development for faculty and administrators in institutions of higher education in order to provide students with disabilities a quality postsecondary education.”\textsuperscript{35} It awards funds on a competitive basis for three years. Obviously, the program is directly targeted at the issue of faculty attitudes and skills and campus culture, which are the primary obstacles to delivering quality educational opportunities to students with disabilities.

The program first received an appropriation of $5 million in FY 1999, and it is receiving $6.9 million in FY 2004.\textsuperscript{36} The Bush Administration’s FY 2005 budget recommends no funding and the elimination of the program.

Nearly 50 projects have been funded in two rounds of grants in 1999 and 2002. These projects have titles such as: University of Rhode Island — “Changing the Culture: Enhancing the Inclusion and Retention of Students with Disabilities in Postsecondary Education;” Columbia University — “Universal Access ≠ Dumbing Down: Stigma, Pedagogy & Elitism;” and The College of New Jersey — “Teaching College Faculty and Staff to Use Adaptive Technology as a Reasonable Accommodation.”\textsuperscript{37}

One important feature of this program is its location within the Department of Education in the Office of Postsecondary Education (OPE) rather than in the Office of Special Education and Rehabilitation Services (OSERS). This location signals that effective inclusion of students with disabilities in higher education is a part of the mainstream higher education mission of OPE as it should be a concern of mainstream institutions, administrators, and faculty in higher education.

The Higher Education Act is scheduled to be reauthorized in the 108\textsuperscript{th} Congress (2003 — 2004). In September 2003 the House of Representatives passed H.R. 3076 which would extend for another six years the Demonstration Projects to Ensure Students with Disabilities Receive a Quality Higher Education. The bill also adds two new authorized activities. The first is “the development of innovative, effective, and efficient teaching methods and strategies to ensure the smooth transition of students with disabilities from high school to postsecondary education.”\textsuperscript{38} This provision is clearly a response to the weaknesses of the IEP transition plans in meeting the needs of students with disabilities planning to attend higher education. The bill also permits the development of quality distance education programs to expand the higher education opportunities of students with disabilities.\textsuperscript{39} The Senate has yet to act on the reauthorization of this program.

\textsuperscript{34} Insofar as any federal initiative can have a single author, this program was the creation of Mary Ann “Amie” Amiot, who worked for many years as a program administrator and advocate for students with disabilities. She also served as the first director of this program in the Department of Education. Amie was a valued friend and colleague who helped to conceptualize this report. She died at age 56 in June 2003.

\textsuperscript{35} Section 761. This program is Part D of Title VII of the Higher Education Act.

\textsuperscript{36} The funding history of the program is: FY 99 $5m.; FY 00 $5 m.; FY 01 $6 m.; FY 02 $7 m.; FY 03 $6.954 m.; and FY 04 $6.9 m.

\textsuperscript{37} Brief summaries of all of the projects for which awards have been made can be found at \url{http://www.ed.gov/programs/disabilities/awards.htm}.

\textsuperscript{38} H.R. 3076, Section 7(b)(1)(C).

Student Support Services (TRIO)

The federally-funded Student Support Services (SSS) program, which is one of the TRIO programs, also provides assistance to students with disabilities in higher education. The TRIO programs generally help low-income and first-generation-in-college students to overcome non-financial barriers to access and success in higher education, such as information about applying to college and financial aid, academic and personal counseling, tutoring, and remedial instruction. SSS has a specific legislative mandate to serve students with disabilities in higher education.  SSS is designed to promote the academic success of these students. This role complements the role and the legal responsibility of the institution to provide access without discrimination to students with disabilities. Thus, in general, SSS programs are not directly responsible for providing legally-required accommodations for students with disabilities although SSS programs frequently coordinate their services with those provided through the disability services office. In FY 2004, SSS received an appropriation of $264 million serving nearly 200,000 students, including those with disabilities.  

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40 Section 402D of the Higher Education Act.

CHAPTER 5

The Special Case of Students with Learning Disabilities

Students in higher education with learning disabilities (LD) are a special case because they are the largest group of students with disabilities, a group that has grown rapidly in recent years. In addition, as a group, students with LD have a number of characteristics that often lead higher education faculty and administrators to react to them with suspicion and to be reluctant to accommodate the students’ needs.

LD defined

The National Joint Committee on Learning Disabilities defines LD as follows:

Learning disabilities is a general term that refers to a heterogeneous group of disorders manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning, or mathematical skills. These disorders are intrinsic to the individual, presumed to be due to central nervous system dysfunction, and may occur across the life span….¹

LD is not the same as an inability to learn. The Association on Higher Education and Disability (AHEAD) explains that “individual ‘learning styles,’ ‘learning differences,’ ‘academic problems,’ and ‘test difficulty or anxiety,’ in and of themselves, do not constitute a learning disability. …[E]motion, attentional or motivational problems … may be interfering with learning [also] but do not constitute a learning disability.”²

The most common learning disability is dyslexia, which is neurological in origin and characterized by trouble in processing the information and concepts expressed in written language. Dyslexia is primarily manifest in reading difficulties. Students with dyslexia also may experience problems in other language skills such as spelling, writing, and speaking.³ Expert testimony in a federal court case dealing with students with LD estimated that about 80 percent of those with LD have dyslexia.⁴ LD generally, and dyslexia in particular,

can be highly debilitating for a student facing the academic tasks of understanding and manipulating written or other visual information. In the case of dyslexia, students, in effect, cannot “see” the printed text; they cannot process the meaning of a text in the way that students without dyslexia are able to do.

**Specific prohibitions of discrimination against students with LD**

Section 504 of the Rehabilitation Act of 1973 explicitly prohibits discrimination against persons with “specific learning disabilities.” This “impairment” limits the major life activities of “learning and working.” The ADA similarly includes “specific learning disabilities” in its definition of “disability.”

What constitutes LD in practice in terms of the law as well as the views of health professionals, campus administrators, and LD advocates is fluid and unsettled. In particular, there is disagreement about whether a student should be compared to “most people” or to his or her own expected performance in making an LD determination.

Colleges and universities may, of course, choose to offer special assistance and services to students who are not LD for purposes of federal law but who are LD by another definition. Indeed, institutions of higher education offer a spectrum of LD services depending on their individual mission and priorities in student services.

To meet the non-discrimination requirements of Section 504 and ADA, all institutions must provide students with LD those accommodations necessary to assure equal access, which may include part-time schedules, assistive technology, tape recording of lectures, note taking assistance, tape recorded texts, extended time for timed examinations, distraction-free examination venues, and occasionally, course substitutions.

Many institutions offer more extensive services to students with LD, beyond what is required to meet the non-discrimination requirements of the law. Services may include a comprehensive plan to assist the student to achieve academic success through personal counseling, individual tutoring and support systems — activities to help the student to deal with their LD generally as well as to succeed in particular courses.

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5 34 C.F.R. 104.3. See also Section 7(21)(A)(ii) of the Act. The term “specific learning disabilities” is presumably used in the law to distinguish general problems faced by an individual in learning from the more clearly defined conditions that have a medical or psychological etiology. For simplicity, in this report the term “learning disability (LD)” is used.

6 34 C.F.R. 104.3.

7 28 C.F.R. 36.104. IDEA also includes “specific learning disabilities” in its definition of a “child with a disability” in Section 602(3)(A)(i). IDEA in Section 602(26)(A) also defines “specific learning disability” to mean “a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which disorder may manifest itself in imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations.”


Perhaps, 50 to 100 institutions offer for a fee even more intensive individual services (or the same services that others provide at no cost). Fees for these LD services range from $300 to more than $6,000 per semester with the average around $2,500 per semester.11 The University of the Ozarks in Arkansas, for example, through its Jones Learning Center “offers enhanced services to students with diagnosed learning disabilities who show potential for success in a competitive academic environment.”12

Finally, at the end of the spectrum is Landmark College in Vermont that is “designed exclusively for students with dyslexia, attention deficit hyperactivity disorder (AD/HD), or other specific learning disabilities.” Landmark’s annual price for tuition, fees, room and board is more than $41,000, among the highest in the country.13

The number and other characteristics of students with LD

As reported in Chapters 1 and 2, in the last two decades the percentage of college undergraduates reporting a disability tripled to nearly 10 percent, and they now number more than one million students in higher education. The fastest growing category of disability is LD. One study notes that “the number of college freshmen with learning disabilities has increased tenfold since 1976.”14 Students with LD represented 40 percent of the freshmen with disabilities in 2000 compared to 16 percent 12 years earlier. This suggests that currently about one in 25 students in higher education, or at least one in most classes, has a LD.15 Thus, the number of students in higher education with LD is large and growing both absolutely and as a share of all students with disabilities.

Among college students with LD who depend on their parents for support 36 percent are from the highest income quartile. Among dependent college students in the highest income quartile there are more students with LD than any other disability category.16

One explanation for the disproportionate affluence of the families of students with LD is that these families are most likely to be able to afford the professional testing and evaluation required to document this disability. As noted in Chapter 4, the cost of these assessments is generally hundreds and sometimes thousands of dollars, which usually must

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12 University of the Ozarks, Campus Services, Jones Learning Center retrieved March 18, 2004 from http://www.ozarks.edu/campusservices/jlc/index.html.
13 See, “About Landmark College” retrieved November 24, 2003 from http://www.landmarkcollege.org/about/index.html. There are, of course, other postsecondary institutions devoted specifically to students with a particular disability, perhaps most famously Gallaudet University for deaf and hard of hearing students in Washington, DC.
14 Mull, Sitlington, and Alper, p. 97.
15 This analysis is based on the CIRP data, which are consistent with the National Longitudinal Transition Study-2 that found that 61 percent of the students with disabilities in high school had learning disabilities. The NPSAS data reported in Chapter 1 indicate that among 1999-2000 undergraduates with a disability, only 5 percent had learning disabilities while nearly 30 percent had orthopedic impairments. Particularly in light of the limitation of the NPSAS survey, these results simply lack face validity. It could be that the fall off in the percentage of disabled students with LD between high school and college reported in NPSAS is explained by a high rate of those with LD in high school either not being eligible to be considered LD by the standards applied at the college level or by a high rate of students choosing not to reveal their disability in higher education or both. However, there are no data to confirm or deny these possibilities.
be borne by the student or the student’s family. These costs are a formidable economic barrier to higher education access for low-income students with LD and could account for the higher income profile of students with LD who are enrolled in higher education.

A second explanation for the relatively high income of the families of students with LD is that these students do not really have a LD. They are fakers. Affluent families have used their economic resources and sophistication to find a friendly diagnostician to provide the needed documentation so they can game the system. For example, if non-LD children can get more time on examinations with LD documentation, these children of the affluent will have an advantage in achieving academic success compared to their peers.

This explanation for the significant increase in the number and proportion of students with LD in higher education has taken on the attributes of an “urban legend.” Everyone has heard about it and knows it is true, but no one has witnessed it directly. The primary evidence is usually from the “friend of a friend who swears it is true.” In Elizabeth Guckenberger et al v Boston University (1997), the Boston University administration suspected that some students with LD diagnoses “might be faking a disability to gain an educational advantage.” Yet, the court found that “there has not been a single documented instance at BU in which a student has been found to have fabricated a learning disorder in order to claim eligibility for accommodations.” Evidence is similarly lacking to bear out the suspicions widely held by others.

In addition, only 19 percent of all students with LD in higher education are supported by parents who are in the top income quartile (“rich kids”). Even if all of them were fakers whose LD diagnosis was false that still leaves 81 percent of the students with LD in higher education who are not supported by affluent parents. This 81–percent group is either older independent students, or they are low and moderate-income dependent students who do not have the resources to pay for expensive but dubious diagnoses and documentation.

As noted in Chapter 4, LD is also among the “hidden” or “invisible” disabilities that are not readily apparent to lay observers. Students with LD look the same as students without disabilities, in contrast, for example, to a student in a wheelchair where the fact that the student has a disability is obvious. Students with hidden disabilities therefore bear a heavier burden of proof in establishing their disability and their special needs. The prima facie assumption for them is that they do not need assistance rather than that they do.

Finally, from the point of view of current senior higher education faculty and administrators LD is a “new” phenomenon. During their formative years in education

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17 One education researcher remarked to us that “LD is middle class ploy to get their kids all the advantages.” When we mentioned in passing our inquiry concerning LD in higher education to another colleague, the immediate response was: “Oh, LD is a way for upper income families to get more time on tests for their kids.” On urban legends generally, see Jan Harold Brunvand, The Vanishing Hitchhiker: American Urban Legends and Their Meaning (NY: W.W. Norton and Co., 1981). Perhaps the most famous urban legend in American public policy discussions is the “welfare queen with a Cadillac” famously invoked by President Reagan.
18 Page 7.
19 Ibid.
30 or 40 years ago, LD did not exist as a category of disability. While blind people are mentioned in the Bible, the Iliad, and Shakespeare’s works, no one with LD appears (at least not identified as such). In their school years senior faculty and administrators knew some students who “struggled” academically or lacked in aptitude or effort. Now, there is a large and growing group of students with LD, and there is skepticism about the new and unfamiliar, especially in American higher education.

Students with LD on campus

Chapter 4 outlined the barriers to full inclusion and effective accommodations for students with disabilities created by faculty and administrator attitudes and the academic culture. In particular, these higher education professionals are often lacking in information about students with disabilities and are fearful about what they should do. In addition, faculty resent non-academic staff in the disability office telling them what to do and intruding into their academic domain and its standards. Faculty often perceive the necessity of providing academic adjustments to students with disabilities as undermining their academic authority and compromising academic standards and values.

In the case of students with LD, additional factors lead to faculty and administrator resistance and skepticism in providing accommodations. Students with LD are a large, rapidly growing and new group of students with disabilities. Their disability is “invisible” and its incidence is disproportionately among students from affluent families. Also, many of the accommodations required for students with LD must be delivered directly by the faculty or involve their direct participation. For example, they have to allow note takers and tape recording in their class or prepare examinations in alternative formats. Many of the accommodations for students with LD involve providing them with more time to accomplish academic tasks, which some faculty view as compromising academic standards.

Thus, the resistance and skepticism that students with disabilities face in general from faculty and administrators are compounded in the case of students with LD. The poster boy for these attitudes about students with LD is Jon Westling, former provost and president of Boston University. In the mid-1990s provost Westling, who had no experience or training related to LD, gave speeches about LD, including one titled “Disabling Education: The Culture Wars Go to School.” In these speeches, he alleged that “hundreds of thousands of children are being improperly diagnosed with learning disabilities by self-proclaimed experts” and that “the learning disability movement is a great mortuary for the ethics of hard work, individual responsibility and pursuit of excellence.” Also featured in his speeches was “Somnolent Samantha” who had presented him with a letter explaining her need, based on LD, for various accommodations including the need to be filled in when she fell asleep in class. According to Westling, students like Samantha, who he characterized as “draft dodgers,” were discouraged from working to achieve their fullest potential and could overcome their academic difficulties “with concerted effort.” It turned out that there was no Samantha. Westling had invented her. She represented in the words of the

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22 Ibid., pp. 6-7.
23 Ibid.
court “Westling’s belief — fuelled mostly by popular and anecdotal accounts — that students with learning disabilities were often fakers who undercut academic rigor.” In short, Somnolent Samantha was an urban legend.

If these are the attitudes that could be repeatedly expressed in public speeches by the chief academic officer of a major university less than a decade ago, it should not take too much imagination to understand the views of students with LD that many hold in the academic trenches.

One result of the size, rapid growth, and suspicion that surrounds students with LD is increasingly stringent requirements for documentation, particularly of “hidden” disabilities. Students are required to produce current specific documentation from designated types of professionals. Some schools also require that the diagnosis come from someone who has an arm’s length relationship to the student (not “my uncle the doctor”).

With respect to faculty and administrator attitudes the best hope is probably the ineluctable passage of time. For future generations of faculty and administrators students with LD will at least not be so new and unknown and therefore less suspect.

24 Ibid. The court found that Boston University had a chaotic and discriminatory system for dealing with students with LD. Many of the university’s failings were remedied as the case moved to federal court, and still others were required to be fixed by the court. Most of the students with LD who were suing the university were awarded damages.

25 The dissertation by Mary Ann Ferkis, Faculty Members’ Knowledge of Postsecondary Disability Law and Disability Services (Purdue University, 2002) quotes from the court case Dinsmore v. Pugh and the Regents of the University of California, Berkeley (1989) in which a professor told a student with LD that “there was no such thing as a learning disability” p. 21.

26 What has been written in this chapter about students with LD could also apply to students with other hidden disabilities particularly those that are relatively recent in their identification such as attention deficit hyperactivity disorder (ADHD) or bipolar disorder. The major difference for policy considerations is that the number of students with these disabilities is much smaller than the population of students with LD although the number of students with ADHD is growing very rapidly. See, for example, the discussion of ADHD in Elizabeth Farrell, “Paying Attention to Students Who Can’t: Some colleges make accommodations for attention deficit hyperactivity disorder; others balk,” The Chronicle of Higher Education, September 26, 2003, p.A50.
CHAPTER 6

Architectural Barriers

Among the barriers to higher education opportunities for persons with disabilities the most obvious have been the brute physical barriers that exclude some from campus facilities. These include curbs and stairs that cannot be navigated by wheelchairs or mounted by the physically frail; no tactile maps for the blind, and no TTY phones for the deaf. In short, the built environment was often built to exclude rather than include students with disabilities.

With the passage of the Architectural Barriers Act in 1968 the federal government began to address on a national basis the issue of architectural barriers to those with disabilities. This law required that federal buildings and facilities as well as those built, altered, or leased with federal funds, be accessible to people with disabilities. To strengthen enforcement of the Act and to meet the need for a central agency to develop design standards the Architectural and Transportation Barriers Compliance Board was created by the Rehabilitation Act of 1973. This independent federal agency is now known as the Access Board.

The Rehabilitation Act of 1973 also, of course, included Section 504 which prohibited discrimination against otherwise qualified persons with disabilities in any program receiving federal funds. The regulations to implement Section 504 define facilities which are “inaccessible to or unusable by handicapped persons” to be a form of prohibited discrimination. Thus, architectural barriers to those with disabilities were prohibited not only in facilities supported by federal funding but also in facilities used for federally funded programs. For example, if an academic program that received federal funds is taught in a building (facility) that was built entirely with state funds, that building is nevertheless required to be accessible. More importantly, if an institution participates in any federal program, then the institution as a whole must comply with the non-discrimination requirements of Section 504 (as well as other civil rights laws). Thus, Section 504, in effect, expanded the requirement for accessibility to all higher education facilities since almost all higher education institutions participate in federal higher education programs.

The general rule set out in the Section 504 regulations is that institutions of higher education that receive federal support must operate their programs “so that when each part is viewed in its entirety, it is readily accessible to handicapped persons.” The regulation goes on to explain that this “does not require a recipient to make each of its existing facilities or every part of a facility accessible to and usable by handicapped persons.” What this means in practice is that, with respect to existing facilities, an accessible option in every

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1 P.L. 90-480.
2 Section 502 of P.L. 93-112.
4 34 C.F.R. 104.21.
5 34 C.F.R. 104.22(a).
6 Ibid.
program or activity must be available for students with disabilities. For example, lectures scheduled for an inaccessible building must be relocated to an accessible building if a student who uses a wheelchair enrolls in the course. This would be a standard part of the accommodations provided by the institution to such a student.

Buildings constructed since 1977, when the Section 504 regulations took effect, must be fully accessible to students with disabilities. In addition, alterations to buildings must “to the maximum extent feasible” be “readily accessible to and usable by handicapped persons.”

If a higher education institution provides housing for its students, students with disabilities must be offered housing that is “comparable, convenient, and accessible” and at the same cost as the housing offered to students without disabilities. The campus housing also must be “available in sufficient quantity and variety so that the scope of handicapped students’ choice of living accommodations is, as a whole, comparable to that of nonhandicapped students.”

The requirements for architectural accessibility for students with disabilities were reinforced by the Americans with Disabilities Act (ADA, 1990), which demands non-discrimination by institutions against persons with disabilities as a matter of civil rights law, regardless of their status as recipients of federal funds. It also broadened civil rights protections of persons with disabilities in areas such as employment, transportation, public accommodations and telecommunications.

The Access Board has promulgated accessibility guidelines and standards, provided technical assistance and training and conducted research, and it continues to enforce the Architectural Barriers Act. The accessibility requirements of Section 504 and the ADA are enforced by the Department of Justice and the Office for Civil Rights in the Department of Education. The impact and success of these federal enforcement and technical assistance efforts are visible on every campus in the curb cuts, the presence and pitch of ramps, the height of water fountains, the configuration of restrooms, the width of doorways, visual as well as audio fire alarms and many other features designed to fully include students with disabilities in the programs and activities of the college. Disability advocates and practitioners mark the elimination of architectural barriers to educational opportunities for students with disabilities as one of the most successful fronts in the effort to make higher education more inclusive.

Beginning with the Higher Education Facilities Act (HEFA, 1963), which was incorporated into the Higher Education Act as Title VII, broad federal authority existed for the “Construction, Reconstruction, and Renovation of Academic Facilities.” Title VII included a variety of facilities programs including grants, loans, loan guarantees,

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7 34 C.F.R. 104.23(a). See also, Office for Civil Rights, U.S. Department of Education, Questions and Answers on Disability discrimination Under Section 504 and Title II retrieved March 20, 2004 from http://www.ed.gov/about/offices/list/ocr/qa-disability.html.
8 34 C.F.R. 104.22(b).
9 34 C.F.R. 104.45.
10 Ibid.
11 For example, in anticipation of the reauthorization of the Higher Education Act, the National Council on Disability prepared a comprehensive position paper, People with Disabilities and Postsecondary Education (September 15, 2003). It does not even mention the issue of architectural barriers.
interest subsidies, and loan insurance. In the 1980s and 1990s Title VII was expanded to “include assistance to enable institutions … to bring their facilities into conformity with the requirements of … Federal, State, and local laws requiring removal of barriers to full participation by individuals with disabilities.”¹¹ In reality, very little funding was devoted to architectural barrier removal, but at least the legal authority to provide assistance existed on the books. These federal higher education facilities programs were repealed in the 1998 reauthorization of the Higher Education Act. Future federal support for architectural barrier removal does not seem likely.

¹¹ Section 701(a) of the Higher Education Act as of March, 1994.
CHAPTER 7

Student Financial Aid

Financial need and students with disabilities

As reported in Chapter 1, students with disabilities generally have lower incomes than their peers without disabilities. Thirty-seven percent of students with disabilities in high school came from families with household incomes less than $25,000, compared to only 20 percent of their peers. At the college level, students from the lowest income quartile have the highest rate of disability, especially independent students. Students with learning disabilities or attention deficit disorder (ADD) who are dependent on their parents for support do not conform to this pattern. The highest rate of these disabilities occurs in the highest income quartile. Thus, students with disabilities other than learning disabilities or ADD are even more likely to be from the lowest income quartile than students with disabilities as a whole.¹

Low-income students with disabilities, like other low-income students, need financial assistance in order to afford the costs of higher education. However, students with disabilities, being disproportionately low-income, have an even greater need for financial assistance than other students. Thus, the financial barriers to higher education opportunities faced by students from low-income families are also faced, albeit even more broadly, by students with disabilities.

College prices, including tuition, fees, books, and living costs, have been increasing rapidly over the past two decades in relation to student and family income levels.² The amount of student financial aid available to students from low-income families has not kept pace with these price increases. One measure of the growing shortage of financial aid is the increase in “unmet need” faced by financially needy students. Unmet need is the difference between the higher education price students must pay and the financial resources available to them.³ The growth in unmet need results in access to higher education being denied to substantial numbers of low-income students who are academically prepared for higher education.⁴

¹ See, Chapter 1, Table 7.
Two other trends add more financial barriers to higher education. First, federal Pell Grants, which maximize student choice among institutions of higher education and which need not be repaid, are perhaps the best form of financial aid to expand higher education opportunities for low-income students. Yet, the purchasing power of these grants has steadily decreased over the last 30 years. For example, the Pell Grant maximum award was 84 percent of the average total price of a public four-year institution in the mid-1970s. By the mid-1990s it was 34 percent of that price.\(^5\)

A second troubling trend is that in the last decade loans have continually grown as a share of total student financial aid, while the share of grants has correspondingly shrunk.\(^6\) As a consequence, by 1999-2000, the average debt of graduating federal student loan borrowers at public four-year colleges had grown to nearly $14,000; and $16,000 at private four-year colleges. The prospect of such debt levels probably discourages some students from low-income families from considering higher education.\(^7\)

Clearly students with disabilities from low-income families, along with all students from low-income families, would have their higher education opportunities improved if the amount of financial aid available was increased to match the growth in college prices and if more of the aid was provided in the form of grants rather than loans. In addition, there are special issues related to the financial barriers to higher education faced by students with disabilities from low-income families.

**It is expensive to have a disability.**

To meet their special needs persons with disabilities often receive services from a variety of professionals. These may include counselors, doctors, psychologists, and therapists of all kinds who must be visited in their respective offices, clinics, and hospitals. Insurance payments for persons with disabilities and support from public and private agencies rarely entirely cover the cost of the treatments and services they receive. The difference is made up out-of-pocket. There are also all the incidental costs of having a disability: special foods to meet dietary restrictions, cab fares to the doctor, maintenance of a wheelchair, dog food and veterinarian bills for a guide dog, over-the-counter medications and high utility bills from running computers and assistive devices. The expenses of auxiliary aids to provide accommodations to students with disabilities to give them a level playing field in higher education are generally the responsibility of the institution of higher education. However, enhancements beyond what the college provides as well as additional incidental costs of studying and being on campus must also be borne by the students with disabilities.\(^8\)

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\(^6\) Ibid., p. 12.

\(^7\) Gladieux, pp. 30-31.

For a low-income student with a disability, in theory at least, all of these additional costs of having a disability can be met from student financial aid sources. For purposes of federal student aid programs “cost of attendance,” in addition to tuition, fees, books, supplies, and room and board, includes “for a student with a disability, an allowance (as determined by the institution) for those expenses related to the student’s disability, including special services, personal assistance, transportation, equipment, and supplies that are reasonably incurred and not provided for by other assisting agencies.” The amount of federal financial assistance a student can receive equals the student’s cost of attendance minus the funds available from the student, the student’s family, or other sources. Thus, since all of the costs related to a student’s disability can be included in the cost of attendance, all of these costs can be met by federal financial aid or from another source.

In addition, student financial aid administrators have general authority under the Higher Education Act “on the basis of adequate documentation, to make adjustments on a case-by-case basis to the cost of attendance…to allow for treatment of an individual … with special circumstances.” This discretion of aid administrators buttresses their ability to meet the financial needs of students with disabilities. Unfortunately, this ideal system faces difficulties in practice.

To apply for federal student aid a student must file the Free Application for Federal Student Aid (FAFSA). The information from this form also is used by many states and institutions of higher education to award their financial aid. This form does not include any questions related to the student’s disability status or any other special conditions. It advises the student: “If you or your family has unusual circumstances not shown on this form … that might affect your need for student financial aid, submit this form and then consult with the financial aid office at the college you plan to attend.” Thus, for students with disability to have the expenses related to their disabilities included in the cost of attendance, the students must again knock on the door, in this case the door of the student financial aid office. Students with disabilities must take the initiative and make their case to the student financial aid officer.

Students with disabilities must document for the financial aid administrator the expenses related to their disabilities that are not provided for by another source. This task again calls for self-confidence and self-advocacy skills that often have not been well developed in secondary school in students with disabilities. Students with disabilities must undertake the difficult and complex task of cataloguing and documenting all of the expenses related to their disabilities and reducing that amount by support received from elsewhere, such as VR. This is a formidable challenge that would test the skills of anyone and is sometimes unreasonable for students with disabilities.

9 Section 472(9) of the Higher Education Act of 1965.
10 Section 479A(a) of the Higher Education Act of 1965.
11 As a practical matter, it is probably not possible for the FAFSA to include questions related to disability or other special circumstances of the student. This form is already often criticized for its length and complexity that make it another barrier for low-income students. The number of questions that would have to be added to take into account all of the major categories of special circumstances would add considerably to this length and complexity. It was exactly for this reason that student financial aid administrators were granted discretion to deal with the special circumstances of students.
In addition, some students with disabilities are frustrated by financial aid administrators who do not understand or are unresponsive and unsympathetic to the needs of students with disabilities.\textsuperscript{13} This is a more common complaint than aid administrators actually discriminating against a student because of his or her disability. Such discrimination is explicitly prohibited in the regulations to implement Section 504 of the Rehabilitation Act of 1973.\textsuperscript{14}

Even if students with disabilities establish their need for funds to cover all their higher education expenses, including those related to their disabilities, there may simply not be enough money available to meet those needs. One reason that the amount of money available to low-income students with disabilities is insufficient is that many federal, state, and private financial aid programs have an award maximum. For example, the maximum Pell Grant for the 2004-2005 school year will be $4,050 and the maximum amount that a freshman student can borrow from the federal Stafford Loan program is $2,650, for a total from the two programs of $6,700. If there is not support from other sources and if the total cost of attendance for a student with a disability including expenses related to the student’s disability is greater than $6,700, the student is out of luck. Awards to students up to the maximum award from Pell Grant and Stafford Loan programs are generally guaranteed.

Another reason that the amount of money available to low-income students with disabilities is inadequate is that, in the case of programs such as the federal campus-based programs, the demand for funds far exceeds the amounts available. The campus-based programs include Perkins Loans, Supplemental Educational Opportunity Grants and College Work Study. These programs have an annual funding allocation consisting of federal appropriations, institutional matching funds, and repayments of loans by previous students in the case of Perkins Loans. Every year the documented financial need of low-income students, including those with disabilities, far exceeds the available funds. Similarly, the availability of state and institutional financial aid funds also is limited by either award limits or an excess of demand compared to funding.

In short, improving self-advocacy by students with disabilities and their skills in documenting their disability-related expenses and developing the knowledge and sensitivity of financial aid administrators does not matter if there is not enough money available to meet all the demonstrated need of students with disabilities. Currently, fully meeting the needs of students with disabilities would require diverting resources from other low-income students. This would not be a just or desirable result. The most important policy change required to meet the financial needs of low-income students with disabilities is to expand the amount of financial aid available for all low-income students. Otherwise the process becomes a matter of rationing and redistributing limited financial aid dollars among various groups of financially needy students, including those with disabilities.


\textsuperscript{14} 34 C.F.R. 104.46.
It takes a lot of time to have a disability

Generally, students with disabilities in higher education can do academically what their peers without disabilities can do but cannot do it as fast. Students with disabilities may have conditions that slow them down in general. For example, it takes longer to walk from point A to point B if your energy and stamina are sapped by chronic illness. A person in a wheelchair or with cerebral palsy needs more time to bathe, dress, shop, and accomplish other self-care tasks. Students with disabilities have multiple demands on their time for the treatments and services they require to meet their needs apart from their studies. Trips to doctors, therapists, counselors, and administrators take time. It also takes time to acquire, set up, learn how to use, and maintain auxiliary learning aids such as electronic readers or videotext displays. Software bugs and computer crashes are not just inconveniences for a student with a disability who must have them to study. These technical glitches bring a halt to learning. Finally, students with disabilities often take longer to perform academic tasks. Many disabilities, particularly learning disabilities, increase the time needed to process information, the central task of most academic work. A student with dyslexia needs more time to read and understand a given amount of written text compared to a student without this disability. The speed at which an aide reads text to a blind student is slower than the reading speed of sighted students. Listening on tape to a lecture over again takes longer than getting it the first time sitting in the classroom.

Because it takes longer for persons with disabilities to perform both life and academic tasks, perhaps the most common form of accommodation for students with disabilities is more time. A reduced course load, a longer deadline for degree completion and additional time for timed examinations are among the time-related accommodations.\(^{15}\)

Given the time demands faced by students with disabilities, it follows that the time to degree completion for students with disabilities is longer than for their peers without disabilities. For example, the National Council on Disability reports that “on average students with disabilities who finish postsecondary education take twice as long to complete their degree than do their non-disabled peers….”\(^{16}\)

The longer time that it takes students with disabilities to complete their studies also implies that the cost of higher education to them is higher. The forgone income that they experience is greater for them compared to their peers without disabilities. Most importantly, even if a student with a disability is taking a reduced course load, they still have to live full time. They face additional years of room and board costs, semester fees, and the extra costs associated with their disability to make the same academic progress that their peers without disabilities make in a shorter time. They may also be charged more per credit hour or per course if they are taking less than the standard full-time course load.

The federal student aid programs, the largest source of financial aid, define a “full time” student as one who is enrolled for at least 24 semester hours (or 36 quarter hours) per year.\(^{17}\) For less-than-full-time students, Pell Grants are reduced proportionately to their degree of

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\(^{15}\) Chapter 4 noted the general importance of faculty members providing early notice of their course requirements so that students with disabilities can have enough time to determine what accommodations might be needed and to arrange for them.

\(^{16}\) National Council on Disability, p. 5.

\(^{17}\) Section 481(a)(2) of the Higher Education Act.
full-time attendance. To be eligible for a Stafford Loan, students must be enrolled at least half-time compared to the standard full-time load. Funds from campus-based programs (Supplemental Grants, Perkins Loans, and Work-Study) can be awarded to students with any level of attendance. However, first preference in granting these scarce funds is usually given by financial aid administrators to students pursuing the standard full-time course load.

Financial aid administrator discretion does not extend to waiving or modifying the statutory definition of full time for individual students with disabilities.Obviously, low-income students with disabilities are at a substantial disadvantage in receiving federal financial aid. A full-time academic course load for them, given the demands on their time, is often substantially less than the standard full-time load.

This would seem to be a situation tailor made for the exercise of financial aid administrator discretion through which a feasible “full-time” schedule for students with disabilities could be determined to provide them with a full-time amount of federal student aid. Unfortunately, financial aid administrator discretion does not extend to waiving or modifying the statutory definition of full time for individual students with disabilities. Under current law exceptions to that definition are not permitted.

This is clearly an important issue that should be addressed in the reauthorization of the Higher Education Act this year. However, simply giving financial aid administrators the authority to waive or modify the definition of a full-time student, even if only for students with disabilities, raises very serious questions. Financial aid administrators (or disability counselors) would be asked to make difficult judgments about the proportion of the standard full-time course load that was reasonable to be considered full time for a given student with a disability. Allowing modifications to the definition of full time would have important implications for the cost of the federal student aid programs, especially Pell Grants. In addition, the ability to make such changes would carry a risk of program fraud and abuse. Perhaps this issue should be studied by the Advisory Committee on Student Financial Assistance, which could fully explore the ramifications of various solutions and make recommendations to Congress and the Secretary of Education.

Financial aid packaging

Low-income students usually receive financial aid from several sources that in combination should enable them to pay for higher education. In most cases, student financial aid administrators assemble aid from various programs into a comprehensive “package.” Low-income students with disabilities face two special issues in having their financial aid appropriately packaged.

First, financial aid for students with disabilities must frequently be packaged from a larger number of sources than the aid received by their peers without disabilities. There are very few financial aid programs specifically for students with disabilities. Therefore, these

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students and all other low-income students receive most of their financial aid from the same federal, state, and institutional programs. The largest of these are the federal programs which accounted for 68 percent of the financial aid from all sources.\footnote{19.4 percent came from institutional, 5.4 percent from state and 7.2 percent from other sources. The College Board, p. 4.}

Students with disabilities also often receive support from Supplemental Security Income (SSI), a federal program that provides financial assistance to low-income persons with disabilities who cannot work, and from the Social Security Disability Insurance (SSDI) program, a federal program that provides income to those who were insured under the program and who became disabled while employed. In addition, as noted in Chapter 3, students with disabilities can receive support from VR specifically for higher education attendance. What these sources of support have in common is that students with disabilities must seek them out, qualify for aid and bring them to the table for the financial aid administrator to combine with the other aid programs that are more typically in the standard financial aid packages.

To qualify for these non-student-aid programs, students with disabilities are, of course, obliged to fill out more forms and meet with more counselors and administrators. In addition, students with disabilities are sometimes caught in bureaucratic loops and dead ends, entangled in the competing requirements and priorities of different programs. One of the most common of these bureaucratic hurdles is the classic “first dollar/last dollar” competition between programs that should complement each other.

For example, in meeting the financial need of students with disabilities, VR counselors and financial aid administrators who control institutional financial aid funds, each want the other program to pay as much as possible up front, pay the first dollar. Then each could use the limited resources at his or her disposal to provide less aid for a particular student, topping off their aid package to pay the last dollar. Thus, they could stretch their resources further and serve a larger number of students. The low-income student with a disability ends up as the negotiator and mediator between the two sources of support, each of which demands that the other maximize its contribution first. This, of course, delays assembling an aid package and wastes the time and energy of the students with disabilities, who have little of either to spare. In sum, programs that should cooperate and coordinate to the benefit of students with disabilities often compete and battle with each other to the detriment of these students.\footnote{See, Moore, pp. 3, 4, 14, 18 and 18-22.}

Private sources of financial aid, beyond federal, state and institutional programs, often require additional applications, examinations, essays, and interviews.\footnote{These grants and scholarships from private sources constitute about 2 percent of all financial aid according to Daniel Gardner, Financial Aid for Individuals with Learning Disabilities (Washington, DC: The George Washington University, HEATH Resource Center, 2000) p. 1.} These are often too high a hurdle for low-income students with disabilities as well.

In sum, low-income students with disabilities generally have a greater need for financial aid than their peers without disabilities. But, they face additional obstacles in assembling the package of resources to pay for college. A larger burden is placed on students with disabilities who may have less capacity to bear it.
A second issue that confronts students with disabilities in assembling their financial aid is the standard rules for packaging aid. Financial aid administrators have standard packaging rules that typically provide each financially needy student with a mix of gift aid, grants that need not be repaid, and self help, loans, and work. Students with disabilities may not be able to work during the school year because of limitations of their time, skills, or capacity for work. Packaging rules built on an expectation of summer work earnings also may be inappropriate for students with disabilities for the same reasons. If they do work, students with disabilities may face losses in income from other sources, such as SSI. Students with disabilities may also be particularly leery of borrowing in light of concerns about their future job and income prospects. These students may especially need additional counseling about available loan deferment options related to low-income and disability status that could put their minds somewhat at ease.

Professional organizations of student financial aid administrators must provide in-service training opportunities to improve their members’ understanding of the special issues and circumstances facing low-income students with disabilities. In particular, a greater appreciation is needed of the financial burdens of having a disability, the time demands faced by those with disabilities, the multiple and complex sources from which students with disabilities derive support that require effective coordination, and the inappropriateness of applying standard packaging rules to students with disabilities.

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21 See, for example, HEATH, Creating Options, p. 9.