

II. STUDENT CHARACTERISTICS

Infants and Toddlers Served Under IDEA

Preschoolers Served Under IDEA

Students Ages 6 Through 21 Served Under IDEA

**A Changing Population: Individual and Household
Characteristics of High School Students With Disabilities**

Infants and Toddlers Served Under IDEA

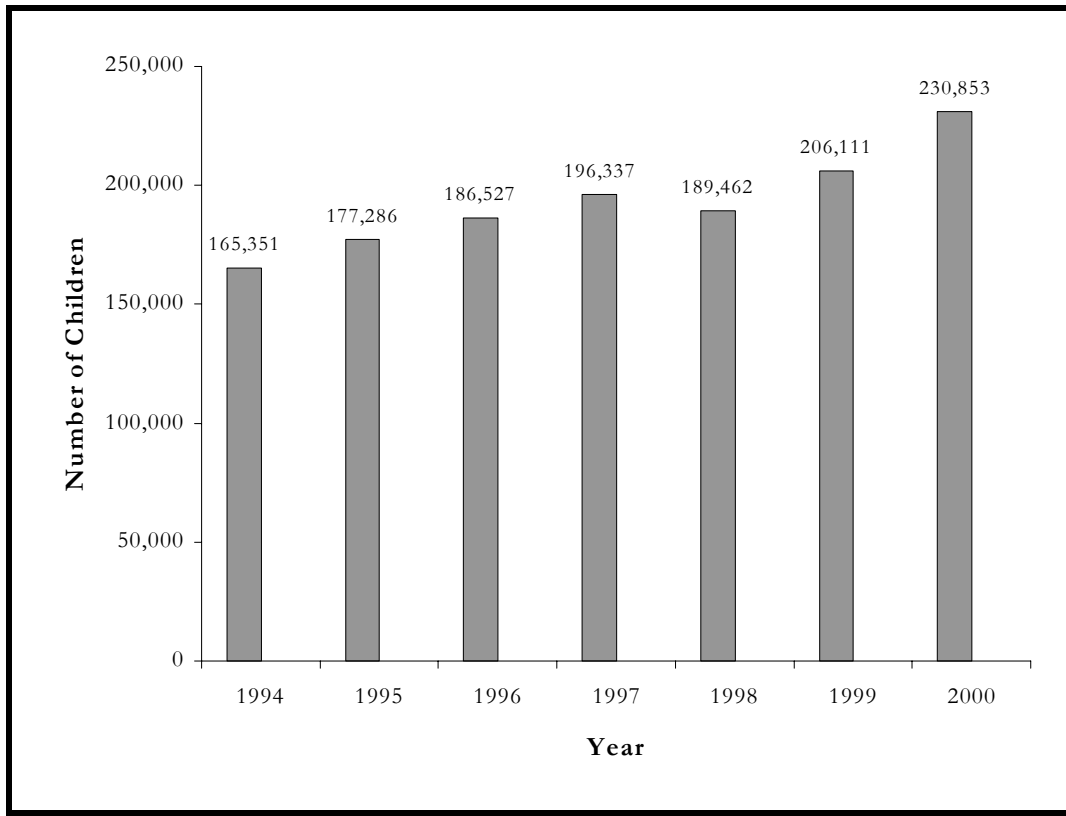
The Education of the Handicapped Act Amendments of 1986 established the Early Intervention Program for Infants and Toddlers with Disabilities under Part H (now Part C) of the Individuals with Disabilities Education Act. The program assists states in developing and implementing a statewide, comprehensive, coordinated, multidisciplinary, interagency system that makes early intervention services available to all children with disabilities from birth through age 2. Full implementation of the program in all states and outlying areas was achieved by September 30, 1994 (U.S. Department of Education, 2000).

This module presents state-reported data about the number of infants and toddlers with disabilities receiving services in 2000-01 and the racial/ethnic distribution of this population. It also presents 1999-2000 data on the environments in which services were provided and the percentage of infants and toddlers served who transitioned to Part B services.

The Number of Children Served Under IDEA, Part C

Since 1994, the number of infants and toddlers served under Part C has grown 40%, from 165,351 on December 1, 1994, to 230,853 on December 1, 2000 (see Table AA9 and Figure II-1). After excluding children from the outlying areas, these counts represent 1.4% of the 1994 birth through 2-year-old population and 2% of the 2000 birth through 2-year-old population (see Table AH1). The increase in the number of children receiving services remained steady from 1994 to 1997 but declined in 1998 before resuming its upward direction. Anecdotal reports from states have attributed the increase in the child count to improved Child Find efforts, more efficient data collection procedures, and staff training. Part of the decline in the 1998 Part C child count may be accounted for by changes in the administrative data collection procedures in Illinois and Ohio. In 1998, the lead agency and thus the responsibility for collecting and reporting Part C data in Illinois passed from the Department of Education to the Department of Human Services. Such a change can lead to volatility in the data because different agencies may have different counting procedures and priorities. In the case of Illinois, the change in lead agency resulted in a 31% drop in the number of infants and toddlers served, a decline of 2,403 children. Also in 1998, Ohio changed to a new data collection system it believes is more reliable and able to eliminate possible duplication in the child count that the state experienced in previous data collection years. This change resulted in a 77% drop in Ohio's infant and toddler count, a decline of 17,756 children.

Figure II-1
Number of Infants and Toddlers Served Under IDEA, Part C,
1994 Through 2000



Source: U.S. Department of Education, Office of Special Education Programs, Data Analysis System (DANS).

By 1999, the Illinois and Ohio transitions were complete, and the 10% increase appears to be an adjustment for the aberrant dip in the count for the previous year. The 12% increase in the child count from 1999 to 2000 was the largest 1-year increase since the Part C data collection was fully implemented in 1994. Most states and outlying areas contributed to this increase; however, some states' child count numbers rose at a higher rate than expected. Illinois' child count rose from 8,104 to 11,506, a 42% increase. Illinois attributed this large increase to continued improvements in Child Find efforts. West Virginia reported a 55% increase in its child count, from 833 in 1999 to 1,288 in 2000. The state reported that it was rebounding from difficulties experienced in converting from a database and paper transfer process to a newly created data application. Only seven states and two outlying areas reported a decrease in the number of infants and toddlers served under Part C in 2000. All other states and outlying areas reported increases in Part C child count.

In the 2000 child count, 16% of the total number of children served under Part C were birth through 1 year old. Thirty-two percent of the children served were 1 through 2 years old, and 53% were between 2 and 3 years of age (see Table AH1). Since 1994, the distribution of discrete age groups in the child count has varied only slightly. From year to year, the birth through 1-year-old age group ranged between 16% and 18% of the total; the 1- through 2-year-old age group ranged between 32% and 33%, and the 2- through 3-year-old age group has ranged between 49% and 53% from 1994 to 2000.

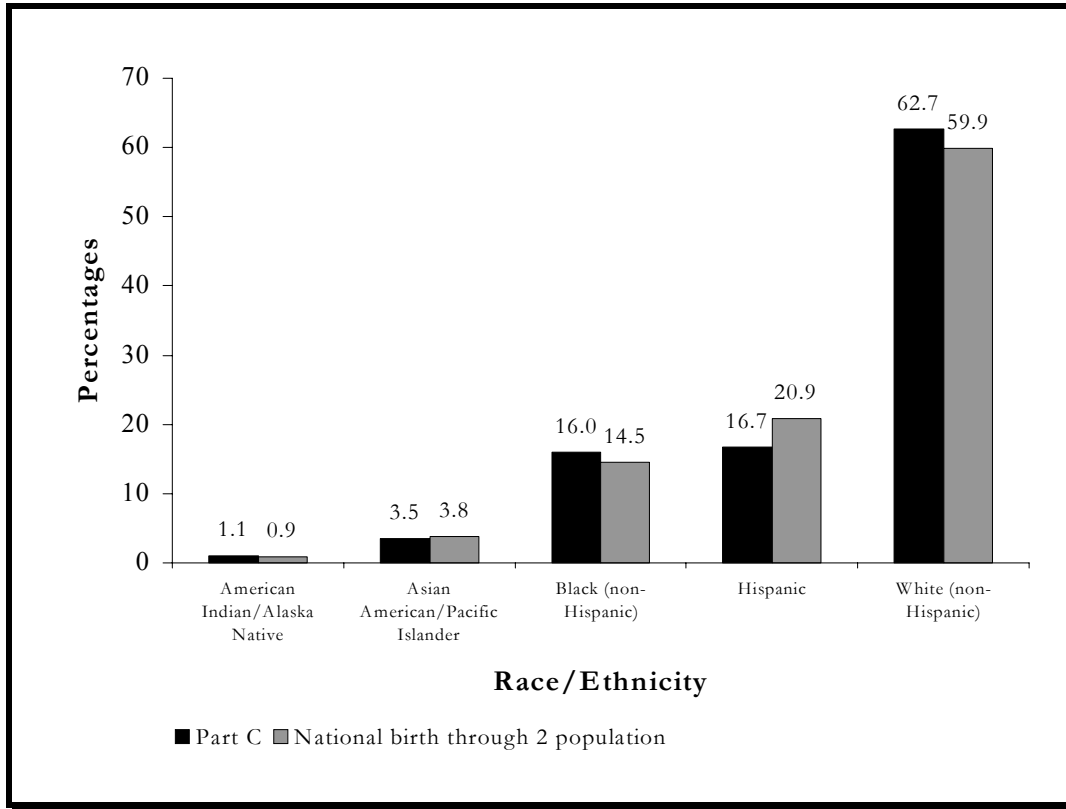
In 2000, nine states and one outlying area reported serving at-risk infants and toddlers under Part C: California, Hawaii, Indiana, Massachusetts, Nevada, New Hampshire, New Mexico, North Carolina, West Virginia, and Guam. An at-risk child is defined as a child under age 3 who would be at risk of experiencing a substantial developmental delay if early intervention services were not provided. Of the states that reported serving at-risk infants and toddlers in the 2000 child count, two reported more than half of their Part C population in the at-risk category: California reported 75% and Hawaii reported 54% of their Part C populations as at risk. New Mexico reported 37%, Indiana reported 14%, and North Carolina reported 13% of their Part C populations in this category. The remaining five states and one outlying area reported serving 4% or less of their child count in the at-risk category (see Tables AH1 and AH2).

Race/Ethnicity of Infants and Toddlers Served

This section describes the racial/ethnic distribution of the children served under Part C in 2000. The collection of race/ethnicity data under IDEA began in 1998. Because New York has not yet submitted race/ethnicity data for 2000, and the data collection is still somewhat new, the figures reported here should be interpreted cautiously. According to the 2000 child count, 63% of the children served under Part C were classified as White (non-Hispanic); 17% were Hispanic; 16% were Black (non-Hispanic); 4% were Asian/Pacific Islander; and 1% were American Indian/Alaska Native. There has been little change in the distribution of children served by race/ethnicity since these data were first collected in 1998. A comparison of the percentage of children served under Part C with the birth through 2 population of the 50 states, the District of Columbia, and Puerto Rico is shown in Figure II-2. The data from Summary File 1 of the 2000 Census indicates that 60% of the national birth through 2 population was White (non-Hispanic); 21% was Hispanic; 15% was Black (non-Hispanic); 4% was Asian/Pacific Islander; and 1% was American Indian/Alaska Native (see Tables AF6 and AH7).¹

¹ Data from the 2000 Census are available from the U.S. Census Bureau web site at www.Census.gov.

Figure II-2
Race/Ethnicity: National^{a/} Versus Part C Percentages



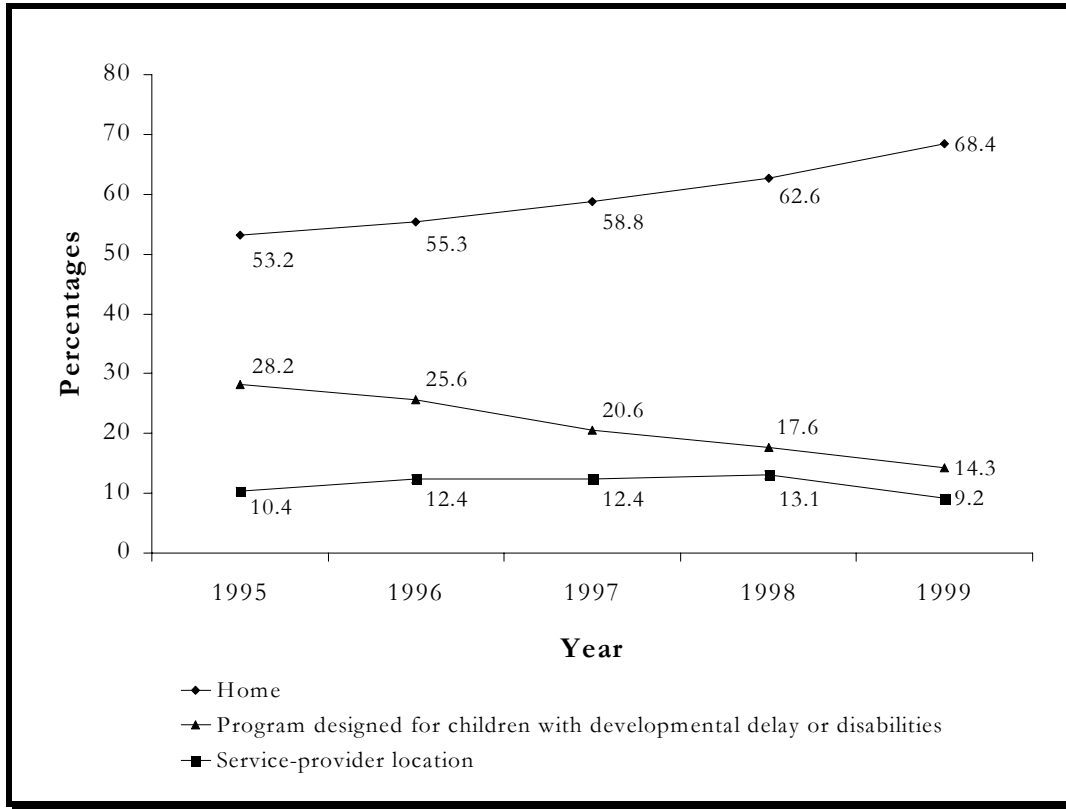
^{a/} Data from 50 states, the District of Columbia, and Puerto Rico.

Source: U.S. Department of Education, Office of Special Education Programs, Data Analysis System (DANS).

Early Intervention Service Settings for Infants and Toddlers With Disabilities

Data are collected in seven early intervention service setting categories under Part C. The categories are: program designed for children with developmental delays or disabilities, program designed for typically developing children, home, hospital (inpatient), residential facility, service provider location, and other setting. Part C of IDEA mandates states to provide services in natural environments. Natural environments include home and community settings in which children without disabilities participate. During the 1999-2000 reporting period, states reported that 68% of all early intervention services took place in the home (see Table AH5), compared with 63% served in 1998-99 and 53% in 1995-96, before the 1997 Amendments were enacted (see Figure II-3).

Figure II-3
Part C Settings, 1995 Through 1999



Source: U.S. Department of Education, Office of Special Education Programs, Data Analysis System (DANS).

Programs designed for children with developmental delay or disability were the second most reported service setting for infants and toddlers, accounting for 14% of the children served under Part C (see Table AH5). Use of this service-setting category continues to decline as states move to serve children in more natural environments. In 1995, 28% of infants and toddlers were served in this setting.

The third most reported service setting was the service-provider location, where 9% of Part C children were served in 1999 (see Table AH5). The percentage of children with disabilities served in this category has varied somewhat from year to year. In 1995, 10% of children were reported as receiving services in the service-provider location, compared with 13% in 1998.

All states and outlying areas reported 1999-2000 settings data; however, Massachusetts reported serving infants and toddlers only in the home setting category. Although Massachusetts families enrolled in Part C receive services in a variety of settings, the state reports that most services are provided in the home.

Transition to Part B

The Part C exiting data were first collected in 1998. Because 1999-2000 was only the second year exiting data were collected, the data should be interpreted cautiously. The exiting categories for reporting children who have reached the maximum age for Part C services include: Part B eligible (65,149); not eligible for Part B, exit with referrals to other programs (12,340); not eligible for Part B, exit with no referrals (6,746); and Part B eligibility not determined (12,611). Among children who had reached the maximum age for Part C services, 67.3% exited Part C eligible for Part B services. This percentage is up slightly from 1998-99 (66.0%). Another 12.7% of children who reached the maximum age for Part C services in 1999-2000 exited Part C with referrals to other programs (see Table AH6).

Summary

In 2000, the number of birth through 2-year-olds with disabilities served under Part C saw its largest 1-year increase since all states and outlying areas reported full implementation of Part C in 1994. States attribute the continued increase in child count to increased Child Find efforts, extensive staff training, improved data processing procedures, and improved data collection systems. Use of the home setting category continues to increase. During this second year of collecting exit data, states continued to report eligibility for Part B as the most common reason for exit.

Reference

U.S. Department of Education. (2000). *Twenty-second annual report to Congress on the implementation of the Individuals with Disabilities Education Act*. Washington, DC: U.S. Government Printing Office.

Preschoolers Served Under IDEA

In 1975, Congress passed the Education for All Handicapped Children Act (P.L. 94-142) after determining that millions of children with disabilities were not receiving “appropriate educational services which would enable them to have full equality of opportunity” (IDEA Amendments of 1997, §601(c)(2)(B)). Although the 1975 law ensured the provision of a free appropriate public education (FAPE) to students with disabilities, it did not mandate services for preschoolers with disabilities. Instead, children ages 3 through 5 with disabilities were served under an incentive grants program. The importance of the preschool years was reflected in the Education of the Handicapped Act (EHA) Amendments of 1986, when Congress amended Section 619 of the law to include a new Preschool Grants for Children with Disabilities Program (U.S. Department of Education, 2000). All states currently participate in the Section 619 program. In order to be eligible to receive funding under the program, states are required to make a free appropriate public education available to all children with disabilities, ages 3 through 5, residing in the state. States may also provide services, at the state’s discretion, to 2-year-old children with disabilities who will turn 3 during the school year. States were required to serve all eligible preschoolers by the 1991-92 school year (U.S. Department of Education, 2000).

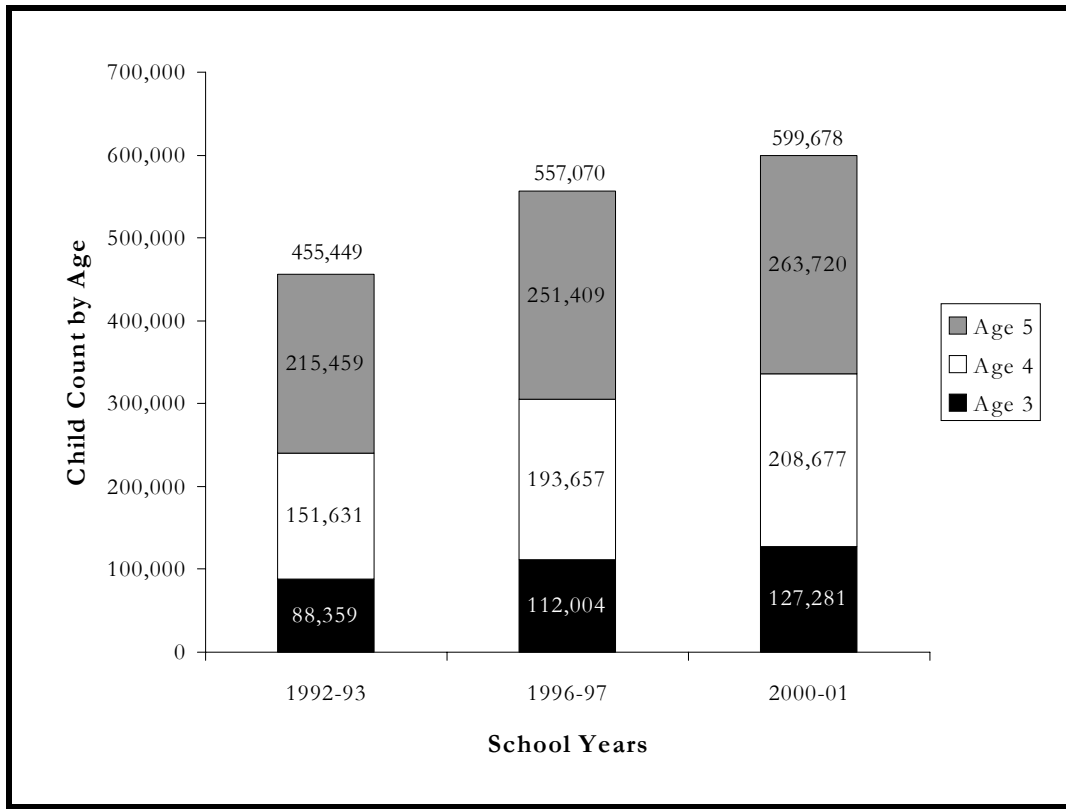
This module presents state-reported data on preschoolers with disabilities for the 2000-01 school year, including the number of children served under the Individuals with Disabilities Education Act (IDEA) and their racial/ethnic composition. The module also includes disability category and educational environment data for preschoolers served under IDEA during the 1999-2000 school year.

Number of Preschoolers Receiving Special Education Services

For the 2000-01 school year, states reported serving 599,678 children ages 3 through 5 with disabilities under IDEA (see Table AA1), up from 589,134 in 1999-2000. This number represents an increase of 144,229 preschoolers or a 31.7% growth in children served since 1992-93 (see Figure II-4). From 1992-93 to 2000-01, the number of 3-year-olds receiving services increased 44%; the number of 4-year-olds increased 37.6%, and the number of 5-year-olds receiving services increased 22.4%. Preschoolers served under IDEA accounted for 5% of the total population of children ages 3 through 5 living in the 50 states, the District of Columbia, and Puerto Rico (see Tables AA1 and AF3).¹

¹ Population data are provided from Summary File 1 of the 2000 Census, U.S. Census Bureau.

Figure II-4
Number of Preschoolers Receiving Services Under IDEA During the 1992-93, 1996-97, and 2000-01 School Years



Source: U.S. Department of Education, Office of Special Education Programs, Data Analysis System (DANS).

Comparing 1996-97 data with 2000-01 data shows a similar but less dramatic increase: 13.6% for 3-year-olds, 7.8% for 4-year-olds, and 4.9% for 5-year-olds. The continuing child count increase seen within the youngest age group may in part reflect expanded Child Find outreach activities and states' success in transitioning children from Part C to Part B.

Disability Categories of Preschool Children Served Under IDEA

P.L. 94-142 mandated the collection of disability category data on all children with disabilities, but collection of these data for children ages 3 through 5 was discontinued in the EHA Amendments of 1986. The IDEA Amendments of 1997 restored this requirement. The 24th Annual Report to Congress marks the first

Table II-1
Percentage of Preschoolers Receiving Services During 2000-01

Specific disabilities	Age 3	Age 4	Age 5	All preschoolers
Specific learning disabilities	2.6	2.9	4.1	3.3
Speech or language impairments	46.3	52.1	61.9	55.2
Mental retardation	4.1	3.7	4.8	4.3
Emotional disturbance	1.2	1.3	1.6	1.4
Multiple disabilities	2.4	2.0	2.0	2.1
Hearing impairments	1.6	1.3	1.3	1.4
Orthopedic impairments	2.3	1.7	1.6	1.8
Other health impairments	2.5	2.0	2.2	2.2
Visual impairments	0.8	0.6	0.5	0.6
Autism	2.6	2.4	2.8	2.6
Deaf-blindness	0.0	0.0	0.0	0.0
Traumatic brain injury	0.2	0.1	0.2	0.1
Developmental delay	33.4	29.9	17.0	24.9
All disabilities	100.0	100.0	100.0	100.0

Source: U.S. Department of Education, Office of Special Education Programs, Data Analysis System (DANS).

publication of disability data on preschoolers since 1987-88. The 13 disability categories are specific learning disabilities, speech or language impairments, mental retardation, emotional disturbance, hearing impairments, orthopedic impairments, other health impairments, visual impairments, multiple disabilities, deaf-blindness, autism, traumatic brain injury, and developmental delay.

As shown in Table II-1, speech or language impairment was the most prevalent disability category, accounting for 55.2% of all preschoolers served in 2000-01. Developmental delay was the next most common disability category, accounting for 24.9% of preschoolers served (see Table AA7).

The distribution of disabilities among preschoolers varied by age. For example, developmental delay was more frequent among younger preschoolers, while speech or language impairment was more frequent among older preschoolers. These variations by age may in part reflect the reclassification of preschoolers with developmental delay as more specific disabilities become apparent. The percentages

of children reported in other disability categories remained relatively small and constant across the 3- through 5-year-old range.

Educational Environments for Preschoolers With Disabilities

In 1998-99, the Federal data collection was revised to add separate categories for reporting the educational placements of preschoolers served under IDEA. The revised educational environments for preschoolers now include early childhood setting, early childhood special education setting, home, part-time early childhood/part-time early childhood special education setting, residential facility, separate school, itinerant services outside the home (optional), and reverse mainstream (optional).

During the 1999-2000 school year, 36.2% of preschoolers were served in early childhood settings, 34.0% in early childhood special education settings, and 12.9% in part-time early childhood/part-time early childhood special education settings (see Table AB1). Another 3.6% were served at home; 7.1% received itinerant services outside the home; 4.4% attended a separate school; 1.7% were served in a reverse mainstream setting; and 0.1% lived in a residential facility. These figures indicate that 60% of the preschoolers were served in environments specifically designed to serve children with disabilities, and 40% were served in typical early childhood settings or at home.² Eleven states reported serving more than 50% of their preschoolers with disabilities in early childhood settings, and 17 states reported serving fewer than 25% of their preschoolers in such settings.

Educational Environments by Race/Ethnicity

Table II-2 presents educational environment data by race/ethnicity for preschoolers served in 1999-2000. Early childhood settings were the most common placement for American Indian children (44.9%), White non-Hispanic children (36.9%), and Black non-Hispanic children (35.9%) (see Table AB9). In contrast, early childhood special education settings were the most frequently reported placement for Asian/Pacific Islander preschoolers (48.8%) and Hispanic preschoolers (40.5%). Across racial/ethnic groups, similar percentages of children were reported as being served in the home, in a residential facility, in a separate school, or in a reverse mainstream setting. When compared to other racial/ethnic groups, relatively fewer Asian/Pacific Islander children were served in part-time early childhood special education settings, and relatively fewer American Indian children were reported as receiving itinerant services outside the home.

² Texas and the District of Columbia did not report settings data for preschoolers served under IDEA.

Table II-2
Preschool Educational Environments by Race/Ethnicity, 1999-2000

Educational environments	American Indian	Asian/Pacific Islander	Black	Hispanic	White
Early childhood	44.9	24.3	35.9	29.3	36.9
Early childhood special education	30.0	48.8	33.4	40.5	33.1
Home	2.5	4.0	2.7	3.4	3.9
Part-time early childhood/part-time early childhood special education	15.2	7.9	15.3	13.2	12.1
Residential facility	0.3	0.3	0.4	0.3	0.4
Separate school	2.6	3.0	4.2	2.5	3.6
Itinerant service outside the home	3.4	10.4	7.1	9.2	8.0
Reverse mainstream setting	1.1	1.2	0.9	1.5	2.0
Total	100.0	100.0	100.0	100.0	100.0

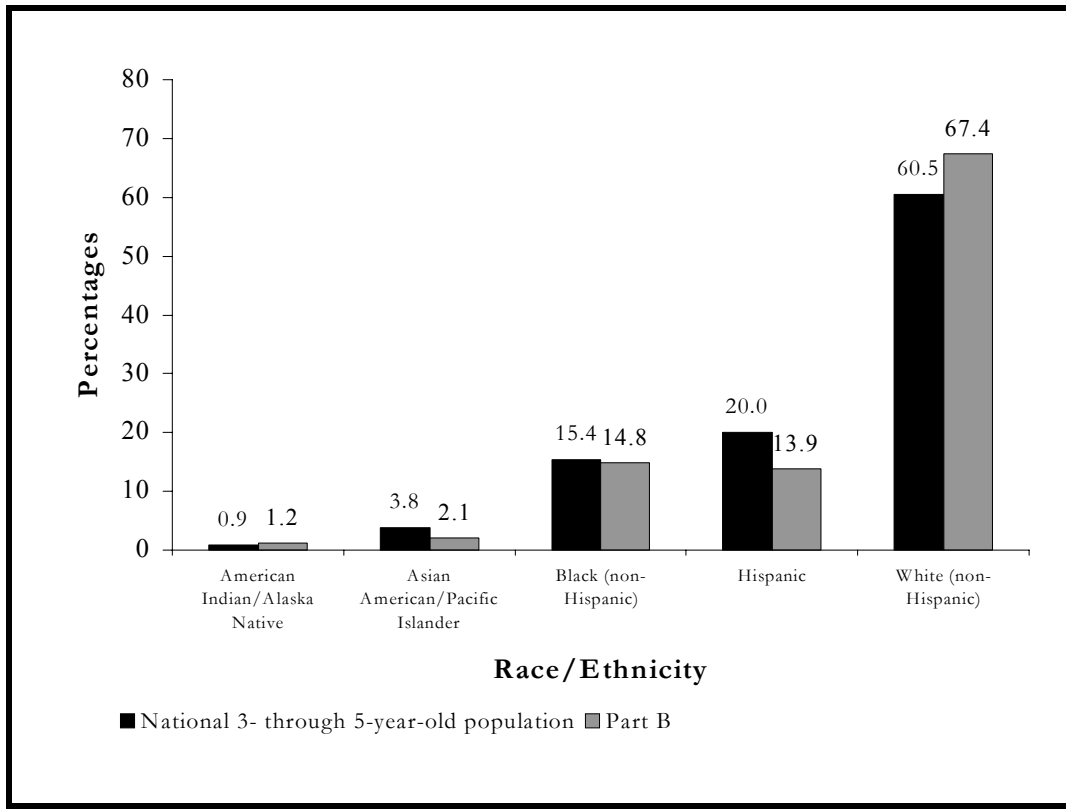
Source: U.S. Department of Education, Office of Special Education Programs, Data Analysis System (DANS).

Race/Ethnicity of Preschoolers Served Under IDEA

The IDEA Amendments of 1997 require states to submit data on the race/ethnicity of students receiving special education and related services beginning with the 1998-99 school year. This section of the module describes the racial/ethnic distribution of preschoolers served in 2000-01 and the disability distribution within each racial/ethnic group. Because New York has not yet submitted race/ethnicity data for the 2000-01 school year, the data presented here are incomplete and should be interpreted accordingly.

Appendix Table AF7 presents race/ethnicity data for the preschoolers served under Part B in 2000-01. As Figure II-5 shows, White (non-Hispanic) preschoolers were overrepresented in the Part B population. Asian American/Pacific Islander and, especially, Hispanic children were underrepresented among the preschoolers served under IDEA. For American Indian/Alaska Native and Black (non-Hispanic) preschoolers, the Part B and general populations were roughly equal.

Figure II-5
Race/Ethnicity: National^{a/} Versus Part B Percentages



^{a/} Data from 50 states, the District of Columbia, and Puerto Rico.

Source: U.S. Department of Education, Office of Special Education Programs, Data Analysis System (DANS).

Disability Distribution by Race/Ethnicity

Speech or language impairment was the most frequently reported disability category for all racial/ethnic groups with one exception: among American Indian/Alaska Native preschoolers, developmental delay was the most frequently reported category, accounting for nearly half of the children served under IDEA (see Table II-3). Among White, Hispanic, Black, and Asian/Pacific Islander preschoolers, developmental delay was the next largest disability category, but the proportion of Hispanic children reported in this category was smaller than that of other racial/ethnic groups (19.0% vs. 32.9% for Black children, 29.4% for Asian/Pacific Islanders, and 27.2% for White children).

Table II-3
Disability Distribution by Race/Ethnicity for Preschoolers Served
in 2000-01

Specific disabilities	American Indian/ Alaska Native	Asian/ Pacific Islander	Black	Hispanic	White
Specific learning disabilities	3.3	3.5	3.1	6.4	2.3
Speech or language impairments	39.4	42.6	47.7	56.3	56.2
Mental retardation	1.8	5.2	5.8	5.2	4.0
Emotional disturbance	0.6	0.9	1.4	0.5	1.2
Multiple disabilities	1.1	2.1	1.6	1.8	1.4
Hearing impairments	1.1	2.3	1.2	1.8	1.3
Orthopedic impairments	0.9	2.9	1.7	2.7	1.7
Other health impairments	1.5	2.3	1.6	2.7	1.6
Visual impairments	0.5	1.0	0.5	0.8	0.5
Autism	0.9	7.5	2.2	2.6	2.3
Deaf-blindness	0.1	0.1	0.0	0.1	0.0
Traumatic brain injury	0.1	0.2	0.2	0.1	0.1
Developmental delay	48.6	29.4	32.9	19.0	27.2
All Disabilities	100.0	100.0	100.0	100.0	100.0

Source: U.S. Department of Education, Office of Special Education Programs, Data Analysis System (DANS).

Among Asian/Pacific Islander preschoolers, 7.5% were reported to have autism. In comparison, 2% to 3% of White, Black, and Hispanic children and less than 1% of American Indian/Alaska Native children were reported as having autism. More than 6% of Hispanic preschoolers were reported in the specific learning disabilities category, compared with between 3% to 4% of American Indian/Alaska Native, Asian/Pacific Islander, and Black children and 2.3% of White children. More than 5% of Asian/Pacific Islander, Black, and Hispanic preschoolers were reported as having mental retardation, compared with about 2% of American Indian/Alaska Native preschoolers and 4% of White preschoolers.

Summary

The number of preschool children with disabilities served under IDEA increased in 2000-01, but at a slower rate than in previous years. Disability category data indicated

that more than half of the preschoolers served were reported as having speech or language impairments, while another quarter were reported as having developmental delays. Speech or language impairment was the most frequently used disability category for all racial/ethnic groups with the exception of American Indian/Alaska Native preschoolers, who were more frequently reported in the developmental delay category.

Reference

U.S. Department of Education. (2000). *Twenty-second annual report to Congress on the implementation of the Individuals with Disabilities Education Act*. Washington, DC: U.S. Government Printing Office.

Students Ages 6 Through 21 Served Under IDEA

As mandated by Congress, since 1976-77 the U.S. Department of Education has collected data on the number of students ages 6 through 21 with disabilities who receive services under the Individuals with Disabilities Education Act (IDEA). During this 25-year period, the number of students receiving services has grown to more than 5 million. This module describes the characteristics of students with disabilities served during the 2000-01 school year and discusses changes in the number of students served, their distribution across disability categories, and their distribution across age groups since 1991-92.

Students Served Under IDEA by Disability Category

In 2000-01, states and outlying areas reported serving 5,775,722 students ages 6 through 21 under IDEA. This represents an increase of 28.4% since the 1991-92 school year. Students ages 6 through 17 with disabilities made up 11.5% of the estimated student enrollment for grades prekindergarten through 12th grade (see Table AA13). This percentage is also comparable to previous years (11.4% in 1999-2000).¹

States report disability data in 13 categories: specific learning disabilities, speech or language impairments, mental retardation, emotional disturbance, multiple disabilities, hearing impairments, orthopedic impairments, other health impairments, visual impairments, autism, deaf-blindness, traumatic brain injury, and developmental delay. The developmental delay category, introduced in 1997-98, is applicable only to children ages 3 through 9. Its use for students ages 6 through 9 is optional for states and local education agencies (LEAs). In 2000-01, 28 states, the Bureau of Indian Affairs, and outlying areas used the developmental delay category to report data for 6- through 9-year-olds. Table II-4 shows the distribution of students served under IDEA during school years 1991-92 and 2000-01 by disability category and shows the percent change in each category during that period (see Tables AA3 and AA9).

¹ Enrollment data are 2000-01 estimates from the National Center for Education Statistics (NCES). These estimates include students with and without disabilities.

Table II-4
Number of Students Ages 6 Through 21 Served Under IDEA
During 1991-92 and 2000-01

Disability	1991-92	2000-01	Percent change in number
Specific learning disabilities	2,247,004	2,887,217	28.5
Speech or language impairments	998,904	1,093,808	9.5
Mental retardation	553,262	612,978	10.8
Emotional disturbance	400,211	473,663	18.4
Multiple disabilities	98,408	122,559	24.5
Hearing impairments	60,727	70,767	16.5
Orthopedic impairments	51,389	73,057	42.2
Other health impairments	58,749	291,850	396.8
Visual impairments	24,083	25,975	7.9
Autism	5,415	78,749	1,354.3
Deaf-blindness	1,427	1,320	-7.5
Traumatic brain injury	245	14,844	5,958.8
Developmental delay	--	28,935	--
All disabilities	4,499,824	5,775,722	28.4

Note: Reporting in the autism and traumatic brain injury categories was optional in 1991-92 and required beginning in 1992-93.

Data from 1991-92 include children with disabilities served under the Chapter 1 Handicapped program.

Source: U.S. Department of Education, Office of Special Education Programs, Data Analysis System (DANS).

Four disability categories (specific learning disabilities, speech or language impairments, mental retardation, and emotional disturbance) continued to account for the majority of students served under IDEA. The specific learning disabilities category represented half of all students served. Speech or language impairments (18.9%), mental retardation (10.6%), and emotional disturbance (8.2%) were the next largest categories. Together, these four categories represented 87.7% of all students ages 6 through 21 served under IDEA, down somewhat from the 93.3% of students served that these categories represented in 1991-92 (see Table AA9).

Of the categories that now include 100,000 students or more, other health impairments showed the largest increase between 1991-92 and 2000-01 (from 58,749

to 291,850). As a percentage of total students served, this category grew from 1% of the total in 1991-92 to 5% in 2000-01 (see Table AA9). Moreover, four states (Colorado, Delaware, Michigan, and Mississippi) report children with other health impairments under the orthopedic impairments category. If these four states did not combine these categories, it is likely that the growth in the other health impairments category would be even larger. One possible explanation for the growth in this category comes from the states, which have reported that the increase is due in large part to the increased identification and provision of services to children with attention deficit disorder and attention deficit/hyperactivity disorder.

Developmental delay is another category that has experienced substantial growth. Since the category was introduced in 1997-98, the number of students reported in it has grown by 663%. The category grew 50.2% in the past year alone. And although autism accounts for a relatively small number of students served, reporting in this category has also increased dramatically in recent years, growing more than 400% since reporting in this category was first required in 1992-93 (see Table AA9).

Age-Group Distribution

Between 1991-92 and 2000-01, the growth in the number of children served has varied by age group. The 12-through-17 age group showed the greatest growth. The number of students served in this age group increased 40.5% during that period. For the 18-through-21 age group, the increase during the same period was 20.1%, and for the 6-through-11 age group, it was 19.3% (see Table AA9).

Among all age groups, specific learning disabilities has continued to be the largest disability category. However, the rank order of the next largest categories differs by age group. For students ages 6 through 11, the second largest disability category was speech or language impairments, followed by mental retardation and emotional disturbance. For students in the 12-through-17 and 18-through-21 age groups, the speech or language impairments category was ranked fifth and sixth in size, respectively. For these age groups, mental retardation and emotional disturbance were the second and third largest disability categories after specific learning disabilities (see Table AA9).

Race/Ethnicity

The IDEA Amendments of 1997 require that states report the race/ethnicity of children who receive special education and related services. States report race/ethnicity data in five categories: American Indian/Alaska Native, Asian/Pacific

Table II-5
Percentage of Students Ages 6 Through 21 Served Under IDEA by
Disability and Race/Ethnicity, During the 2000-01 School Year

Disability	American Indian/ Alaska Native	Asian/ Pacific Islander	Black (non- Hispanic)	Hispanic	White (non- Hispanic)	All students served
Specific learning disabilities	56.3	43.2	45.2	60.3	48.9	50.0
Speech or language impairments	17.1	25.2	15.1	17.3	20.8	18.9
Mental retardation	8.5	10.1	18.9	8.6	9.3	10.6
Emotional disturbance	7.5	5.3	10.7	4.5	8.0	8.2
Multiple disabilities	2.5	2.3	1.9	1.8	1.8	2.1
Hearing impairments	1.1	2.9	1.0	1.5	1.2	1.2
Orthopedic impairments	0.8	2.0	0.9	1.4	1.4	1.3
Other health impairments	4.1	3.9	3.7	2.8	5.9	5.1
Visual impairments	0.4	0.8	0.4	0.5	0.5	0.4
Autism	0.6	3.4	1.2	0.9	1.4	1.4
Deaf-blindness	0.0	0.0	0.0	0.0	0.0	0.0
Traumatic brain injury	0.3	0.3	0.2	0.2	0.3	0.3
Developmental delay	0.7	0.6	0.7	0.2	0.6	0.5
All disabilities	100.0	100.0	100.0	100.0	100.0	100.0

Note: Does not include data for New York State.

Source: U.S. Department of Education, Office of Special Education Programs, Data Analysis System (DANS).

Islander, Black (non-Hispanic), Hispanic, and White (non-Hispanic). This section of the module examines the racial/ethnic composition of the IDEA 6 through 21 population. For each racial/ethnic group, it examines the distribution across disability categories and compares these results with the distribution of all students with disabilities. However, it should be remembered that this is only the third year that race/ethnicity data have been reported and that the reporting of these data continues to be a problem for states. Table II-5 shows the percentage of students served by race/ethnicity and disability during the 2000-01 school year.²

² New York's data are not included in the data presented in Table II-2. New York has not yet provided race/ethnicity data for 2000-01.

The 2000-01 racial/ethnic make up of students ages 6 through 21 served under IDEA is similar to that reported for 1999-2000. White students made up 62.3% of the students served; 19.8% of students served were Black; 14.5% were Hispanic; 1.9% were Asian/Pacific Islander; and 1.5% were American Indian/Alaska Native (see Table AA15). The 2000 Census allowed respondents to report themselves in multiple racial/ethnic categories. IDEA, however, uses five mutually exclusive racial/ethnic categories. Using data from Summary File 1 of 2000 Census, we estimate that 62.9% of all children ages 6 through 21 would be considered White (non-Hispanic), using the IDEA race/ethnicity categories; 14.8% would be considered Black (non-Hispanic); 17.5% would be considered Hispanic; 3.8% would be considered Asian/Pacific Islander; and 1% would be considered American Indian/Alaska Native (see Table AF8).

Table II-5 presents the distribution of each racial/ethnic group across the 13 disability categories. As shown in that table, specific learning disabilities was the most frequent disability category for all racial/ethnic groups. In fact, with one exception, the rank order of the five largest disability categories is the same for all groups: specific learning disabilities, speech or language impairments, mental retardation, emotional disturbance, and other health impairments. The exception is that the order of mental retardation and speech or language impairments is reversed for Blacks (see Table AA15).

When compared with the average percentages for all students with disabilities, the percentages of Black students receiving services for mental retardation or emotional disturbance were higher, and the percentages receiving services for specific learning disabilities or speech/language impairments were lower. Among Hispanic students, the percentage receiving services for specific learning disabilities was higher than that for all students with disabilities, and the percentages receiving services for emotional disturbance, other health impairments, or mental retardation were lower. The percentages of Asian/Pacific Islander students receiving services for speech/language impairments or autism were higher than those for all students with disabilities, and the percentages receiving services for specific learning disabilities or emotional disturbance were lower. As is the case for Hispanic students, the percentage of American Indian/Alaska Native students receiving services for specific learning disabilities was higher than that for all students with disabilities, and the percentage receiving services for mental retardation was lower. The percentages of White students in most disability categories were all close to those for the IDEA student population as a whole, but the percentages of White students in the other health impairments category was higher.

Summary

The number of students ages 6 to 21 with disabilities served under IDEA has continued to grow at a steady rate, rising 28.4% since 1991-92. During this time period, four disability categories have accounted for the majority of students served: specific learning disabilities, speech or language impairments, mental retardation, and emotional disturbance. The other health impairments category experienced substantial growth in both the number of children served and as a percentage of all children with disabilities. Developmental delay and autism, although small categories in terms of the percentages of children served, have also experienced large growth during the same period.

In 2000-01, the rank ordering of the top five disability categories was nearly identical for all racial/ethnic groups; however, students from some racial/ethnic groups were overrepresented or underrepresented in specific disability categories when compared with the IDEA student population as a whole. For example, the percentages of White children receiving services for other health impairments, American Indian/Alaska Native and Hispanic children receiving services for specific learning disabilities, the percentage of Asian/Pacific Islander children receiving services for speech or language impairments, and the percentage of Black children receiving services for mental retardation were somewhat higher than the percentages for all students served under IDEA. Conversely, the percentages of Asian/Pacific Islander and Hispanic children receiving services for emotional disturbance and the percentage of Hispanic children receiving services for other health impairments were lower than the percentages observed for all IDEA students. Race/ethnicity data should still be viewed with caution, however.

A Changing Population: Individual and Household Characteristics of High School Students With Disabilities

The composition of the student population in America's schools has changed dramatically in recent decades. For example, there has been a marked increase in the diversity of students' racial/cultural and language backgrounds. The population of students with disabilities clearly reflects such demographic changes (see Table II-8). The population of students with disabilities also reflects changes in the numbers of children identified in particular disability categories (such as specific learning disabilities or other health impairments) over time (see Table II-6).

Two studies sponsored by the Office of Special Education Programs (OSEP) provide a unique opportunity to identify the nature and extent of such changes among students receiving special education services in secondary school. The National Longitudinal Transition Study (NLTS), conducted from 1987 through 1993, examined the characteristics, experiences, and achievements of a nationally representative sample of secondary school students receiving special education as they transitioned into early adulthood. As the first source of nationally representative data on students with disabilities, NLTS prompted OSEP to launch an extensive program of longitudinal research that includes children and youth from birth to young adulthood. As part of that research program, the National Longitudinal Transition Study-2 (NLTS2) was commissioned in 2000. This study, which is modeled on NLTS, will follow secondary-school-age students through their mid-20s, collecting data on secondary school and postschool experiences. The two studies were designed so that valid comparisons can be made between students who received special education in the late 1980s and students receiving special education in the early years of the 21st century.

Information now is available from the first wave of interviews with parents of NLTS2 students, conducted in the spring and summer of 2001. This information can be compared with data from similar interviews of parents conducted in 1987 for the age groups of students included in Wave 1 of both studies: 15-, 16-, and 17-year-olds.¹ A series of reports over the next few years will examine changes in many aspects of student characteristics and their experiences in high school. Later waves of data also will be compared to illuminate differences in the postsecondary achievements of young people with disabilities.

¹ The samples were weighted to have the same distribution of these three age groups: 26% are 15, 35% are 16, and 38% are 17.

Table II-6
Disability Category Distribution of Youth With Disabilities, 1987 and 2000

Primary disability category	Federal child count (ages 12 through 17)				Percentage point change	NLTS/NLTS2 (ages 15 through 17)		
	Cohort 1		Cohort 2			Cohort 1	Cohort 2	Percentage point change
	Number	Percentage	Number	Percentage				
Learning disability	1,014,618	59.9	1,649,306	61.6	+1.7	60.4	61.4	+1.0
Speech/language impairment	104,968	6.2	129,683	4.8	-1.4	4.4	3.2	-1.2
Mental retardation	292,746	17.3	312,133	11.7	-5.6	18.0	13.0	-5.0
Emotional disturbance	196,153	11.6	286,909	10.7	-.9	11.4	11.9	+5
Hearing impairment	17,377	1.0	32,723	1.2	+2	1.4	1.4	.0
Visual impairment	7,905	.5	11,865	.4	-.0	.6	.6	.0
Orthopedic impairment	16,208	1.0	31,032	1.2	+2	1.0	1.2	+2
Other health impairment	19,572	1.2	142,853	5.3	+4.2	1.4	5.2 ^a	+3.8
Multiple disabilities	23,631	1.4	52,074	1.9	+5	1.3 ^b	2.2 ^b	+9
Deaf-blindness ^{a/}	252	.0	518	.0	+0			
Autism ^{b/}	NA		22,289	.8	+8			
Traumatic brain injury ^{b/}	NA		7,711	.3	+3			
All disabilities	1,693,430		2,679,096					

^{a/} Includes students with deaf-blindness.

^{b/} Students with autism and traumatic brain injury have been reassigned, for comparison purposes, to other categories as described in this text, with many being included in this other health impairments category.

In this module, an initial comparison of students represented by NLTS and NLTS2 (referred to as Cohorts 1 and 2) focuses on changes in students and their households between 1987 and 2001, including aspects of students' disability profiles and student and household demographic characteristics. Findings are presented for secondary school students receiving special education as a whole and for the nine disability categories that were in use in both 1987 and 2001. The module includes comparisons with the general population where comparable data are available.

Students' Disability Profiles

This section of the module highlights changes in key aspects of students' disability profiles, including their primary disability classification and the ages at which their disabilities were first identified and when they first received disability-related services.

Primary Disability Classification

Using Federal child count data, Table II-6 depicts the considerable growth in the number of adolescents receiving special education, as well as changes in the distribution of disability categories between 1987 (Cohort 1) and 2000 (Cohort 2). Although there has been a 58% increase in the number of students ages 12 through 17 who receive special education, the more important point for comparing the two cohorts is the different mix of disabilities at the two time points. Most notably, in 1990, Public Law 101-476 added two new disability categories—autism and traumatic brain injury (TBI) to the Education of All Handicapped Children Act. Students with those conditions previously had been distributed among other categories, with the heaviest concentration in the other health impairments category. Despite the removal of students with autism and TBI, the other health impairments category still has shown more than a fourfold increase. It comprised only slightly more than 1% of students with disabilities in this age range in 1987 but more than 5% in 2000. This change reflects, in part, the increase in the number of students diagnosed with attention deficit/hyperactivity disorder (ADHD) as a primary disability, who may be reported in the other health impairments category. A decline of similar size was evident for students with mental retardation (17% to 12%).

Smaller changes were evident in some other categories. The number of students with learning disabilities grew by less than 2 percentage points, and declines of about 1 to 2 percentage points were noted for students with speech/language impairments and emotional disturbance. Other changes were less than 1 percentage point. Overall, the distributions of primary disability classifications of the NLTS and NLTS2 samples of 15- to 17-year-olds match the 1987 and 2000 national distribution of 12- to 17-year-olds quite closely.

The small shifts in disability distribution between the two time points should be kept in mind when considering the findings regarding changes in the population of students with disabilities as a whole—the characteristics and experiences of Cohort 2 reflect students with learning disabilities and other health impairments more than was true for Cohort 1.

Age at First Identification of and Service for Disability

The age at which children first are recognized as having a disability can suggest much about the nature of their disabilities and the experiences children and families have with them. Some disabilities, such as genetic disorders and some conditions that result from premature birth, affect children throughout their lifetimes; these children and their families never experience a time when disability is not an aspect of their relationship. Other disabilities emerge when children reach the ages of typical developmental milestones and exhibit delays in acquiring skills such as walking or talking. Still others become apparent when children take on more sophisticated cognitive tasks, such as reading or mathematics, and demonstrate difficulty in learning. Other disabilities can result from accidents that occur at any age. Regardless of the age at which disabilities emerge, promptness in identifying and addressing them can be extremely important in ameliorating their effects on children's development and functioning. IDEA includes an early intervention program for infants and toddlers with disabilities that begins at birth and has outreach components for their families.

Table II-7 indicates that high-school-age students with disabilities in 2001 were first identified as having a disability or delay significantly earlier than were their peers in 1987.¹ The average age at first identification reported by parents dropped by about 8 months, from 6.6 years for Cohort 1 to 5.9 years for Cohort 2. Higher proportions of youth in Cohort 2 first were identified as infants and toddlers (19% vs. 16.5%) and as preschoolers (10% vs. 6%), significantly so in the latter case. Receipt of disability-related services also began significantly earlier for Cohort 2; the average age of first service was 7.4 years for Cohort 2, compared with 8.5 years for Cohort 1.

¹ For this and subsequent tables, significance levels are calculated using the standard errors presented in each table. Standard errors have a 25% “cushion” in order to minimize the possibility that a difference between two estimates meets the standard for statistical significance by chance alone.

Table II-7
Changes in Age at First Identification of and Service for Disability,
by Cohort

	Cohort 1	Cohort 2	Change
Percentage whose disability or delay first was identified at age:			
Birth through 2	16.5 (1.7)	19.0 (1.6)	+2.5
3 or 4	5.5 (1.1)	9.5 (1.2)	+4.0*
5 or 6	27.0 (2.1)	31.3 (1.9)	+4.3
7 through 10	37.2 (2.3)	29.6 (1.9)	-7.6*
11 or older	13.7 (1.6)	10.6 (1.8)	-3.1
Average age when disability or delay first was identified	6.6 (.2)	5.9 (.1)	-.7**
Percentage who began receiving service for a disability or delay at age:			
Birth to 2	4.3 (1.0)	9.1 (1.2)	+4.8**
3 or 4	5.6 (1.1)	7.9 (1.1)	+2.3
5 or 6	18.3 (1.8)	21.5 (1.7)	+3.2
7 through 10	44.4 (2.3)	42.8 (2.0)	-1.6
11 or older	27.3 (2.1)	18.8 (1.6)	-8.5**
Average age when first began receiving service for a disability or delay	8.5 (.2)	7.4 (.1)	-1.1***
Sample size	2,729	5,665	

Notes: Standard errors are in parentheses.

Statistically significant difference in a two-tailed test at the following levels: * $p < .05$,
** $p < .01$, *** $p < .001$.

Source: NLTS2.

Students' Demographic Characteristics

The experiences of students are defined by much more than their disabilities. Gender and racial/ethnic background are two other individual characteristics that have pervasive influences on adolescents' perspectives, preferences, and experiences.

Table II-8 compares the gender and racial/ethnic distributions² of students in 1987 and 2001.

There was no significant change over time in the gender distribution of students with disabilities (69% and 67% male); at both time periods, males were significantly overrepresented among students receiving special education relative to students in the general population. Interestingly, a similar overrepresentation of males was evident even among infants and toddlers with disabilities (61%; Hebbeler et al., 2001).

The increase in the racial/ethnic diversity of the general student population is also evident among students with disabilities. Hispanic students exhibited the largest increase for both groups, being half again as large in 2001 as in 1987 (14% vs. 9%, $p < .05$). In contrast, the proportions of students with disabilities who were White or Black declined by just over 2 percentage points. With these changes, the population of high school students receiving special education in 2001 more closely mirrored the racial/ethnic distribution of the general population than had been true in 1987.

Consistent with the increase in the Hispanic population, there was more than a fourfold increase in the proportion of students with disabilities who did not use primarily English at home: the percentage grew from 3% to 14%. Thus, students with disabilities increasingly faced the challenges of communicating in two languages and accommodating two cultures, in addition to the challenges posed by their disabilities.

Characteristics of Students' Households

A student's household is his or her first educational setting. At home, children form their first emotional attachments, achieve early developmental milestones, and develop a foundation for subsequent growth and learning. As children grow up, what they need from family and others who share their households may change, but values, expectations, and preferences continue to be shaped by experiences at home.

² The racial/ethnic classification of students in Cohort 1 relied on information supplied by parents. In Cohort 2, information came primarily from the school districts or state-supported special schools from which students were sampled. In cases in which schools or districts did not supply this information, parent reports of racial/ethnic classifications were used.

Table II-8
Changes in the Gender and Racial/Ethnic Distributions of Students With Disabilities and Students in the General Population

Individual characteristics	Youth with disabilities			Youth in the general population		
	Cohort 1	Cohort 2	Percentage point change	Cohort 1 ^{a/}	Cohort 2 ^{b/}	Percentage point change
Percentage male	68.6 (2.0)	67.4 (1.9)	-1.2	50.0	51.0	+1.0
Percentage who were:						
White	64.9 (2.1)	62.5 (1.9)	-2.4	68.8	63.1	-5.7
Black	23.5 (1.8)	20.7 (1.6)	-2.8	16.4	16.1	-.3
Hispanic	8.7 (1.2)	13.6 (1.3)	+4.9**	10.8	15.7	+4.9
Asian/Pacific Islander	1.4 (.5)	1.3 (.4)	-.1			
American Indian/Alaska Native	.6 (.3)	1.4 (.5)	+.8			
Mixed/other	.8 (.3)	.6 (.2)	-.2	3.9	5.1	+1.2
Percentage who did not use English at home	3.3 (.8)	14.2 (1.4)	+10.9***	3.5	5.0	+2.5
Sample size	2,988	6,002				

^{a/} Figures are for 5- through 17-year-olds. Source: U.S. Department of Commerce, Bureau of the Census. *October Current Population Surveys, 1972-1998*. Reported in U.S. Department of Education (2000), *The Condition of Education*.

^{b/} Figures are for 15- to 19-year-olds. Source: U.S. Census Bureau, 2001.

Notes: Standard errors are in parentheses.

Statistically significant difference in a two-tailed test at the ** $p < .01$ level, *** $p < .001$.

Source: NLTS2.

This section of the module examines changes over time in the households of high-school-age students receiving special education, including their living arrangements; the presence of parents and other children in their households; whether any other child in the household had a disability; and the education, employment, and economic status of heads of households.

Living Arrangements

Table II-9 shows little change in the percentage of youth who were living with their parents, a stability that also was evident in the general population. Small declines were noted in the proportion of youth with disabilities who were living in group settings other than families. The declines in these living arrangements were offset by an increase of almost 4 percentage points in youth living with friends or family members other than parents.

Household Composition

The percentage of young people living in single-parent households was relatively stable over time for both youth with disabilities and those in the general population. However, the 4- to 6-percentage-point increase in youth with disabilities who were living in two-parent households with only their biological mother or father suggests that two-parent households increasingly included stepparents. The percentage of youth with disabilities who were living with neither biological parent declined by almost 6 percentage points, consistent with the decline in youth living in group settings other than households. This decline contrasts with a doubling of students living in households with no biological parents in the general population. Nonetheless, the rate at which young people with disabilities lived in households with no biological parents (e.g., with foster or adoptive parents) was more than twice that of students in the general population in 2001.

The average number of children in the households of youth with disabilities dropped slightly over time from 2.6 to 2.3 children, and the percentage of students in households with another child with a disability increased by almost 5 percentage points, although this change was not large enough to be statistically significant.

Head of Household Education and Employment

Table II-10 demonstrates a marked improvement in the education and employment status of heads of households among both youth with disabilities and youth in the

Table II-9
Changes in Household Composition of Youth With Disabilities and Youth in the General Population

Individual characteristics	Youth with disabilities			Youth in the general population		
	Cohort 1	Cohort 2	Percentage point change	Cohort 1	Cohort 2 ^{a/}	Percentage point change
Percentage of youth living:						
With a parent or guardian	94.0 (1.0)	92.8 (1.0)	-1.2	94.0 ^b	94.0	.0
With another family member or friend	2.2 (.6)	5.8 (.9)	+3.6***	NA	NA	
In a residential school	.6 (.3)	.1 (.1)	-.5	NA	NA	
In a supervised group home	.7 (.4)	.2 (.2)	-.5	NA	NA	
In an institution	1.0 (.4)	.4 (.2)	-.6	NA	NA	
In another arrangement	1.6 (.7)	.7 (.4)	-.9	NA	NA	
Percentage living in a single-parent household	35.8 (2.2)	37.2 (1.9)	+1.4	25.6	27.0	+1.4
Percentage of households with:						
No biological parents present	19.0 (1.8)	13.5 (1.3)	-5.5*	3.0	6.0	+3.0
Biological father present	3.8 (.9)	7.8 (1.0)	+4.0**	2.6	4.2	+1.6
Biological mother present	34.8 (2.2)	41.2 (1.9)	+6.4*	21.3	21.9	+6.0
Both biological parents present	42.4 (2.2)	37.6 (1.9)	-4.8	73.1	67.8	-5.3
Average number of children in the household	2.6 (.1)	2.3 (.1)	-.3*	2.2	NA	
Percentage with another child/other children with disabilities	21.5 (1.9)	26.1 (1.8)	+4.6	NA	NA	
Sample size	2,890	5,747				

^{a/} Federal Interagency Forum on Child and Family Statistics, 2001.

^{b/} U.S. Census Bureau, 1987.

Notes: Standard errors are in parentheses.

Statistically significant difference in a two-tailed test at the following levels: * $p < .05$, ** $p < .01$, *** $p < .001$.

Source: NLTS2.

Table II-10
Changes in Household Socioeconomic Status of Youth With Disabilities and Youth in the General Population

Individual characteristics	Youth with disabilities			Youth in the general population		
	Cohort 1	Cohort 2	Percentage point change	Cohort 1 ^{a/}	Cohort 2 ^{b/}	Percentage point change
Head of household's education (percentage)						
Less than high school	41.3 (2.2)	21.5 (1.6)	-19.8***	22.3	13.3	-9.0
High school graduate or GED	34.9 (2.2)	41.4 (2.0)	+6.5*	38.8	29.7	-9.1
Some college	15.4 (1.6)	23.6 (1.7)	+8.2***	17.8	28.8	+11.0
Bachelor's degree or more	8.4 (1.3)	13.6 (1.4)	+5.2**	21.1	28.3	+7.2
Head of household's employment (percentage)						
Not employed	29.0 (2.1)	18.4 (1.6)	-10.6***	NA	NA	
Part time	8.7 (1.3)	7.9 (1.1)	-8	NA	NA	
Full time	62.4 (2.2)	73.8 (1.8)	+11.4***	NA	NA	
Annual household income (percentage)						
Less than \$25,000	67.7 (2.2)	34.9 (2.0)	-32.8***	38.6	19.8	-18.8
\$25,000 to \$50,000	27.0 (2.0)	30.4 (1.9)	+3.4	35.6	25.5	-10.1
More than \$50,000	5.1 (1.0)	34.7 (2.0)	+29.6***	25.8	54.7	+28.9
Percentage recently receiving:						
AFDC/TANF	14.2 (1.6)	10.5 (1.2)	-3.7	12.6	8.6	-4.0
Food Stamps	26.7 (2.0)	16.2 (1.5)	-10.5***	12.9	14.2	+1.3
Sample size	2,598	5,281				

^{a/} U.S. Census Bureau, 1988.

^{b/} U.S. Census Bureau, 2001.

Notes: Standard errors are in parentheses.

Statistically significant difference in a two-tailed test at the following levels: * $p < .05$, ** $p < .01$, *** $p < .001$.

Income data are not adjusted for inflation.

Source: NLTS2.

A Changing Population: Individual and Household Characteristics of High School Students With Disabilities

general population. For example, the percentage of youth with disabilities living in households whose head was not a high school graduate dropped by about half (from 41% to 22%), which greatly exceeded the decline in the general population (from 22% to 13%). There were corresponding increases at every other education level for heads of households of students with disabilities. However, the average education level of heads of households in which youth with disabilities lived remained substantially below that of youth in the general population.

The strong economy through the late 1990s and early 21st century was reflected in the higher employment rates of heads of households of both youth with disabilities and youth in the general population. Unemployment among heads of households of young people with disabilities dropped by almost 11 percentage points, and full-time employment rose by a similar amount. Improvements in employment and other financial indicators also may have been affected by the changing demographics of the student population.

Higher employment clearly contributed to increases in income over time. Because income data are not adjusted for inflation, a sizable increase in income would be expected because of inflation alone, whether or not gains in real income occurred. However, income gains for households of youth with disabilities were much larger than for those of students in the general population. Although youth with disabilities were substantially more likely than students in the general population to be living in households with incomes below \$25,000, that group had declined by almost 33 percentage points by 2001, compared with a 19 percentage point decline in the general population. At the same time, the proportion of students with disabilities living in households with incomes of more than \$50,000 increased by 30 percentage points, similar to the increase among students in the general population. However, students with disabilities continued to have significantly lower household incomes than did students in the general population.

Both higher incomes and welfare reform probably contributed to the reduced rates of participation in Aid to Families with Dependent Children (AFDC) (renamed Temporary Assistance to Needy Families (TANF) in 1996) and food stamps of almost 4 and 11 percentage points, respectively. The decline in AFDC/TANF was mirrored in the general population of students, although they did not experience a decline in food stamp participation similar to students with disabilities.

Differences in Rates of Change Between Disability Categories¹

The kinds of changes in the population of high school students receiving special education described thus far did not affect all categories of students similarly. Students in some disability categories experienced a greater degree of change than was evident for students overall, whereas change was less marked for students in other categories. The most notable differences in the rates of change between disability categories are highlighted here.

Students' Disability Profiles

The decline in the average age at first identification of a disability that was noted for students with disabilities as a whole resulted from statistically significant reductions in age for students in four disability categories—learning disabilities, emotional disturbance, and orthopedic and other health impairments—ranging from almost 10 to 18 months (Table II-11). For students in other categories, there was no significant change in age at first identification. The overall drop in age at first service for disability of almost a full year that was seen in the population as a whole was more widely shared across the disability categories. Significant declines of 1 to 2 years in age at first service were evident for students in all categories except students with hearing impairments.

In general, the smallest reductions in age at first identification and first service were evident in categories for which the ages already were among the lowest of the disability categories. For example, there was essentially no change in the average age of identification for students with hearing or visual impairments or multiple disabilities, for whom the average age was already 2 or younger. Similarly, the smallest change in the age at first service was for students with hearing impairments,

¹ In comparing the disability categories, it is important to understand the adjustments made in this analysis to improve the comparability of the two cohorts:

- The two Cohort 1 categories of deaf and hard of hearing were combined to be comparable to the single Cohort 2 category of hearing impairment.
- In both cohorts, students with deaf-blindness were included in the multiple impairments category.
- Cohort 2 students with autism or TBI were included in other categories, using descriptions of the primary disability provided by parents. If parents said the primary disability of these students was autism or TBI, with no other information provided, students were included in the other health impairments category. If more than one disability, in addition to autism or TBI, was mentioned by parents, students were included in the multiple impairments category. A few students with autism or TBI were included in other categories on the basis of parents' reports. This distribution mirrors the fairly broad dispersion of students with autism and TBI in Cohort 1.

Table II-11
Changes in Disability Profiles of Youth With Disabilities, by Cohort and Disability Category

	Learning disability	Speech/ language impairment	Mental retardation	Emotional disturbance	Hearing impairment	Visual impairment	Orthopedic impairment	Other health impairment	Multiple disabilities
Average age when disability was identified									
Cohort 1	7.3 (.2)	5.9 (.4)	4.8 (.3)	7.4 (.3)	2.2 (.2)	1.8 (.3)	3.2 (.4)	6.1 (.5)	2.1 (.4)
Cohort 2	6.5 (.2)	5.8 (.2)	4.1 (.2)	6.5 (.2)	2.5 (.2)	1.8 (.3)	1.7 (.2)	4.8 (.2)	2.3 (.2)
Change in average age	-.8**	-1	-.7	-.9*	+3	.0	-1.5**	-1.3*	+2
Average age when first received service for a disability									
Cohort 1	9.0 (.2)	8.4 (.3)	6.8 (.3)	9.5 (.3)	4.6 (.3)	5.3 (.4)	4.9 (.4)	8.5 (.4)	4.6 (.5)
Cohort 2	8.0 (.2)	7.4 (.2)	5.7 (.2)	8.5 (.2)	4.1 (.2)	3.5 (.3)	2.9 (.3)	6.7 (.2)	3.4 (.2)
Change in average age	-1.0***	-1.0**	-1.1**	-1.0**	-.5	-1.8***	-2.0***	-1.8***	-1.2*
Average self-care skills score									
Cohort 1	11.9 (.0)	11.8 (.1)	11.00 (.2)	11.9 (.1)	11.8 (.0)	10.9 (.2)	9.9 (.2)	11.1 (.2)	8.5 (.5)
Cohort 2	11.7 (.0)	11.7 (.1)	10.7 (.1)	11.7 (.0)	11.6 (.1)	10.3 (.2)	9.5 (.2)	11.3 (.1)	9.0 (.2)
Change in scale score	-.2*	-1	-.3	-.2*	-.2*	-.6*	-.4	+2	+5
Average functional mental skills scale score									
Cohort 1	14.6 (.1)	14.5 (.2)	12.0 (.3)	14.3 (.2)	14.2 (.2)	12.6 (.3)	13.5 (.3)	13.7 (.3)	8.3 (.5)
Cohort 2	14.1 (.1)	14.4 (.1)	11.3 (.2)	14.5 (.1)	14.2 (.2)	11.7 (.3)	12.5 (.3)	13.7 (.1)	9.8 (.3)
Change in scale score	-.5***	-1	+7	+2	.0	-.9*	-1.0*	.0	+1.5**
Average household responsibilities scale score									
Cohort 1	10.6 (.2)	10.7 (.3)	9.6 (.2)	9.9 (.2)	10.9 (.2)	10.0 (.3)	8.6 (.3)	10.1 (.3)	7.1 (.4)
Cohort 2	9.6 (.2)	9.8 (.2)	10.5 (.2)	10.1 (.2)	9.2 (.2)	10.5 (.3)	12.1 (.2)	10.6 (.1)	12.1 (.2)
Change in scale score	-1.0***	-.9*	+9**	+2	-1.7***	+5	+3.5***	+5	+5.0***
Sample size: Cohort 1/2	342/590	188/423	280/552	258/523	604/585	330/467	287/610	197/1,191	267/724

Standard errors are in parentheses.

Statistically significant difference in a two-tailed test at the following levels: * $p < .05$, ** $p < .01$, *** $p < .001$.

Source: NLTS2.

for whom the age at first service was among the lowest for Cohort 1. One exception was the average age at identification for students with speech/language impairments, which did not decline; on average, students in both cohorts first were identified as having a speech/language disability or delay at school entry age.

Students' Demographic Characteristics

The fairly stable gender distribution that was noted for students with disabilities as a whole also was evident for most disability categories. Only among students with other health impairments was there a significant change, with the proportion of males in that category increasing from 54% in Cohort 1 to 75% in Cohort 2. This change resulted primarily from the considerable increases in the number of students with autism and ADHD, most of whom were included in the other health impairments category for comparison purposes. Students with autism had the highest proportion of males of any disability category.

Table II-12 shows that changes in the racial/ethnic distribution that were observed for students with disabilities as a whole affected students in different disability categories quite differently. For example, the small decline in the proportion of students as a whole who were White was evident for six of the nine disability categories. In contrast, there were increases of 13 and 20 percentage points in the proportion of White students among youth with speech/language and other health impairments, respectively. The small overall decline in the percentage of students with disabilities who were Black occurred for eight of the nine disability categories, with the decline of 11 percentage points among students with speech/language impairments being the largest. Only students with mental retardation showed an increase, which did not attain statistical significance.

Increases in the Hispanic population were evident in eight of nine disability categories, with the largest apparent among students with learning disabilities or visual impairments. For those students, the proportion of students who were Hispanic increased 7 and 8 percentage points. In contrast, there was a 17 percentage point decrease in the percentage of Hispanic students among those with other health impairments, consistent with the large increase in White students in that group.

In seven disability categories, there were increases in the percentage of students who did not use primarily English at home, ranging from 7 to 22 percentage points. Many of these increases were consistent with increases in the proportion of Hispanic students. However, the largest increase was among students with hearing impairments, which reflected a growth in reporting of the use of signed

Table II-12
Changes in Racial/Ethnic Backgrounds and Language Use, by Cohort and Disability Category

	Learning disability	Speech/ language impairment	Mental retardation	Emotional disturbance	Hearing impairment	Visual impairment	Orthopedic impairment	Other health impairment	Multiple disabilities
Percentage who were:									
White									
Cohort 1	67.0 (3.1)	53.8 (4.4)	60.2 (3.5)	67.5 (3.7)	61.0 (3.5)	62.7 (4.9)	62.6 (4.4)	55.0 (4.8)	63.0 (6.3)
Cohort 2	62.5 (2.9)	66.5 (3.1)	55.2 (3.0)	61.5 (3.0)	60.8 (3.2)	60.9 (4.2)	64.3 (3.2)	74.9 (2.2)	65.3 (3.0)
Percentage point change	-4.5	+12.7*	-5.0	-6.0	-2	-1.8	-1.7	+19.9***	+2.3
Black									
Cohort 1	21.2 (2.7)	27.4 (3.9)	30.3 (3.3)	24.9 (3.4)	20.4 (2.9)	26.1 (4.4)	20.2 (3.7)	17.2 (3.7)	20.8 (5.3)
Cohort 2	18.4 (2.3)	16.8 (2.5)	32.6 (2.9)	24.2 (2.6)	17.7 (2.5)	19.5 (3.4)	14.9 (2.4)	15.0 (1.8)	18.3 (2.4)
Percentage point change	-2.8	-10.6*	+2.3	-7	-2.7	-6.6	-5.3	-2.2	-2.5
Hispanic									
Cohort 1	8.7 (1.9)	15.7 (3.2)	6.3 (1.7)	6.0 (1.9)	14.4 (2.5)	7.7 (2.7)	15.5 (3.3)	24.4 (4.2)	10.8 (4.0)
Cohort 2	15.4 (2.2)	14.3 (2.3)	9.5 (1.8)	10.5 (1.9)	16.1 (2.4)	15.4 (3.1)	16.6 (2.5)	7.2 (1.3)	12.0 (2.0)
Percentage point change	+6.7*	+1.4	+3.2	+4.5	+1.7	+7.7**	+1.1	-17.2***	+1.2
Percentage who do not use English at home									
Cohort 1	13.0 (.8)	7.6 (2.4)	5.9 (1.7)	1.5 (1.0)	18.0 (2.8)	5.6 (2.3)	7.6 (2.5)	10.3 (3.0)	33.5 (6.1)
Cohort 2	15.4 (2.2)	17.6 (2.6)	11.4 (2.0)	8.9 (1.8)	40.4 (3.3)	17.7 (3.3)	14.9 (2.5)	9.0 (1.5)	15.6 (2.3)
Percentage point change	+14.1***	+10.0**	+5.5*	+7.4***	+22.4***	+12.1**	+7.3	-1.3	-17.9**
Sample size: Cohort 1/2	383/630	219/471	323/607	288/575	626/612	339/489	300/627	229/1,226	281/739

Standard errors are in parentheses.

Statistically significant difference in a two-tailed test at the following levels: * $p < .05$, ** $p < .01$, *** $p < .001$.

Source: NLTS2.

communication. Decreases in the use of a language other than English were noted for students with other health impairments and multiple disabilities; the decrease of 18 percentage points for the latter group was statistically significant.

Household and Parent Characteristics

Several of the patterns of change in the households of students with disabilities that were observed for the group as a whole applied fairly uniformly across disability categories, including the general stability in living arrangements and the significant decrease in the number of children in the household. However, Table II-13 shows that the overall absence of significant change in the percentage of students living in single-parent households was seen only in some disability categories. Most notably, the decline was 17 percentage points among students with other health impairments. This large reduction was in the category of students with among the highest rates in Cohort 1.

Changes in parent characteristics also did not always affect students equally across disability categories. For example, although all categories of Cohort 2 students were significantly less likely than those in Cohort 1 to have parents who had not graduated from high school, the significant increase in college graduates that was evident for students with disabilities as a whole occurred only among parents of students in six disability categories, with increases ranging from 7 to 12 percentage points. The increases in college graduates among parents of students with learning disabilities, mental retardation, and visual impairments were not statistically significant. Improvements in employment status also did not occur uniformly. Although there were fewer heads of households who were not employed and more who were employed full-time in all categories, heads of households of students with emotional disturbances, visual impairments, and multiple disabilities experienced those changes to a lesser degree than most others.

While household incomes improved markedly for all students with disabilities, the percentage point drop in households with incomes of less than \$25,000 ranged widely, from 20 percentage points for households of students with mental retardation and 30 percentage points for those with emotional disturbance to 47 percentage points for students with speech/language impairments and almost 46 percentage points for those with other health impairments. Students with mental retardation and emotional disturbance also had the smallest increases in households earning more than \$50,000. One fourth to more than one half of households of students with disabilities had annual incomes of \$25,000 or less.

Table II-13
Changes in Household and Parent Characteristics, by Cohort and Disability Category

Household characteristics	Learning disability	Speech/ language impairment	Mental retardation	Emotional disturbance	Hearing impairment	Visual impairment	Orthopedic impairment	Other health impairments	Multiple disabilities
Percentage living in a single-parent household									
Cohort 1	33.6 (3.3)	44.7 (4.5)	36.3 (3.6)	41.8 (4.0)	34.1 (3.4)	36.2 (4.8)	37.4 (4.5)	44.7 (5.0)	38.1 (6.8)
Cohort 2	35.3 (2.9)	33.1 (3.1)	43.7 (3.0)	46.5 (3.2)	34.6 (3.6)	41.5 (4.2)	32.6 (3.2)	27.4 (2.3)	34.3 (3.0)
Percentage point change	+1.7	-9.6	+7.4	+4.7	.5	+5.3	-5.8	-17.3***	-3.8
Percentage with head of household with 4-year college degree or more									
Cohort 1	8.8 (2.0)	11.4 (2.9)	5.7 (1.7)	6.0 (1.9)	11.2 (2.3)	15.4 (3.6)	17.3 (3.5)	17.1 (3.8)	12.7 (4.7)
Cohort 2	11.9 (2.0)	22.6 (2.9)	9.3 (1.8)	13.4 (2.1)	23.0 (2.9)	17.1 (3.3)	27.8 (3.1)	27.4 (2.3)	23.9 (2.8)
Percentage point change	+3.1	+11.2**	+3.6	+7.4**	+11.8**	+1.7	+10.5*	+10.3*	+11.2*
Percentage with a head of household who was:									
Employed full time									
Cohort 1	66.2 (3.3)	61.2 (4.4)	48.6 (3.7)	64.9 (3.9)	66.7 (3.4)	65.2 (4.8)	57.3 (4.6)	54.8 (5.0)	64.9 (6.8)
Cohort 2	77.3 (2.6)	77.9 (2.9)	61.4 (3.1)	66.8 (3.0)	76.0 (3.0)	68.0 (4.0)	74.0 (3.1)	78.0 (2.2)	69.7 (3.0)
Percentage point change	+11.1**	+16.7**	+12.8**	+1.9	+9.3*	+2.5	+16.7**	+23.2***	+4.8
Not employed									
Cohort 1	25.3 (3.0)	27.0 (4.1)	43.3 (3.7)	25.9 (3.6)	25.9 (3.2)	26.4 (4.4)	34.1 (4.4)	30.5 (4.6)	30.8 (6.5)
Cohort 2	14.9 (2.2)	14.6 (2.5)	29.6 (2.9)	25.8 (2.8)	18.0 (2.7)	19.9 (3.5)	17.1 (2.7)	15.0 (1.9)	22.6 (2.7)
Percentage point change	-10.4**	-12.4**	-13.7**	-.1	-7.9	-6.5	-17.0***	-15.5**	-8.2

Table II-13 (continued)

Household characteristics	Learning disability	Speech/ language impairment	Mental retardation	Emotional disturbance	Hearing impairment	Visual impairment	Orthopedic impairment	Other health impairments	Multiple disabilities
Percentage in a household with annual income of:									
\$25,000 or less									
Cohort 1	65.0 (3.4)	72.7 (4.1)	74.8 (3.4)	72.9 (3.7)	67.9 (3.5)	65.3 (5.0)	67.1 (4.5)	69.2 (4.8)	71.0 (6.7)
Cohort 2	31.0 (3.0)	25.6 (3.2)	54.4 (3.3)	42.8 (3.2)	30.7 (3.3)	29.6 (4.0)	30.2 (3.4)	23.7 (2.3)	34.8 (3.3)
Percentage point change	-34.0***	-47.1***	-20.4***	-30.1***	-37.2***	-35.7***	-36.9***	-45.5***	-36.2***
More than \$50,000									
Cohort 1	5.3 (1.6)	6.8 (2.3)	1.7 (1.0)	5.4 (1.9)	6.9 (1.9)	4.4 (2.1)	14.6 (3.4)	7.2 (2.7)	10.2 (4.5)
Cohort 2	37.9 (3.1)	43.2 (3.6)	18.2 (2.6)	27.9 (2.9)	40.3 (3.5)	35.8 (4.2)	38.9 (3.6)	45.0 (2.7)	35.8 (3.4)
Percentage point change	+32.6***	+36.4***	+16.3***	+22.5***	+33.4***	+31.4***	+24.3***	+38.6***	+25.6***
Percentage in a household that recently received:									
AFDC/TANF									
Cohort 1	14.2 (2.4)	10.6 (2.8)	16.3 (2.7)	12.3 (2.7)	9.2 (2.1)	13.0 (3.4)	14.1 (3.2)	19.9 (4.0)	15.4 (5.1)
Cohort 2	9.2 (1.8)	8.9 (2.0)	15.2 (2.3)	14.9 (2.3)	8.5 (1.9)	11.0 (2.7)	6.0 (1.7)	7.5 (1.4)	9.7 (1.9)
Percentage point change	-5.0	-1.7	-1.1	+2.6	-.7	-2.3	-8.1*	-12.4**	-5.7
Food Stamps									
Cohort 1	25.7 (3.0)	22.9 (3.8)	33.0 (3.5)	25.5 (3.6)	18.8 (2.8)	19.9 (4.0)	24.7 (4.0)	24.7 (4.3)	27.9 (6.3)
Cohort 2	14.0 (2.2)	11.7 (2.2)	24.6 (2.7)	25.0 (2.8)	11.7 (2.2)	9.7 (2.5)	10.6 (2.2)	9.7 (1.6)	11.5 (2.1)
Percentage point change	-11.7**	-11.2*	-8.4	-.5	-7.1*	-10.2*	-14.1**	-15.0***	-16.4*
Sample size: Cohort 1/2	328/564	196/401	272/536	260/509	551/542	299/430	269/557	197/1,093	226/649

Notes: Standard errors are in parentheses.

Statistically significant difference in a two-tailed test at the following levels: * $p < .05$, ** $p < .01$, *** $p < .001$.

Income data are not adjusted for inflation.

Source: NLTS2.

A Changing Population: Individual and Household Characteristics of High School Students With Disabilities

Consistent with their relatively smaller gains in income, households of students with emotional disturbances also did not experience the reduction in receipt of AFDC/TANF benefits that was common to all other groups. Along with students with mental retardation, they were the only categories whose drop in food stamp participation was not statistically significant.

Conclusion

This analysis of changes in the characteristics of high-school-age students with disabilities between 1987 and 2001 reveals both improvements and challenges. For example, an improved economy was apparent in higher employment rates in 2001 than in 1987, and Cohort 2 parents were substantially better educated than their predecessors. However, these improvements also may have reflected shifts in the demographics of students and their households. The racial/ethnic distribution of students with disabilities more closely resembled that of the general population in 2001 than in 1987. However, more students came from blended families, rather than traditional families with two biological parents, and more students had bilingual and bicultural backgrounds. These changes may add challenges and stress to the lives of youth with disabilities and their families that were less prevalent in earlier years.

The increasing racial/ethnic and language diversity of students was matched by an increasing diversity of disabilities. For example, Cohort 2 students were markedly more likely to have their disabilities identified and served at younger ages. Sharp increases in the numbers of students with such disabilities as ADHD and autism changed the mix of the population of students with disabilities further.

The increased diversity along multiple dimensions among high-school-age students receiving special education may well have been met by changes in school policies and programs to accommodate the increased diversity. Further analyses will be needed to identify changes in students' schools and school programs and to assess the impacts of changes in students' characteristics and in their programs on students' performance in high school and early adulthood. Over the next several years, NLTS2 will generate those analyses to inform policy-making and program improvement.

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