

2. DEMOGRAPHIC CHARACTERISTICS OF YOUTH WITH DISABILITIES

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The nature of a student's disability can be a powerful influence on his or her experiences, both in school and out of school. Especially during adolescence, other fundamental characteristics also help shape individuals' development, relationships, experiences, and achievements. At this time of life, a single year of age can make a major difference in both competence and independence. Gender is a defining human characteristic at any age, and during adolescence, when people are exploring their sexuality and gender roles, it can shape their experiences and choices in powerful ways. Race/ethnicity and language background can be associated with rich cultural traditions, patterns of relationships within families and communities, and strong group identification. All of these factors can generate important differences in values, perspectives, expectations, and practices.

Thus, understanding the demographic makeup of youth with disabilities is crucial in interpreting NLTS2 findings for youth with disabilities as a whole and for youth with particular disability classifications. It also is a foundation for interpreting comparisons between youth with disabilities and those in the general population.

This chapter reports the variety of disabilities among middle- and high-school-age youth with disabilities and describes other traits that may partially explain their experiences.¹ First, the disabilities and demographic characteristics of youth with disabilities as a whole are presented and their demographic characteristics compared with those of youth in the general population. Then demographic differences of youth in different primary disability categories are discussed.

Primary Disabilities of Youth

In the 2000-01 school year, students who received special education constituted 13% of all students enrolled in grades 7 through 10.² Exhibit 2-1 depicts the primary disability classifications assigned by schools to those students (Office of Special Education Programs, 2002).

Almost two-thirds of students receiving special education in this age group are classified as having a learning disability (62%). Youth with mental retardation and emotional disturbances comprise 12% and 11% of students, respectively. Another 5% of youth are classified as having other health impairments, and 4% are identified as having speech impairments. The seven remaining disability categories each are 1% or fewer of students; together they comprise about 5% of youth with disabilities. Thus, when findings are presented for youth with disabilities in this age group as a whole, they are heavily influenced by the experiences of youth with learning disabilities.

¹ Analyses similar to those reported in this chapter were conducted for elementary and middle school students as part of the Special Education Elementary Longitudinal Study (SEELS) and are reported in Marder and Wagner (2002).

² General student enrollment is available by grade level rather than age. Grades 7 through 10 were used in calculating the general student enrollment (National Center for Education Statistics, 2001).

**Exhibit 2-1
PRIMARY DISABILITY CATEGORIES OF YOUTH WITH
DISABILITIES AGES 13 THROUGH 16**

Primary Disability Classification	Federal Child Count ^a		NLTS2 Weighted Percentage
	Number	Percentage	
Learning disability	1,130,539	61.8	62.0
Speech/language impairment	76,590	4.2	4.0
Mental retardation	213,552	11.7	12.2
Emotional disturbance	203,937	11.2	11.4
Hearing impairment	22,001	1.2	1.3
Visual impairment	8,013	.4	.5
Orthopedic impairment	21,006	1.2	1.2
Other health impairment	98,197	5.4	4.6
Autism	14,637	.8	.7
Traumatic brain injury	6,379	.2	.3
Multiple disabilities	34,865	1.2	1.8
Deaf-blindness	340	<.1	.2
TOTAL	1,838,848	100.0	100.0

^a Data are for youth ages 13 to 16 who were receiving services under IDEA, Part B, in the 2000-01 school year in the 50 states and Puerto Rico (Office of Special Education Programs, 2002).

It is important to note that, although this report often refers to students receiving special education as “students with disabilities,” the population of students with disabilities actually is larger than those receiving special education services. For example, parents of children under 18 in the general population report that 6% of those children have a visual impairment, 13% have a hearing impairment, and almost 16% have a speech impairment (National Center for Health Statistics, 2001). Yet, youth who receive special education primarily for those impairments taken together constitute fewer than 3% of all students (Office of Special Education Programs, 2002). This difference points

up the fact that many children and youth experience some degree of disability that does not constitute a significant challenge to their ability to learn in traditional school settings and thus does not qualify them for special education.

The weighted distribution of primary disability categories assigned to NLTS2 youth by schools and districts very closely approximates that of the youth with disabilities in the nation. Thus, as stated in Chapter 1, weighted findings presented in this report provide an accurate picture of the characteristics, experiences, and achievements of youth with the range of disabilities highlighted in Exhibit 2-1.

Age and Grade Level

The middle and high school years are times in which most youth experience tremendous growth in many domains. Knowing a youth’s age provides an important context for understanding his or her experiences, but it also is important to recognize that there are wide differences in the ages at which youth mature in various ways. Although there are characteristics that are typical for adolescents of particular ages, the ages and rates at which young people change and reach milestones vary widely.

Although the youth included in NLTS2 were ages 13 to 16 when they were selected, by the time data were collected from parents, some of the 13-year-olds had turned 14 and some 16-year-olds had turned 17. Therefore, findings are reported here are for 13- through 17-year-old youth (Exhibit 2-2).

**Exhibit 2-2
AGE AND GRADE LEVEL
OF YOUTH REPRESENTED
IN NLTS2**

	Percentage	Standard Error
Age		
13 or 14	32.0	1.4
15	23.0	1.2
16	26.0	1.3
17	19.0	1.1
Grade level		
7	11.5	1.0
8	24.3	1.3
9	24.5	1.3
10	24.1	1.3
11 or above	14.1	1.1
Ungraded	1.2	.3

Source: NLTS2 Wave 1 parent interviews.

The students' grade levels³ mirror the distribution of age, with fewer students in seventh grade (12%) and the upper grades (14% in grade 11 or above) than at other grade levels. One percent of students are not assigned to a grade level. Subsequent reports from NLTS2 will describe school programs for students at these different grade levels.

Each age cohort represents all youth receiving special education services at that age, regardless of the age at which they were identified. Thus, for example, 13-year-olds include students identified as eligible for special education at age 13 and all those identified at earlier ages who still are receiving services at age 13. However, they do not include any students who received special education at earlier ages but are no longer receiving services at age 13 (e.g., a 6-year-old whose articulation impairment was ameliorated through speech therapy by age 10).

Further, each age cohort does not include students who left school at earlier ages. For example, the cohort of

students selected for the sample between their 16th and 17th birthdays does not include students who left school before they turned 16. Early school leavers are not equally distributed across the disability categories; for example, youth with emotional disturbances are more likely to drop out early than youth with sensory impairments (Wagner, 1991). Thus, the disability mix shifts across the age cohorts because some disabilities are more prevalent for younger students and others do not emerge until later, and because youth with some types of disabilities are more likely than others to leave school early.

Youth are distributed across the age groups in a similar pattern within each disability category (Exhibit 2-3), with one exception. Almost half of 13- to 17-year-olds with speech impairments are ages 13 or 14, making them significantly younger as a group than youth in most other disability categories ($p < .001$). This pattern suggests that youth with speech impairments are more likely to be identified as having a disability or to begin receiving services earlier than others, or that their need for special education services is ameliorated as they age.

Gender

Whereas youth in the general population are split about evenly between boys and girls, almost two-thirds of youth with disabilities in the NLTS2 age range are boys (Exhibit 2-4). Some research has suggested that the higher proportion of boys among students receiving special education results from schools using identification and assessment practices that inaccurately identify boys as having some kinds of disabilities more often than girls (Shaywitz & Shaywitz, 2001). However, the National Early Intervention Longitudinal Study (NEILS), which includes a nationally representative sample of children with disabilities or developmental delays or who are at risk of delay and who are ages birth to 30 months, found a similar proportion (61%) of boys

³ Grade levels are for the 2000-01 school year. By the time data were collected from parents at the end of that school year, 1% of youth were no longer enrolled in school, although they continue to be included in NLTS2.

Exhibit 2-3
AGE AND GRADE LEVEL OF YOUTH REPRESENTED IN NLTS2,
BY DISABILITY CATEGORY

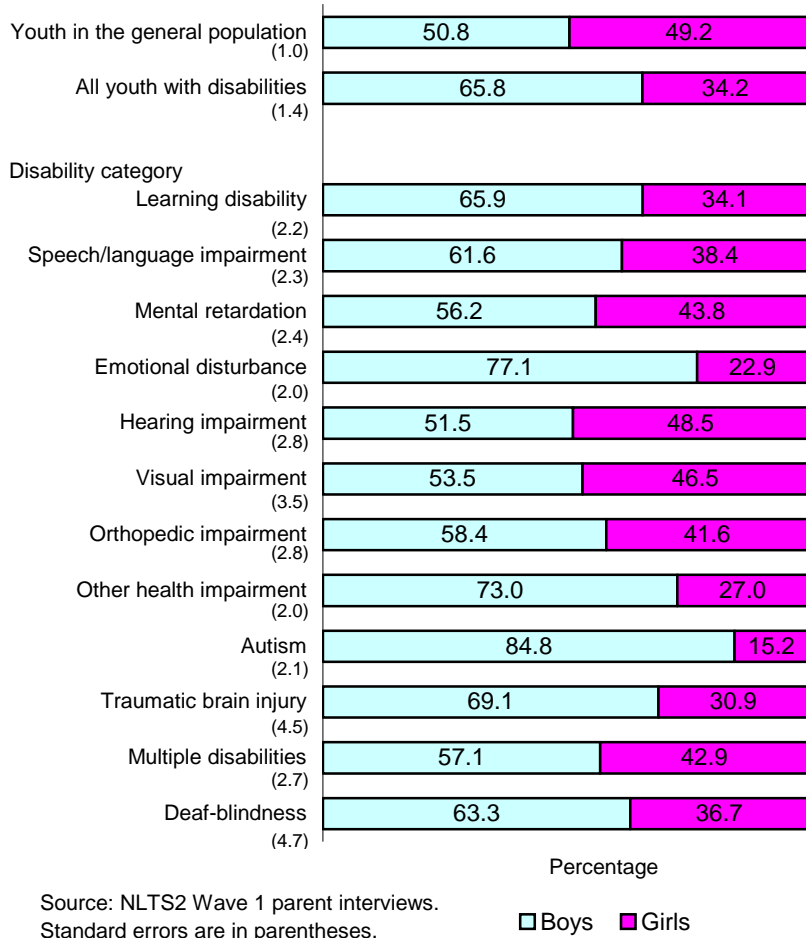
	Learning Dis-ability	Speech/ Language Impair-ment	Mental Retar-dation	Emotional Distur-bance	Hearing Impair-ment	Visual Impair-ment	Orthopedic Impair-ment	Other Health Impair-ment	Autism	Trau-matic Brain Injury	Multiple Disabili-ties	Deaf-Blind-ness
Percentage reporting age as:												
13 or 14	32.8 (2.1)	45.1 (2.3)	27.3 (2.1)	29.8 (2.1)	30.3 (2.5)	29.7 (3.2)	28.3 (2.5)	31.9 (2.1)	32.6 (2.8)	25.5 (4.2)	26.1 (2.3)	35.7 (4.6)
15	23.0 (1.9)	22.4 (1.9)	23.9 (2.0)	22.5 (2.0)	20.5 (2.2)	20.3 (2.8)	25.4 (2.4)	22.9 (1.9)	23.9 (2.5)	22.2 (4.0)	21.4 (2.2)	22.2 (4.0)
16	26.0 (2.0)	19.9 (1.8)	27.3 (2.1)	26.1 (2.1)	27.7 (2.4)	26.0 (3.1)	24.3 (2.4)	26.2 (1.9)	25.4 (2.6)	32.3 (4.5)	31.2 (2.5)	20.1 (3.9)
17	18.2 (1.7)	12.7 (1.5)	21.5 (1.9)	21.6 (1.9)	21.6 (2.2)	24.0 (3.0)	22.0 (2.3)	18.9 (1.7)	18.1 (2.3)	19.9 (3.9)	21.3 (2.2)	22.0 (4.0)
Percentage reporting grade level as:												
7	10.8 (1.5)	16.5 (1.8)	12.9 (1.7)	7.8 (1.4)	10.9 (1.8)	10.0 (2.1)	11.0 (1.7)	10.9 (1.5)	9.9 (1.6)	9.3 (2.7)	10.0 (1.6)	15.3 (3.7)
8	23.8 (2.1)	31.8 (2.3)	21.2 (2.0)	23.3 (2.1)	22.6 (2.4)	19.1 (2.8)	23.7 (2.3)	23.4 (2.0)	22.5 (2.3)	22.9 (3.8)	16.7 (2.0)	21.8 (4.2)
9	24.5 (2.1)	22.0 (2.0)	25.3 (2.1)	28.2 (2.3)	22.7 (2.4)	20.7 (2.9)	23.5 (2.3)	27.9 (2.1)	23.6 (2.3)	20.6 (3.7)	23.7 (2.3)	21.3 (4.1)
10	25.1 (2.1)	18.0 (1.9)	24.3 (2.1)	24.6 (2.2)	25.5 (2.5)	21.5 (2.9)	23.8 (2.3)	22.6 (2.0)	20.5 (2.2)	32.4 (4.3)	21.2 (2.2)	17.6 (3.8)
11 or above	15.3 (1.9)	11.3 (1.6)	11.8 (1.7)	14.4 (1.9)	15.4 (2.2)	22.7 (3.0)	12.1 (2.9)	14.6 (1.7)	11.8 (1.9)	12.2 (3.0)	10.5 (1.7)	8.4 (2.9)
Ungraded/ multigrade	.6 (.4)	.5 (.3)	4.6 (1.2)	1.7 (.6)	2.9 (1.0)	6.0 (1.7)	5.8 (1.5)	.7 (.5)	11.6 (1.9)	2.7 (1.4)	17.9 (2.2)	11.7 (3.2)

Source: NLTS2 Wave 1 parent interviews.
Standard errors are in parentheses.

among infants and toddlers with disabilities (Hebbeler et al., 2001). Thus, the disproportionate number of boys among children with disabilities appears at very early ages, before school practices come to bear. The pattern holds constant across the age range of students represented in NLTS2 and is consistent with patterns identified among youth with disabilities in elementary school and early middle school (Marder & Wagner, 2002). It also appears about equally in all racial/ethnic groups. Whatever the reason for the disproportionate number of boys among youth with disabilities, it is important to understand that the experiences of youth with disabilities as a group disproportionately reflect the experiences of boys.

Boys make up between 62% and 73% of most disability categories, but 77% of youth with emotional disturbances and almost 85% of youth with autism are boys. In contrast, among youth with mental retardation or hearing or visual impairments, the percentages come close to the distribution of boys and girls in the general population, with boys comprising 52% to 56% of these groups. Thus, youth with different disability classifications can be expected to differ in their experiences and achievements because of their different gender balance as well as their disability differences.

**Exhibit 2-4
GENDER OF YOUTH,
BY DISABILITY CATEGORY**



Racial/Ethnic Background

Research has provided considerable evidence that disability is “linked to the conditions of poverty, family structure, and minority status. Analyses of national data consistently find nonrandom rates of occurrence for illness, injury, and chronic health conditions across racial and ethnic boundaries” (Center on Emergent Disability, 2001; see also Bradsher, 1995; Fujiura, 1998). A recent comprehensive report about minority participation in special education and gifted education has documented a host of personal, social, and environmental factors that are linked to a higher rate of disability among minority and low-income individuals and

households, suggesting the complex intertwining of these factors for youth with disabilities (National Research Council, 2002).

Youth with disabilities differ in some respects from youth in the general population in terms of their racial/ethnic backgrounds (Exhibit 2-5). The phenomenon of overrepresentation of minorities in special education, currently a focus of considerable research and policy interest, is apparent for African American youth, who make up 16% of youth in the general population but 21% of youth with disabilities ($p < .001$). In contrast, white youth make up a smaller percentage of youth with disabilities than they do of the general population (62% vs. 66%, $p < .05$). However, comparisons of similar-age youth with disabilities represented by NLTS and NLTS2 indicate that, over time, the racial/ethnic distribution of youth with disabilities has become more similar to that of the general population (Wagner, Cameto, & Newman, 2003).

**Exhibit 2-5
RACE/ETHNICITY OF YOUTH
WITH DISABILITIES AND YOUTH IN
THE GENERAL POPULATION**

	Youth with Disabilities ^a	Youth in the General Population ^b
White	62.1 (1.5)	66.1 (.9)
African American	20.7 (1.3)	15.8 (.7)
Hispanic	14.1 (1.1)	12.8 (.7)
Other	2.7 (.5)	5.2 (.4)

^a Sources: NLTS2 Wave 1 parent interviews and data provided by school districts.

^b Data for 13- through 17-year-olds from the National Household Education Survey, 1999.
Standard errors are in parentheses.

Such differences in the distributions of the various racial/ethnic groups occur across the age range of children and youth with disabilities. Although African Americans comprise 15% of the general population of infants and toddlers, they make up 21% of infants and toddlers with disabilities (Hebbeler et al., 2001). Similarly, African Americans are 17% of the general population of youth ages 6 through 13 but are 19% of students with disabilities of the same ages (Marder & Wagner, 2002). Differences in the proportion of Hispanics among youth with disabilities and youth in the general population are not statistically significant.

The disproportionality of minorities among youth with disabilities is concentrated in a few categories. The racial/ethnic composition of most disability categories does not differ significantly

from the general population of youth. However, African Americans make up significantly larger proportions of youth with mental retardation (33%), emotional disturbance (25%), and autism (24%) than their proportion of the general population, and Hispanics make up a significantly larger proportion of youth with hearing impairments (17%) and significantly smaller proportions of youth with mental retardation (10%), other health impairments (8%), and autism (9%) than their proportion of the general population (Exhibit 2-6). These racial/ethnic differences between disability categories may contribute to differences in the experiences of youth, apart from their differences in disability.

**Exhibit 2-6
RACE/ETHNICITY, BY DISABILITY CATEGORY**

Percentage whose race/ethnicity was: ^a	Learning Dis- ability	Speech/ Language Impair- ment	Mental Retar- dation	Emotional Distur- bance	Hearing Impair- ment	Visual Impair- ment	Ortho- pedic Impair- ment	Other Health Impair- ment	Autism	Trau- matic Brain Injury	Multiple Disabili- ties	Deaf- Blind- ness
White	62.3 (2.3)	64.7 (2.3)	54.8 (2.4)	61.4 (2.4)	59.9 (2.8)	62.1 (3.4)	64.3 (2.6)	76.6 (2.0)	62.0 (2.6)	68.5 (4.2)	65.6 (2.5)	62.4 (4.7)
African American	18.4 (1.9)	17.7 (1.8)	33.3 (2.3)	25.0 (2.2)	17.5 (2.1)	20.2 (2.8)	15.5 (2.0)	13.3 (1.6)	23.7 (2.3)	17.9 (3.5)	18.4 (2.1)	14.7 (3.4)
Hispanic	16.2 (1.8)	14.2 (1.7)	9.6 (1.4)	10.2 (1.5)	17.3 (2.1)	14.0 (2.4)	16.4 (2.0)	7.7 (1.2)	8.9 (1.5)	10.0 (2.7)	11.6 (1.7)	19.5 (3.9)
Asian/Pacific Islander	1.0 (.5)	2.1 (.7)	1.2 (.5)	1.4 (.6)	4.1 (1.1)	3.0 (1.2)	3.2 (1.0)	1.2 (.5)	4.0 (1.0)	2.3 (1.4)	1.8 (.7)	2.9 (1.6)
American Indian/ Alaska Native	1.3 (.5)	.9 (.5)	.5 (.3)	1.6 (.6)	1.2 (.6)	.3 (.4)	.4 (.3)	.7 (.4)	.7 (.4)	1.2 (1.0)	2.3 (.8)	.0 (.0)

Sources: NLTS2 Wave 1 parent interviews and data provided by school districts.

^a Table does not include youth reported as having multiple or "other" backgrounds.
Standard errors are in parentheses.

Language Used at Home

English and Spanish are the only languages in which the NLTS2 parent interview and family survey were conducted. Consequently, youth who use primarily languages other than English or Spanish in the home are almost certainly underrepresented in the study. Among the population represented, parents of 92% of youth report that English is the language used at home most of the

**Exhibit 2-7
PRIMARY LANGUAGE USED IN THE HOMES
OF YOUTH WITH DISABILITIES,
BY RACE/ETHNICITY**

	All	White	African American	Hispanic
Percentage who primarily use at home:				
English	92.1 (.9)	97.8 (.6)	94.8 (1.5)	68.7 (4.1)
Spanish	4.9 (.7)	.5 (.3)	2.9 (1.1)	28.0 (4.0)
Sign language	.5 (.2)	.6 (.3)	.1 (.2)	.4 (.6)
Other ^a	2.5 (.5)	1.1 (.4)	2.2 (1.0)	2.9 (1.5)

Sources: NLTS2 Wave 1 parent interviews and data provided by school districts.
^a Includes students who do not use spoken language.
 Standard errors are in parentheses.

time (Exhibit 2-7). Because of the language constraint imposed in data collection, it is not surprising that almost all youth who do not use English in the home use Spanish (5%). Another 3% of youth reportedly use a language other than English or Spanish at home most of the time, and sign language is most often used at home by fewer than 1% of students.

English is the predominant language at home for youth in all racial/ethnic categories; however, its prominence ranges from 98% of white youth to 69% of Hispanic youth, 28% of whom use Spanish at home most of the time.

The proportion of youth who use English most of the time at home is close to 90% or greater for all disability categories except hearing impairment and deaf-blindness (Exhibit 2-8). Among

those students, 22% and 13%, respectively, use sign language most of the time at home. Between 3% and 7% of youth in most disability categories use primarily Spanish at home.

**Exhibit 2-8
PRIMARY LANGUAGE USED AT HOME,
BY DISABILITY CATEGORY**

	Learning Dis- ability	Speech/ Language Impair- ment	Mental Retar- dation	Emotional Distur- bance	Hearing Impair- ment	Visual Impair- ment	Ortho- pedic Impair- ment	Other Health Impair- ment	Autism	Trauma- tic Brain Injury	Multiple Disabili- ties	Deaf- Blind- ness
Percentage who primarily use at home:												
English	92.0 (1.3)	88.9 (1.5)	93.7 (1.2)	94.8 (1.1)	70.0 (2.6)	90.0 (2.1)	91.4 (1.6)	94.9 (1.0)	90.1 (1.6)	91.3 (2.5)	90.0 (1.6)	77.9 (4.3)
Spanish	5.3 (1.1)	7.1 (1.3)	3.6 (.9)	3.6 (.9)	5.0 (1.2)	6.7 (1.7)	6.7 (1.4)	3.4 (.9)	4.1 (1.1)	5.0 (1.9)	4.0 (1.1)	6.2 (2.5)
Sign language	.0	.0	.7 (.4)	.3 (.3)	21.8 (2.4)	.2 (.3)	.1 (.2)	.2 (.2)	.2 (.2)	.2 (.4)	1.2 (.6)	13.0 (3.5)
Another language	2.7 (.8)	4.0 (1.0)	1.9 (.7)	1.3 (.6)	3.2 (1.0)	3.0 (1.2)	1.9 (.8)	1.6 (.6)	5.6 (1.2)	3.5 (1.6)	4.9 (1.2)	2.8 (1.7)

Source: NLTS2 Wave 1 parent interviews.
 Standard errors are in parentheses.

Summary

The findings reported in this chapter demonstrate that, as a group, youth with disabilities are both similar to and different from their peers in the general population. Considerably greater variation is apparent when we look at youth within each primary disability category. Even in such fundamental aspects as gender and racial/ethnic background, youth with different primary disabilities differ considerably from each other.

Although students receiving special education include youth in 12 primary disability categories, two-thirds are classified as having learning disabilities as their primary disability. NLTS2 represents youth who were 13 through 17 years old when data were collected; however, most youth for whom data were collected were in the 14- to 16-year-old age range, with the exception that youth with speech/language impairments had a larger proportion of younger students than other categories. Two-thirds of the youth represented are boys; however, boys make up approximately 55% of youth with hearing impairments, mental retardation, or visual impairments. In contrast, they are 77% of youth with emotional disturbances and 85% of youth with autism.

African Americans are somewhat overrepresented among youth with disabilities relative to the general population, although less now than earlier. This overrepresentation is consistent across the age range of children and youth with disabilities; however, it is disproportionately concentrated in a limited number of disability categories. African Americans make up a particularly large proportion of youth with mental retardation relative to their proportion in the general population. In contrast, the percentage of Hispanic students is particularly small among students with other health impairments, autism, or mental retardation.

This overview of some fundamental features of the national population of youth with disabilities that is represented by NLTS2 begins to lay a foundation for understanding the flow of findings that will be produced by the study in the coming years. Understanding the differences between youth with disabilities and the general population, and between youth with different kinds of primary disabilities, is essential to interpreting other differences between those groups in their experiences and achievements, both in and outside of school.

The next chapter extends the effort to profile youth with disabilities by examining important characteristics of the households from which they come.