

## Chapter 4: Changes in Postsecondary Education Participation of Youth with Disabilities

*Excerpted from: Changes Over Time in the Early Postschool Outcomes of Youth with Disabilities. A Report of Findings from the National Longitudinal Transition Study (NLTS) and the National Longitudinal Transition Study-2 (NLTS2).*

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As the American economy becomes increasingly knowledge based, attaining a postsecondary education is more important than ever. Projections for the next decade suggest that the strongest job growth will be in occupations requiring postsecondary education (Braddock, 1999). Whereas only 20% of workers needed at least some college for their jobs in 1959, by 2000 that number had increased to 56% (Carnevale & Fry, 2000). Analyses exploring the relationship between educational attainment and earnings have found that over the past 25 years, the gap in earnings between the different education levels has widened (Day & Newburger, 2002). For example, in 1975, those with an advanced degree earned 1.8 times as much as high school graduates; by 1999, the disparity had increased to 2.6 times as much (Day & Newburger, 2002).

Perhaps in part reflecting an awareness of the growing importance of postsecondary education, students with disabilities increasingly are taking rigorous academic courses in high school, including college-preparatory courses, such as a foreign language and science. In 1987, 62% of high school youth with disabilities had taken a science class, and 6% had enrolled in a foreign language class. By 2003, 83% were taking science, and 21% were studying a foreign language, demonstrating significant increases in the types of courses needed to prepare for postsecondary education (Wagner, Newman, & Cameto, 2004).

Changes are apparent not

only in student course-taking but also in the expectations parents hold for their adolescent children. When most youth included in this report were still in high school, parents were asked to report how likely they thought it was that their adolescent children with disabilities would reach several postsecondary education milestones. Postsecondary education, particularly graduation from a 2-year college, was considered a much more likely option in 2001 than in 1987 for youth in all disability categories, for both boys and girls, for white and African-American youth with disabilities, and for those at all income levels (Wagner, Cameto, & Newman, 2003).

To what extent are these types of changes for students with disabilities accompanied by changes in postsecondary education participation over time? This chapter examines changes between 1987 and 2003 in the postsecondary education enrollment of youth with disabilities who had been out of secondary school up to 2 years, as measured in the National Longitudinal Transition Study (NLTS) and the National Longitudinal Transition Study-2 (NLTS2).<sup>1</sup> It focuses on participation in three types of institutions—2-year/community colleges; 4-year colleges; and postsecondary vocational, technical, or business schools. The section begins with a discussion of change over time in youth's experiences with programs designed to help those who dropped out of high school earn a high school diploma. It

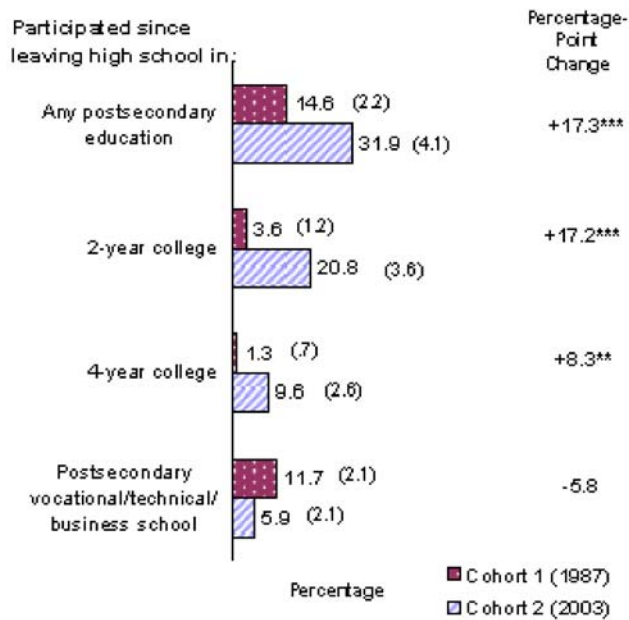
continues with an examination of changes in enrollment rates at postsecondary institutions for youth with disabilities as a whole and for youth who differed in their disability category, high-school-exit status, age, gender, household income, and race/ethnicity, when significant. It concludes with findings regarding changes in the extent to which students attended postsecondary school full- or part-time.

### Participation in High School Diploma/Certificate Programs

For the 30% of out-of-school youth in 2003 and the 46% in 1987 who had left high school without finishing,<sup>2</sup> post-high-school education did not necessarily mean postsecondary-level education. Dropping out of secondary school is not an irrevocable decision; young people may still obtain a high school diploma by reentering a regular or alternative secondary school program or by taking an examination to obtain a General Educational Development (GED) credential.

Although cohort 2 youth were much more likely than their cohort 1 peers to have finished high school (see Chapter 2), those who dropped out in 2003 were no more or less likely to have participated in GED or other high school equivalency programs than were dropouts in 1987. Within 2 years of leaving secondary school, approximately one-quarter of dropouts in cohorts 1 and 2 (25% and 22%, respectively) had participated in

**Exhibit 4-1**  
**Changes in Postsecondary Education Participation**  
**Since High School of Youth with Disabilities**



Sources: NLTS Wave 1 parent interviews and NLTS2 Wave 2 parent/youth interviews.

Statistical significance: \*\*p<.01; \*\*\*p<.001.

Standard errors are in parentheses.

a program to obtain a high school diploma or certificate.<sup>3</sup>

### Postsecondary School Enrollment

In contrast to the unchanged participation in GED programs, the likelihood of enrollment in postsecondary-level education increased over time. There was a 17-percentage-point increase between 1987 and 2003 in young adults with disabilities continuing their education at the postsecondary level (p<.001; Exhibit 4-1). This marked increase resulted in the overall postsecondary enrollment rate more than doubling, from 15% in cohort 1 to 32% in cohort 2 (p<.001). In 2003, almost one-third of out-of-school youth with disabilities had attended a

postsecondary school at some time since leaving high school.

The increase in postsecondary education enrollment was greater for youth with disabilities than for their peers in the general population. Youth in the general population who had completed high school<sup>4</sup> showed an approximate 5-percentage-point increase in college enrollment between 1987 and 2001 (Snyder & Hoffman, 2003). Despite a larger increase for youth with disabilities, the gap between the two groups continued. At the time of the 2003 survey, approximately one in five out-of-secondary-school youth with disabilities (19%) currently were attending postsecondary school, a rate that was less than half that of their peers in the general

population (40%, p<.001).

Examining enrollment at the various types of postsecondary schools, it is apparent that the greatest growth was experienced in enrollment at 2-year colleges. The likelihood of attending a 2-year or community college increased by 17 percentage points (p<.001). Youth were five times as likely to have attended a 2-year college in 2003 as they were 16 years earlier (21% vs. 4%, p<.001). Youth with disabilities also were more likely to have enrolled in a 4-year college in cohort 2 than in cohort 1, with an 8-percentage-point increase over time in the rate of enrollment at this type of institution (p<.01). Youth with disabilities were 10 times as likely to have attended a 4-year college in 2003 as in 1987 (10% vs. 1%, p<.01).

Youth in the general population were more likely to have attended 4-year than 2-year colleges, and since the 1980s, the rate of increase has been higher at 4- than 2-year institutions (National Center for Education Statistics, 2000). In contrast to their peers in the general population, youth with disabilities experienced a higher rate of growth in enrollment at 2-year colleges, resulting in more youth with disabilities having attended 2-year than 4-year institutions in cohort 2 (21% vs. 10%, p<.05).

Unlike enrollment in the other types of postsecondary schools, there was no significant change in enrollment at a postsecondary vocational, technical, or business school. In cohort 2, 6% of youth with disabilities had attended this type of school since leaving high school.

### Differential Changes Related to Disability Category

As with many aspects of their lives, change over time in postsecondary school involvement varied widely by disability

## Exhibit 4-2

## Changes in Postsecondary Education Participation Since High School of Youth with Disabilities, by Disability Category

	LD <sup>^</sup>	SLI	MR	ED	HI	VI	OI	OHI	MD/ D-B
<b>Percentage participating since high school in:</b>									
<b>Any postsecondary education</b>									
Cohort 1 (1987)	15.0 (3.4)	24.9 (6.2)	10.1 (3.5)	13.4 (3.6)	32.4 (5.4)	32.8 (7.7)	20.2 (7.6)	26.1 (7.9)	--
Cohort 2 (2003)	34.7 (6.1)	42.7 (11.8)	13.3 (5.9)	21.8 (5.0)	53.1 (10.4)	66.1 (9.6)	39.7 (8.3)	36.2 (6.4)	40.1 (16.9)
Percentage-pt. change	<b>+19.7**</b>	+17.8	+3.2	+8.4	+20.7	<b>+33.3**</b>	+19.5	+10.1	
<b>2-year college</b>									
Cohort 1 (1987)	3.4 (1.8)	13.9 (5.0)	.9 (1.2)	3.0 (2.0)	13.0 (4.1)	6.1 (4.1)	11.8 (6.4)	14.4 (6.7)	0
Cohort 2 (2003)	23.4 (5.5)	25.6 (10.7)	3.8 (3.5)	12.9 (4.1)	36.7 (8.5)	38.5 (10.1)	20.0 (6.9)	29.6 (6.2)	9.8 (10.7)
Percentage-pt. change	<b>+20.0***</b>	+11.7	+2.9	<b>+9.9*</b>	<b>+23.7*</b>	<b>+32.4**</b>	+8.2	+15.2	+9.8
<b>4-year college</b>									
Cohort 1 (1987)	1.1 (1.0)	5.3 (3.2)	--	.6 (.8)	6.2 (2.8)	17.2 (6.2)	4.3 (3.8)	7.0 (4.6)	1.6 (3.9)
Cohort 2 (2003)	11.0 (4.1)	20.0 (9.8)	.6 (1.4)	4.2 (2.5)	36.4 (8.5)	40.7 (10.2)	19.0 (6.7)	5.8 (3.1)	3.5 (6.4)
Percentage-pt. change	<b>+9.9*</b>	+14.7	+6	+3.6	<b>+30.2***</b>	<b>+23.5*</b>	+14.7	-1.2	+1.9
<b>Postsecondary vocational, technical, or business school</b>									
Cohort 1 (1987)	11.9 (3.2)	11.7 (4.6)	10.9 (3.9)	12.9 (3.9)	15.5 (4.4)	10.9 (5.3)	5.0 (4.3)	6.5 (4.7)	--
Cohort 2 (2003)	4.5 (2.7)	1.5 (3.0)	10.5 (5.6)	7.5 (3.2)	12.6 (5.9)	8.7 (5.8)	10.9 (5.4)	7.2 (3.5)	29.8 (15.9)
Percentage-pt. change	-7.4	-10.2	-4	-5.4	-2.9	-2.2	+5.9	+7	

Sources: NLTS Wave 1 parent interview and NLTS2 Wave 2 parent/youth interviews.

-- Too few to report separately.

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

Standard errors are in parentheses.

<sup>^</sup>LD=Learning Disability; SLI= Speech/Language Impairment; MR= Mental Retardation, ED= Emotional Disability; HI= Hearing Impairment; VI= Visual Impairment; OI= Orthopedic Impairment; OHI= Other Health Impairment; MD/D-B= Multiple Disabilities/Deaf-Blindness

category, with increases ranging from 3 percentage points for youth with mental retardation to 33 percentage points for those with visual impairments (Exhibit 4-2). The largest increases were experienced by those most likely to have attended postsecondary school in cohort 1—youth with sensory impairments—resulting in their continuing to be among those most likely to be enrolled in any postsecondary education in co-

hort 2. For example, with their 33-percentage-point increase ( $p < .01$ ), youth with visual impairments went from one-third having attended postsecondary school in 1987 to two-thirds in 2003. They remained more likely than youth in many other categories to have participated in any type of postsecondary school program (66% vs. 40% of youth with orthopedic impairments,  $p < .05$ ; approximately 35% of youth with other health impairments or

learning disabilities,  $p < .01$  for both comparisons; 22% of youth with emotional disturbances,  $p < .001$ ; and 13% of youth with mental retardation,  $p < .001$ ).

Youth with hearing or visual impairments demonstrated the largest increases in both 2- and 4-year college participation, resulting in their remaining among those most likely to be enrolled at these types of institutions. Youth in these two categories experienced 24- and 32-

**Exhibit 4-3**

**Changes in Postsecondary Education Participation Since High School of Youth with Disabilities, by School Exit Status**

	Completers	Dropouts
<b>Percentage participating since high school in:</b>		
<b>Any postsecondary education</b>		
Cohort 1 (1987)	23.7 (3.5)	5.6 (2.2)
Cohort 2 (2003)	41.3 (5.3)	8.8 (4.3)
Percentage-pt. change	<b>+17.6**</b>	+3.2
<b>2-year college</b>		
Cohort 1 (1987)	5.3 (1.9)	1.3 (1.3)
Cohort 2 (2003)	28.4 (4.9)	1.3 (1.8)
Percentage-pt. change	<b>+23.1***</b>	.0
<b>4-year college</b>		
Cohort 1 (1987)	2.5 (1.3)	--
Cohort 2 (2003)	13.4 (3.7)	--
Percentage-pt. change	<b>+10.9**</b>	.0
<b>Postsecondary vocational, technical, or business school</b>		
Cohort 1 (1987)	16.1 (3.0)	6.0 (2.7)
Cohort 2 (2003)	5.1 (2.4)	8.0 (4.2)
Percentage-pt. change	<b>-11.0**</b>	+2.0

Sources: NLTS Wave 1 parent interview and NLTS2 Wave 2 parent/youth interviews.

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

Standard errors are in parentheses.

percentage-point increases in enrollment at 2-year colleges (p<.05 and p<.01, respectively), such that 37% and 38% of cohort 2 youth had done so. Enrollment rates at 4-year colleges increased by 30 and 24 percentage points for youth with hearing or visual impairments, respectively (p<.001 and p<.05) bringing those rates for cohort 2 to 36% and 41%.

Youth with learning disabilities also experienced significant increases in postsecondary participation, demonstrating a 20-

percentage-point gain between cohorts in enrollment in any type of postsecondary school (p<.01), which more than doubled their enrollment rates (35% vs. 15%, p<.01). They experienced a 20-percentage-point increase in enrollment at 2-year colleges (p<.001) and a 10-percentage-point increase in enrollment at 4-year institutions (p<.05). These increases, particularly at 2-year colleges, brought them from being among the least likely to have enrolled at cohort 1 (3% enrolled in a 2-year col-

lege) to being among those more likely to have done so (23%).

In cohort 2, between about one- and two-thirds of youth in most disability categories had enrolled in a postsecondary program, with the exceptions of youth with mental retardation or emotional disturbances. They were among the least likely to have attended in 1987, and with no significant increases over time, they remained among those least likely to have attended postsecondary school (13% and 22%, respectively).

In contrast to the gains experienced in enrollment at 2- and 4-year colleges, no category of youth had a significant change in the likelihood of enrollment in a postsecondary vocational, technical, or business school.

**Differential Changes Related to School-Exit Status**

Almost all of the postsecondary enrollment gains over time were experienced by youth who had finished high school. High school completers demonstrated an 18-percentage-point increase in the likelihood of attending postsecondary school (p<.01), whereas dropouts experienced a 3-percentage-point change (Exhibit 4-3). In 2003, 4 of 10 high school completers had participated in a postsecondary program since leaving high school, compared with 1 of 10 dropouts (41% vs. 9%, p<.001). Of the 9% of high school dropouts who continued on to postsecondary programs, more than 90% had enrolled at postsecondary vocational, technical, or business schools. Their rates of enrollment at 2- and 4-year colleges were negligible.

For those who completed high school, there was a shift over time from enrollment in vocational, technical, or busi-



ness schools to enrollment in 2- and 4-year programs. High school finishers experienced a 23-percentage-point increase in enrollment at 2-year colleges ( $p < .001$ ) and an 11-percentage-point increase at 4-year colleges ( $p < .01$ ), with a concurrent 11-percentage-point decrease in participation in postsecondary vocational, technical, or business schools ( $p < .01$ ). In 2003, more than one-quarter (28%) of high school completers had attended a 2-year college, 13% had attended a 4-year college, and 5% had enrolled in vocational, technical, or business school programs.

### Differential Changes Related to Demographic Characteristics

The extent to which the participation of youth with disabilities in postsecondary education changed over time varied with several demographic characteristics.

**Age.** Across all age groups, only older youth experienced significant increases in postsecondary education enrollment. Among 19-year-olds, there were increases of 26 percentage points in overall postsecondary school attendance since high school ( $p < .001$ ) and 28 and 11 percentage points in attendance at 2- and 4-year colleges, respectively ( $p < .001$  and  $p < .05$ ; Exhibit 4-4). These gains meant that the gap in enrollment between 19-year-olds and their younger peers widened over time. For example, in cohort 1, 18% of 19-year-olds, compared with 14% of 18-year-olds, had been enrolled in any type of postsecondary education, whereas in cohort 2, more than twice as many 19- as 18-year-olds had been enrolled (44% vs. 20%,  $p < .01$ ). Fewer than 15% of 15- through-17-year-olds had been enrolled in a postsecondary school since high school (vs. 44% of 19-year-olds,  $p < .01$ ).

	15 through 17	18	19
<b>Percentage participating since high school in:</b>			
<b>Any postsecondary education</b>			
Cohort 1 (1987)	6.3 (4.0)	13.6 (3.6)	18.2 (3.3)
Cohort 2 (2003)	14.1 (8.2)	20.3 (5.4)	43.7 (6.3)
Percentage-pt. change	+7.8	+6.7	<b>+25.5***</b>
<b>2-year college</b>			
Cohort 1 (1987)	.6 (1.6)	2.5 (1.8)	5.1 (1.9)
Cohort 2 (2003)	.4 (1.5)	10.2 (4.1)	32.6 (6.1)
Percentage-pt. change	-.2	+7.7	<b>+27.5</b>
<b>4-year college</b>			
Cohort 1 (1987)	.1 (.4)	.6 (.9)	2.2 (1.5)
Cohort 2 (2003)	9.6 (7.3)	4.0 (2.7)	12.7 (4.3)
Percentage-pt. change	+7.6	+3.5	<b>+11.3*</b>
<b>Postsecondary vocational, technical, or business school</b>			
Cohort 1 (1987)	5.3 (4.6)	12.8 (3.8)	13.0 (3.0)
Cohort 2 (2003)	5.1 (5.4)	7.6 (3.6)	5.2 (2.9)
Percentage-pt. change	-.2	-5.2	-7.8

Sources: NLTS Wave 1 parent interview and NLTS2 Wave 2 parent/youth interviews.

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

Standard errors are in parentheses.

Some of the difference in enrollment rates between 15-through 17-year-olds and their older peers might be due to higher rates of dropping out among this younger age group. None of the age groups experienced a significant change over time in enrollment at postsecondary vocational, technical, or business schools.

**Gender.** Mirroring their peers in the general population (Peter & Horn, 2005), girls with disabilities demonstrated larger gains than boys in enrollment in postsecondary school. The

likelihood of enrollment since high school in a postsecondary school program increased by 21 percentage points ( $p < .01$ ) for girls and 15 percentage points for boys ( $p < .01$ ; Exhibit 4-5). Girls experienced most of these gains in enrollment at 2-year colleges (22 percentage points,  $p < .01$ ), whereas boys experienced gains at both 2- and 4-year schools (15 and 10 percentage points,  $p < .01$  for both). Nonetheless, participation rates at both types of institutions did not differ significantly by gender. In 2003, 24% of girls and 19% of

boys had attended a 2-year college, and 6% of girls and 11% of boys had attended a 4-year college.

Boys also experienced a 7-percentage-point decline ( $p < .05$ ) in enrollment at postsecondary vocational, technical, or business schools. Almost 5% of boys and 8% of girls had attended this type of school in cohort 2.

**Household income.** Youth from wealthier households were the only income group to experience a consistent increase over time in enrollment across several types of postsecondary schools. They showed a 22-percentage-point increase ( $p < .05$ ) in having attended any type of postsecondary school, and 19- and 14-percentage-point increases ( $p < .05$  for both) in having attended 2- and 4-year colleges (Exhibit 4-6). In contrast, youth in the middle income group had an increase in enrollment only in 2-year colleges (16 percentage points,  $p < .05$ ), and those in the lowest income group showed no significant increase in postsecondary school attendance. This continued the gap between the groups that had existed in cohort 1. Youth in the highest income group were more than twice as likely as those in the lowest to have attended any type of postsecondary school in cohort 2 (42% vs. 17%,  $p < .05$ ). The gap was particularly apparent in enrollment at 4-year colleges. In 2003, 16% of youth from wealthier households had attended a 4-year institution, compared with fewer than 1% of those from middle-income households ( $p < .05$ ).

None of the household income groups showed significant change in enrollment in postsecondary vocational, technical, or business schools, with rates of enrollment at cohort 2 ranging from 4% to 6% of youth in the three income groups.

**Race/ethnicity.** Although white youth with disabilities

<b>Exhibit 4-5</b>		
<b>Changes in Postsecondary Education Participation Since High School of Youth with Disabilities, by Gender</b>		
	Boys	Girls
<b>Percentage participating since high school in:</b>		
<b>Any postsecondary education</b>		
Cohort 1 (1987)	14.9 (2.7)	14.1 (3.9)
Cohort 2 (2003)	30.3 (5.0)	35.0 (7.0)
Percentage-pt. change	<b>+15.4*</b>	<b>+20.9**</b>
<b>2-year college</b>		
Cohort 1 (1987)	4.3 (1.6)	2.0 (1.7)
Cohort 2 (2003)	19.4 (4.4)	23.5 (6.4)
Percentage-pt. change	<b>+15.1**</b>	<b>+21.5**</b>
<b>4-year college</b>		
Cohort 1 (1987)	.8 (.7)	2.2 (1.6)
Cohort 2 (2003)	11.3 (3.5)	6.2 (3.7)
Percentage-pt. change	<b>+10.5**</b>	+4.0
<b>Postsecondary vocational, technical, or business school</b>		
Cohort 1 (1987)	11.7 (2.6)	11.8 (3.9)
Cohort 2 (2003)	4.7 (2.4)	8.3 (4.2)
Percentage-pt. change	<b>-7.0*</b>	-3.5

Sources: NLTS Wave 1 parent interview and NLTS2 Wave 2 parent/youth interviews.  
 Statistically significant difference in a two-tailed test at the following levels: \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$   
 Standard errors are in parentheses.

were the only racial/ethnic group to experience significant increases in overall postsecondary participation (22 percentage points,  $p < .001$ ), their level of enrollment in postsecondary schools in cohort 2 did not differ significantly from that of their African-American or Hispanic peers. In 2003, 36% of white youth with disabilities, 28% of African-American youth, and 21% of Hispanic youth had enrolled in a postsecondary program since leaving high school.

The pattern of enrollment

change over time for youth with disabilities differed from that of peers in the general population. White youth with disabilities demonstrated the largest increases and Hispanic youth the smallest. In contrast, Hispanic youth in the general population experienced much larger increases in enrollment than their white or African-American peers.<sup>5</sup> Hispanic youth in the general population experienced an 18-percentage-point increase in postsecondary enrollment, three times the 6% in-

## Exhibit 4-6

## Changes in Postsecondary Education Participation Since High School of Youth with Disabilities, by Household Income and Race/Ethnicity

	Income			Race/Ethnicity		
	Lowest	Middle	Highest	White	African-American	Hispanic
<b>Percentage participating since high school in:</b>						
<b>Any postsecondary education</b>						
Cohort 1 (1987)	8.7 (3.5)	11.9 (3.9)	20.3 (4.1)	14.3 (2.6)	15.6 (4.7)	18.3 (10.3)
Cohort 2 (2003)	17.0 (5.6)	22.2 (7.2)	42.5 (8.2)	36.2 (5.3)	27.8 (7.9)	21.2 (11.0)
Percentage-pt. change	+8.3	+10.3	<b>+22.2*</b>	<b>+21.9*</b>	+12.2	+2.9
<b>2-year college</b>						
Cohort 1 (1987)	1.7 (1.7)	.9 (1.3)	8.1 (2.9)	3.9 (1.6)	2.8 (2.3)	3.5 (5.1)
Cohort 2 (2003)	10.5 (4.7)	16.6 (6.5)	26.9 (7.5)	24.7 (4.9)	14.2 (6.2)	13.5 (9.7)
Percentage-pt. change	+8.8	<b>+15.7*</b>	<b>+18.8*</b>	<b>+20.8***</b>	+11.4	+10.0
<b>4-year college</b>						
Cohort 1 (1987)	46.0 (6.1)	41.0 (6.0)	2.2 (1.5)	1.2 (.8)	.2 (.6)	5.7 (6.2)
Cohort 2 (2003)	56.3 (6.9)	51.6 (7.7)	16.0 (6.2)	10.7 (3.5)	12.0 (5.8)	1.6 (3.6)
Percentage-pt. change	+10.3	+10.6	<b>+13.8*</b>	<b>+9.5**</b>	<b>+11.8*</b>	-4.1
<b>Postsecondary vocational, technical, or business school</b>						
Cohort 1 (1987)	8.0 (3.6)	12.4 (4.4)	11.7 (3.4)	11.1 (2.5)	15.3 (5.0)	9.8 (8.2)
Cohort 2 (2003)	3.5 (2.8)	6.2 (4.2)	4.7 (3.6)	6.1 (2.7)	4.2 (3.6)	8.5 (7.9)
Percentage-pt. change	-4.5	-6.2	-7.0	-5.0	-11.1	-1.3

Sources: NLTS Wave 1 parent interview and NLTS2 Wave 2 parent/youth interviews.

Statistically significant difference in a two-tailed test at the following levels: \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ . Standard errors are in parentheses.

crease experienced by white youth and nine times the 2% increase experienced by African-American youth (Snyder & Hoffman, 2003).

White youth with disabilities showed the only significant gain over time in 2-year college enrollment (21 percentage points,  $p < .001$ ). Both African-American and white youth experienced significant increases in 4-year college attendance, with gains of 12 and 10 percentage points ( $p < .05$  and  $p < .01$ , respectively). Despite these gains, cohort 2 enrollment at 2- or 4-year institutions did not differ

by racial/ethnic categories, possibly due in part to the small sample size, particularly for Hispanic youth. In 2003, 25% of white youth and 14% of both African-American and Hispanic youth had enrolled in 2-year schools, and 11% of white youth, 12% of African-American youth, and 2% of Hispanic youth had attended 4-year colleges.

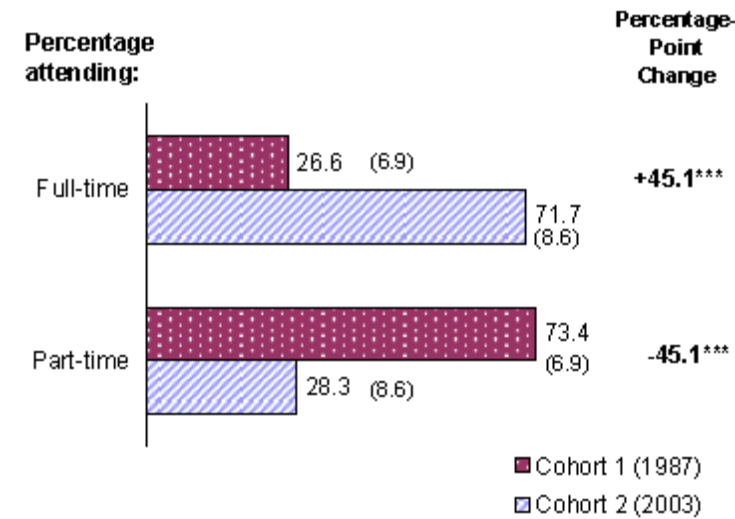
Change in enrollment at postsecondary vocational, technical, or business schools was not significant for any of the racial/ethnic groups.

### Postsecondary Enrollment Characteristics

In cohort 1, nearly three-quarters of postsecondary students attended programs part-time. The 45-percentage-point increase in attending school full-time ( $p < .001$ ) experienced by postsecondary students in cohort 2 resulted in a complete reversal over time in the balance between the two modes of school attendance (Exhibit 4-7). By 2003, almost three-quarters were attending postsecondary school full-time, making their experience more similar to that

Exhibit 4-7

Changes in Full- and Part-Time Enrollment in Postsecondary School by Youth with Disabilities



Sources: NLTS Wave 1 parent interviews and NLTS2 Wave 2 parent/youth interviews.

Statistical significance: \*\*\*p<.001.

Standard errors are in parentheses.

of their peers in the general population, who tended to be enrolled full-time (Wirt, 2000).

Summary

Enrollment in the post-secondary level education by youth with disabilities increased markedly over time, with the overall participation rate increasing by 17 percentage points between cohorts 1 and 2. Youth with disabilities experienced a larger increase than their peers in the general population, although the gap in postsecondary attendance rates between the two groups continued. Youth in the general population were more than twice as likely as those with disabilities to be attending postsecondary school in 2003.

The greatest growth in postsecondary enrollment was

experienced at 2-year colleges, with attendance at 4-year institutions also increasing significantly. In contrast, enrollment at postsecondary vocational, technical, or business schools remained static or decreased for some groups.

Change over time in postsecondary school attendance varied widely by disability category. Youth with visual or hearing impairments demonstrated the largest increases in participation at 2- and 4-year institutions, resulting in their remaining among those most likely to have enrolled at these types of colleges. Increased enrollment also was apparent for youth with learning disabilities. In cohort 2, between about one- and two-thirds of youth in most disability categories had enrolled in a postsecondary pro-

gram. The exceptions were those with emotional disturbances or mental retardation. They were among the least likely to have attended in 1987, and with a lack of significant increases over time, they remained among those least likely to have attended postsecondary school.

Almost all of the postsecondary enrollment gains over time were experienced by youth who had completed high school. In cohort 2, 4 out of 10 high school completers had participated in a postsecondary program since leaving high school, compared with fewer than 1 out of 10 dropouts. Dropouts who continued on to postsecondary programs were most likely to be enrolled at postsecondary vocational, technical, or business schools. Their rates of enrollment at 2- and 4-year colleges were negligible. In contrast, there was a shift over time from enrollment in vocational, technical, or business schools to enrollment in 2- and 4-year programs for those who had graduated from high school.

Across all age groups, only 19-year-olds experienced a significant increase in postsecondary education enrollment. Their gain meant that the gap in enrollment between 19-year-olds and their younger peers widened over time.

Girls demonstrated larger increases than boys in postsecondary school enrollment. Girls experienced most of these gains in enrollment at 2-year colleges, whereas boys experienced gains at both 2- and 4-year schools. Nonetheless, participation rates at both types of institutions did not differ significantly by gender in cohort 2.

Youth from wealthier households were the only income group to experience a consistent increase over time in enrollment across several types of postsecondary schools. In contrast, youth in the middle income



group showed an increase only in enrollment in 2-year colleges, and those in the lowest income group demonstrated no significant increase in postsecondary school attendance from 1987 to 2003. This pattern of change continued the gap in postsecondary enrollment between income groups that existed in cohort 1, favoring youth from wealthier households.

White youth with disabilities were the only racial/ethnic group to experience significant increases in overall postsecondary enrollment, as well as 2-year and 4-year college enrollment. African-American youth demonstrated gains in 4-year college attendance. Contrary to the experiences of their peers in the general population, Hispanic youth with disabilities showed the smallest change in enrollment over time. Despite this pattern of gains for the racial/ethnic groups, cohort 2 enrollment at 2- or 4-year institutions did not differ across the groups.

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## Endnotes

- 1 Youth for whom data are available for 1987 and 2003 are referred to as cohort 1 and cohort 2 respectively. For

both groups of youth, 20% were 15 through 17, 31% were 18, and 50% were 19.

- 2 This includes 6% of youth in 1987 and 1% in 2003 who were reported to have been suspended or expelled or left school for other reasons without finishing. For convenience, the entire group is referred to as dropouts.
- 3 There are too few dropouts in most disability categories to report findings separately by disability category.
- 4 The general population comparison is for individuals ages 16 to 24 who graduated from high school or completed a GED during the preceding 12 months. The youth with disabilities sample is 15- to 19-year-olds and includes dropouts.
- 5 Individuals in the general population ages 16 to 24 who graduated from high school or completed a GED during the preceding 12 months.