

2. Comparisons Across Time of the Postsecondary Education of Youth With Disabilities

Over the past decades, enrollment in postsecondary education has become increasingly prevalent. For youth in the general population, “postsecondary enrollments are at an all-time high” (Ewell and Wellman 2007, p. 2).

Ensuring that students with disabilities have “access to and full participation in postsecondary education” has been identified as one of the key challenges in the future of secondary education and transition for such students (National Center on Secondary Education and Transition 2003, p. 1). Postsecondary education has been linked to increased earning potential for youth who continue their education after high school, even for those who have not earned a degree (Marcotte et al. 2005).

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 percent of high school youth with disabilities had taken a science class, and 6 percent had enrolled in a foreign language class. By 2003, 83 percent were taking science, and 21 percent were studying a foreign language, demonstrating significant increases in the types of courses needed to prepare for postsecondary education (Wagner, Newman, and Cameto 2004).

Differences between 2003 and 1987 are apparent not only in student course-taking but also in the expectations of parents 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 (e.g., attend school after high school, graduate from a 2-year college). Postsecondary education, particularly graduation from a 2-year college, was considered by parents to be 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, and Newman 2003).

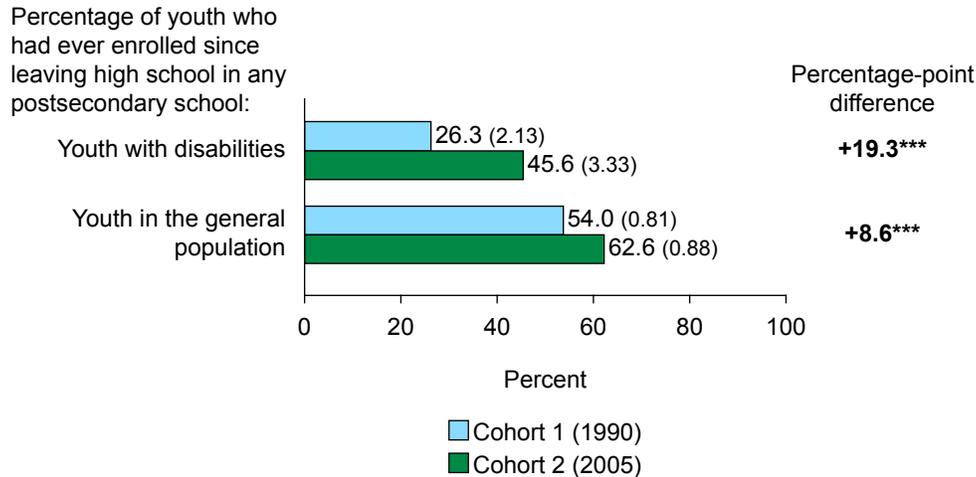
To what extent are these higher rates of academic course enrollment and parental expectation for students with disabilities accompanied by differences in postsecondary education participation? This chapter examines differences between postsecondary education enrollment of youth with disabilities who had been out of secondary school up to 4 years in 1990 (cohort 1) and 2005 (cohort 2), as measured in the National Longitudinal Transition Study (NLTS) and the National Longitudinal Transition Study-2 (NLTS2), respectively. 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 an examination of differences in enrollment rates at postsecondary institutions for youth with disabilities as a whole and for youth who varied in their disability category, high-school-exit status, years since leaving high school, gender, household income, and race/ethnicity. It concludes with findings regarding differences related to the experiences of students who attended postsecondary school.³⁰

³⁰ This chapter examines differences in postsecondary enrollment between 1990 and 2005. As described in Chapter 1, differences exist between NLTS and NLTS2 that have required analytic adjustments to make comparisons between the studies valid. Readers primarily interested in 2005 postsecondary enrollment rates and

Postsecondary School Enrollment

Postsecondary school enrollment rates were higher in 2005 (cohort 2) than in 1990 (cohort 1) for youth with disabilities (figure 1).³¹ Within 4 years of leaving high school, 46 percent of youth with disabilities in 2005 were reported ever to have enrolled in a postsecondary school; in contrast, 26 percent in 1995 were reported to have continued their education at the postsecondary level, a 19 percentage-point difference ($p < .001$).

Figure 1. Comparison between 1990 and 2005 of postsecondary school enrollment since high school of youth with disabilities and youth in the general population out of high school up to 4 years



*** $p < .001$.

NOTE: Standard errors are in parentheses. Findings are reported for youth with disabilities out of high school 1 to 4 years. NLTS percentages are weighted population estimates based on a sample of approximately 2,470 youth across variables. NLTS2 percentages are weighted population estimates based on a sample of approximately 2,600 youth with disabilities across variables.

SOURCE: U.S. Department of Education, Office of Special Education Programs, National Longitudinal Transition Study (NLTS), Wave 2 parent/youth interview, 1990; U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 3 parent interview and youth interview/survey, 2005. U.S. Census Bureau, Current Population Survey (CPS), 1990 and 2005 surveys, responses for 18- to 21-year-olds.

Youth with disabilities experienced a significantly larger difference in enrollment rates between 1990 and 2005 than did those in the general population. In comparison with the 19 percentage-point difference evidenced by youth with disabilities, similar-aged youth in the general population experienced a 9 percentage-point difference in college enrollment ($p < .01$).³² Despite the larger increase for youth with disabilities, they remained less likely than those in the general population ever to have been enrolled in postsecondary education. For youth with disabilities in cohort 2, 46 percent continued on to postsecondary education within 4 years of leaving high school, compared with 63 percent of similar-age youth in the general population ($p < .001$).

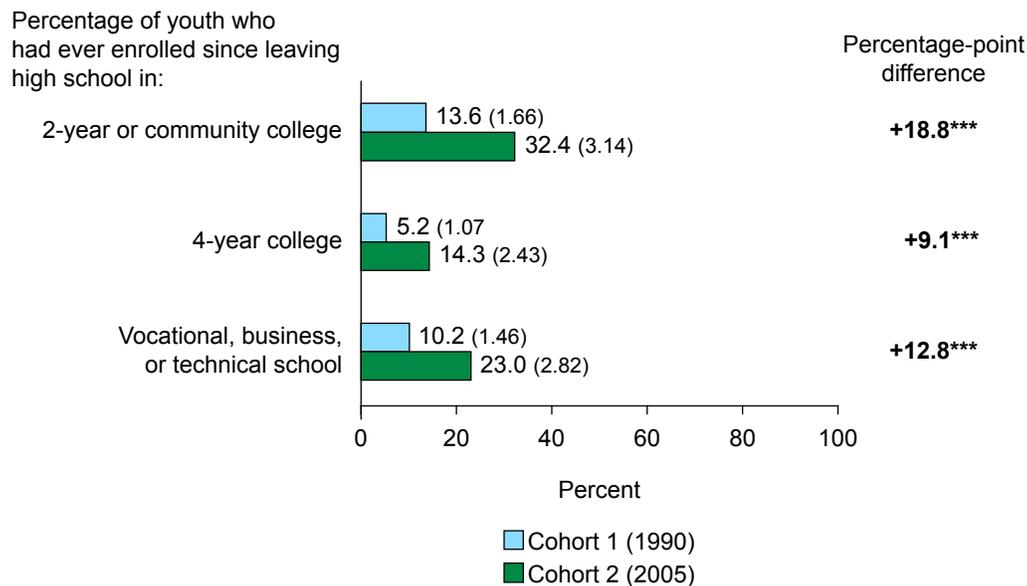
experiences are referred to the report *The Post-High School Outcomes of Youth With Disabilities up to 4 Years After High School* (Newman et al. 2009), available on the NLTS2 website, www.nlts2.org.

³¹ In both studies respondents were asked, “Since leaving high school [have you/has *name of youth*] taken any classes from a [2-year, junior, or community college; vocational, business, or technical school; 4-year college]?”

³² U.S. Census Bureau, Current Population Survey (CPS), 1990 and 2005 surveys, responses for 18- to 21-year-olds.

Reported rates of ever having enrolled in postsecondary education were higher in 2005 than in 1990 for all types of postsecondary programs. Enrollment in a 2-year or community college evidenced a 19 percentage-point difference (14 percent vs. 32 percent, $p < .001$), enrollment in a 4-year college or university demonstrated a 9 percentage-point difference (5 percent vs. 14 percent, $p < .001$), and enrollment in a vocational, business, or technical school showed a 13 percentage-point difference (10 percent vs. 23 percent, $p < .001$) between 1990 and 2005 (figure 2).

Figure 2. Comparison between 1990 and 2005 of postsecondary school enrollment since high school of youth with disabilities out of high school up to 4 years, by the type of postsecondary school



*** $p < .001$.

NOTE: Standard errors are in parentheses. Findings are reported for youth with disabilities out of high school 1 to 4 years. NLTS percentages are weighted population estimates based on a sample of approximately 2,470 youth with disabilities across variables. NLTS2 percentages are weighted population estimates based on a sample of approximately 2,600 youth with disabilities across variables.

SOURCE: U.S. Department of Education, Office of Special Education Programs, National Longitudinal Transition Study (NLTS), Wave 2 parent/youth interview, 1990; U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 3 parent interview and youth interview/survey, 2005.

Comparisons Across Time of Postsecondary School Enrollment by Disability Category

Reported rates of ever having enrolled in a postsecondary program ranged from 8 percent for youth with mental retardation to 58 percent for those with visual impairments in 1990, and from 28 percent for youth with mental retardation to 78 percent for those with visual impairments in 2005 (table 3). Youth in four of the nine disability categories experienced significantly higher postsecondary enrollment rates in 2005 than in 1990, specifically those with hearing impairments (73 percent vs. 50 percent), mental retardation (28 percent vs. 8 percent), learning disabilities (48 percent vs. 30 percent), and emotional disturbances (35 percent vs. 18 percent; $p < .001$ for all comparisons).

Table 3. Comparison between 1990 and 2005 of postsecondary education enrollment of youth with disabilities out-of-high school up to 4 years, by disability category

	Learning disability	Speech/language impairment	Mental retardation	Emotional disturbance	Hearing impairment	Visual impairment	Orthopedic impairment	Other health impairment/autism	Multiple disabilities/deaf-blindness
Percentage of youth who had ever enrolled since high school in:									
Any postsecondary school									
Cohort 1 (1990)	29.7 (3.26)	47.0 (5.55)	8.4 (2.49)	18.0 (3.62)	49.5 (2.97)	57.9 (4.14)	41.0 (5.08)	47.5 (6.24)	13.4 (5.10)
Cohort 2 (2005)	48.2 (5.01)	55.5 (5.28)	28.1 (5.21)	34.7 (4.87)	72.6 (5.62)	77.6 (7.06)	54.2 (5.54)	55.8 (4.76)	37.2 (7.80)
Percentage-point difference	+18.5**	+8.5	+19.7***	+16.7**	+23.1***	+19.7	+13.2	+8.3	+23.8
2-year or community college									
Cohort 1 (1990)	15.8 (2.60)	21.3 (4.55)	2.9 (1.51)	10.1 (2.84)	27.1 (2.64)	22.7 (3.51)	26.1 (4.55)	23.8 (5.32)	7.5 (3.92)
Cohort 2 (2005)	35.3 (4.79)	30.4 (4.87)	20.6 (4.70)	20.8 (4.16)	46.1 (6.31)	56.2 (8.45)	39.0 (5.42)	43.6 (4.76)	19.4 (6.38)
Percentage-point difference	+19.5***	+9.1	+17.7***	+10.7	+19.0**	+33.5***	+12.9	+19.8**	+11.9
4-year college									
Cohort 1 (1990)	5.0 (1.56)	20.5 (4.49)	0.9 (0.85)	1.3 (1.07)	16.3 (2.20)	33.1 (3.94)	13.2 (3.50)	19.9 (4.99)	4.7 (3.15)
Cohort 2 (2005)	16.2 (3.69)	26.3 (4.68)	4.7 (2.45)	5.6 (2.35)	31.3 (5.84)	43.6 (8.39)	20.8 (4.51)	14.0 (3.33)	12.0 (5.24)
Percentage-point difference	+11.2**	+5.8	+3.8	+4.3	+15.0	+10.5	+7.6	-5.9	+7.3
Vocational, business, or technical school									
Cohort 1 (1990)	12.5 (2.36)	9.0 (3.18)	4.7 (1.90)	6.9 (2.39)	12.6 (1.97)	8.9 (2.39)	6.6 (2.57)	8.4 (3.47)	2.1 (2.15)
Cohort 2 (2005)	22.6 (4.19)	23.3 (4.49)	20.2 (4.65)	23.5 (4.34)	31.8 (5.87)	11.9 (5.48)	21.1 (4.53)	32.1 (4.47)	16.3 (5.96)
Percentage-point difference	+10.1	+14.3**	+15.5**	+16.6***	+19.2**	+3.0	+14.5**	+23.7***	+14.2

** $p < .01$, *** $p < .001$.

NOTE: Standard errors are in parentheses. Findings are reported for youth with disabilities who had been out of high school up to 4 years. NLTS percentages are weighted population estimates based on samples that range from approximately 2,470 to 2,480 youth with disabilities across variables. NLTS2 percentages are weighted population estimates based on samples that range from approximately 2,590 to 2,600 youth with disabilities across variables.

SOURCE: U.S. Department of Education, Office of Special Education Programs, National Transition Study (NLTS), Wave 2 parent/youth interview, 1990; U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 3 parent interview and youth interview/survey, 2005.

Despite the significantly higher enrollment rates experienced by youth with mental retardation and emotional disturbances in 2005 compared with 1990, youth in both disability categories remained among those disability categories least likely to attend postsecondary school. In 2005, 28 percent of youth with mental retardation and 35 percent of those with emotional disturbances ever had enrolled in a postsecondary program. Youth in several other disability categories evidenced higher enrollment rates than did youth in these two disability categories, including those with hearing or visual impairments (73 percent and 78 percent, $p < .001$ for all comparisons with mental retardation and emotional disturbances); those with

speech/language, orthopedic, or youth in the category of other health impairment and autism (56 percent, 54 percent, and 56 percent, $p < .001$ for all comparisons with mental retardation and $p < .01$ for all comparisons with emotional disturbances); and youth with learning disabilities (48 percent, $p < .01$ for comparison with mental retardation).

Postsecondary enrollment rates in 2-year or community colleges were higher in 2005 than 1990 for youth in 5 of the 9 disability categories. Youth with visual (56 percent vs. 23 percent, $p < .001$) or hearing impairments (46 percent vs. 27 percent, $p < .01$), youth in the category of other health impairment and autism (44 percent vs. 24 percent, $p < .01$), youth with learning disabilities (35 percent vs. 16 percent, $p < .001$), or mental retardation (21 percent vs. 3 percent, $p < .001$) all had significantly higher rates of ever having enrolled in a 2-year college in 2005 than in 1990.

In 2005, rates of ever having enrolled in 4-year universities ranged from 5 percent of youth with mental retardation and 6 percent of those with emotional disturbances, to 31 percent of those with hearing impairments and 44 percent of those with visual impairments. In contrast with the other types of schools, only students with learning disabilities experienced significantly higher enrollment rates in 4-year colleges in 2005 compared with 1990. In 1990, 5 percent of youth with learning disabilities ever had enrolled in a 4-year college, by 2005 the rate was 16 percent, an 11 percentage-point difference ($p < .01$).

Similar to rates of enrollment in 2-year colleges, rates of ever having enrolled in postsecondary vocational, business, or technical schools were higher in 2005 than 1990 for youth in 6 of the 9 disability categories, including youth in the category of other health impairment or autism (32 percent vs. 8 percent, $p < .001$), youth with hearing impairments (32 percent vs. 13 percent, $p < .01$), emotional disturbances (24 percent vs. 7 percent, $p < .001$), mental retardation (20 percent vs. 5 percent, $p < .01$), orthopedic (21 percent vs. 7 percent, $p < .01$), or speech/language impairments (23 percent vs. 9 percent, $p < .01$).

Comparisons Across Time of Postsecondary School Enrollment by High School-Leaving Characteristics

Across the various types of postsecondary programs, high school completers³³ consistently evidenced significantly higher rates in 2005 of ever having enrolled in postsecondary school than in 1990 (table 4). In 2005, 51 percent of high school completers reported ever having enrolled in a postsecondary program; a 16 percentage point higher rate than in 1990 ($p < .001$). Rates of ever having enrolled in a postsecondary program for high school completers by type of program included 19 percentage-points higher in 2005 than in 1990 at 2-year or community colleges (37 percent vs. 19 percent, $p < .001$), 9 percentage-points higher at 4-year universities (17 percent vs. 7 percent, $p < .01$), and 12 percentage-points higher at vocational, business, or technical schools (24 percent vs. 12 percent, $p < .001$).

In contrast, rates of ever having enrolled in postsecondary programs did not significantly differ between the two time periods for high school noncompleters, resulting in the continued

³³ High school completers includes youth with disabilities who had left high school without finishing (e.g. dropped out or permanently expelled), but who later reentered a regular or alternative secondary school program or took an examination to obtain a General Educational Development (GED) credential, and had received a high school diploma or certificate.

gap between high school completers and noncompleters. In 1990, 34 percent of high school completers compared with 8 percent of noncompleters ever had enrolled in a postsecondary program ($p < .001$). In 2005, 51 percent of completers versus 18 percent of noncompleters had continued on to postsecondary school ($p < .001$).

Table 4. Comparison between 1990 and 2005 of postsecondary education enrollment of youth with disabilities out of high school up to 4 years, by secondary-school-leaving status and years since leaving high school

	Leaving status		Years since leaving high school		
	Completers	Non-completers	Less than 1 year	1 up to 2 years	2 up to 4 years
Percentage of youth who had ever enrolled since high school in:					
Any postsecondary school					
Cohort 1 (1990)	34.3 (2.76)	8.3 (2.42)	25.2 (3.67)	39.6 (3.80)	24.9 (3.45)
Cohort 2 (2005)	50.5 (3.67)	17.9 (6.25)	32.3 (5.15)	40.4 (6.08)	62.6 (5.53)
Percentage-point difference	+16.2***	+9.6	+7.1	+10.8	+37.7***
2-year or community college					
Cohort 1 (1990)	18.7 (2.26)	2.0 (1.23)	14.8 (3.00)	13.7 (2.86)	12.2 (2.61)
Cohort 2 (2005)	37.4 (3.55)	4.3 (3.33)	21.1 (4.51)	28.5 (5.61)	46.5 (5.70)
Percentage-point difference	+18.7***	+2.3	+6.3	+14.8	+34.3***
4-year college					
Cohort 1 (1990)	7.3 (1.51)	0.4 (0.55)	3.9 (1.64)	5.1 (1.83)	6.9 (2.02)
Cohort 2 (2005)	16.7 (2.74)	0.4 (1.03)	15.4 (3.97)	11.3 (3.93)	15.2 (4.10)
Percentage-point difference	+9.4**	0.0	+11.5**	+6.2	+8.3
Vocational, business, or technical school					
Cohort 1 (1990)	12.1 (1.89)	6.0 (2.08)	8.3 (2.33)	13.9 (2.88)	9.3 (2.32)
Cohort 2 (2005)	24.4 (3.15)	15.2 (5.86)	18.0 (4.23)	21.8 (5.12)	28.9 (5.18)
Percentage-point difference	+12.3***	+9.2	+9.7	+7.9	+19.6***

** $p < .01$, *** $p < .001$.

NOTE: Standard errors are in parentheses. Findings are reported for youth with disabilities who had been out of high school up to 4 years. NLTS percentages are weighted population estimates based on samples that range from approximately 2,470 to 2,480 youth with disabilities across variables. NLTS2 percentages are weighted population estimates based on samples that range from approximately 2,590 to 2,600 youth with disabilities across variables.

SOURCE: U.S. Department of Education, Office of Special Education Programs, National Longitudinal Transition Study (NLTS), Wave 2 parent/youth interview, 1990; U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 3 parent interview and youth interview/survey, 2005.

Differences in postsecondary enrollment rates between the two cohorts, by length of time out of high school, primarily were evident for those who had been out of high school longer. Youth with disabilities in 2005 who had left high school from 2 to 4 years earlier were 38 percentage points more likely ever to have enrolled in a postsecondary program (63 percent vs. 25 percent, $p < .001$), 34 percentage points more likely ever to have enrolled in a 2-year college (47 percent vs. 12 percent, $p < .001$), and 20 percentage points more likely ever to have

enrolled in a vocational, business, or technical school (29 percent vs. 9 percent, $p < .001$) than were those who had been out of high school a similar length of time in 1990.

Comparisons Across Time of Postsecondary School Enrollment by Demographic Characteristics

Youth with disabilities in cohort 2 in the highest as well as the lowest parent household income categories were more likely than youth with disabilities in cohort 1 ever to have enrolled in a postsecondary school. In 2005, 72 percent of youth with disabilities in the highest income group ever had enrolled, compared with 45 percent of youth with disabilities in the highest income group in 1990 ($p < .001$), a 28 percentage-point difference (table 5). Thirty-five percent of those in the lowest income group had ever enrolled in 2005, compared with 19 percent in 1990, a 16 percentage-point difference ($p < .001$). Despite the significantly higher enrollment rates experienced by youth with disabilities in the lowest income category in 2005 compared with 1990, those from the highest income households experienced a larger difference (16 percentage points vs. 28 percentage points, $p < .01$), thereby continuing the gap in postsecondary enrollment rates between those from the highest and lowest income households. In 2005, 72 percent of youth with disabilities from families with the highest incomes had continued their education after high school, compared with 35 percent of youth with disabilities from the lowest income households ($p < .001$).

Postsecondary enrollment rates in 2005 also were higher for youth with disabilities from the highest income category than for those in the middle income category (47 percent vs. 72 percent, $p < .01$). Youth with disabilities in the middle income category did not experience a significant difference in their postsecondary enrollment rate between 1990 and 2005.

Youth with disabilities in all income categories experienced higher 2-year college enrollment rates in 2005 than in 1990, with a 14 percentage-point difference for youth with disabilities in the lowest income group (22 percent vs. 8 percent, $p < .01$), a 14 percentage-point difference for those in the middle income group (36 percent vs. 15 percent, $p < .01$), and a 22 percentage-point difference for those in the highest income group (49 percent vs. 27 percent, $p < .01$).

Differences in 4-year college enrollment rates only were significant for those from the highest income households. Thirty-five percent of those from households with the highest incomes in 2005 ever had enrolled in a 4-year university, in comparison with 8 percent who had ever enrolled in 1990, a 28 percentage-point difference ($p < .001$). This difference in enrollment rates resulted in a gap in enrollment in 4-year colleges between those in the highest income and other categories. In 1990, enrollment in 4-year colleges did not significantly differ by household income. In contrast, in 2005 youth with disabilities from the highest income households were more likely ever to have enrolled in a 4-year university (35 percent) than were those from the middle (13 percent, $p < .01$) or lowest (9 percent, $p < .001$) income categories.

Enrollment rates at vocational, business, or technical schools only significantly differed between 1990 and 2005 for youth with disabilities from the lowest income households, with a 13 percentage-point difference (9 percent vs. 23 percent, $p < .01$).

Table 5. Comparison between 1990 and 2005 of postsecondary education enrollment of youth with disabilities out of high school up to 4 years, by household income, race/ethnicity, and gender

	Household income			Race/ethnicity			Gender	
	Low	Middle	High	White	African American	Hispanic	Male	Female
Percentage of youth who had ever enrolled since high school in:								
Any postsecondary school								
Cohort 1 (1990)	18.5 (3.04)	28.7 (4.07)	44.7 (5.36)	27.2 (2.63)	26.8 (5.28)	33.6 (9.12)	24.5 (2.52)	30.5 (3.94)
Cohort 2 (2005)	34.5 (4.91)	46.9 (6.52)	72.2 (6.22)	46.8 (4.10)	45.4 (6.96)	40.3 (10.63)	44.0 (4.12)	49.1 (5.60)
Percentage-point difference	+16.0**	+18.2	+27.5***	+19.6***	+18.6	+6.7	+19.5***	+18.6**
2-year or community college								
Cohort 1 (1990)	8.1 (2.14)	14.6 (3.17)	26.7 (4.77)	14.5 (2.08)	12.8 (3.99)	15.7 (7.04)	11.8 (1.89)	17.9 (3.29)
Cohort 2 (2005)	21.6 (4.25)	36.4 (6.28)	49.1 (6.94)	33.1 (3.87)	34.5 (6.65)	27.2 (9.71)	30.1 (3.81)	37.6 (5.44)
Percentage-point difference	+13.5**	+21.8**	+22.4**	+18.6***	+21.7**	+11.5	+18.3***	+19.7**
4-year college								
Cohort 1 (1990)	3.3 (1.40)	6.4 (2.20)	7.7 (2.86)	5.3 (1.32)	6.2 (2.88)	4.3 (3.91)	4.6 (1.23)	6.5 (2.11)
Cohort 2 (2005)	8.9 (2.94)	12.7 (4.35)	35.3 (6.63)	16.2 (3.03)	5.3 (3.13)	15.4 (7.82)	15.5 (3.00)	11.4 (3.56)
Percentage-point difference	+5.6	+6.3	+27.6***	+10.9***	-0.9	+11.1	+10.9***	+4.9
Vocational, business, or technical school								
Cohort 1 (1990)	9.2 (2.26)	10.5 (2.76)	14.6 (3.79)	9.7 (1.75)	14.0 (4.14)	14.3 (6.75)	10.1 (1.76)	10.2 (2.59)
Cohort 2 (2005)	22.5 (4.32)	25.2 (5.67)	20.3 (5.58)	20.7 (3.33)	28.0 (6.28)	25.1 (9.40)	22.1 (3.44)	25.0 (4.85)
Percentage-point difference	+13.3**	+14.7	+5.7	+11.0**	+14.0	+10.8	+12.0**	+14.8**

** $p < .01$, *** $p < .001$.

NOTE: Standard errors are in parentheses. Findings are reported for youth with disabilities who had been out of high school up to 4 years. NLTS percentages are weighted population estimates based on samples that range from approximately 2,470 to 2,480 youth with disabilities across variables. NLTS2 percentages are weighted population estimates based on samples that range from approximately 2,590 to 2,600 youth with disabilities across variables.

SOURCE: U.S. Department of Education, Office of Special Education Programs, National Longitudinal Transition Study (NLTS), Wave 2 parent/youth interview, 1990; U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 3 parent interview and youth interview/survey, 2005.

Across the race/ethnicity categories of White, African American, and Hispanic, only White youth with disabilities experienced significantly higher enrollment rates at the various types of postsecondary programs between 1990 and 2005, with the exception of enrollment in 2-year colleges, where African American youth with disabilities also experienced higher enrollment rates in 2005 than in 1990 (35 percent vs. 13 percent, $p < .01$). White youth with disabilities in 2005 were more likely than in 1990 ever to have enrolled in any postsecondary program (47 percent vs. 27 percent, $p < .001$), a 2-year college (33 percent vs. 15 percent, $p < .001$), a 4-year university (16 percent vs. 5 percent, $p < .001$), and a vocational, business, or technical school (21 percent vs. 10 percent, $p < .01$).

Both males and females experienced significantly higher rates of enrollment between cohorts across most types of postsecondary schools. Differences between 1990 and 2005 in ever having enrolled in any postsecondary program were 20 percentage-points for males ($p < .001$) and 19 percentage points for females ($p < .01$). Differences by gender in 2-year college enrollment were 18 percentage points ($p < .001$) and 20 percentage points ($p < .01$), and at vocational, business, or technical school, differences in enrollment were 12 and 15 percentage points ($p < .01$ for both comparisons) for males and females, respectively. Only males experienced significantly higher 4-year college enrollment rates, an 11 percentage-point difference between cohorts ($p < .001$). Despite the significant difference experienced by males but not by females, in 2005, 4-year college enrollment did not significantly differ by gender.

Postsecondary School Experiences

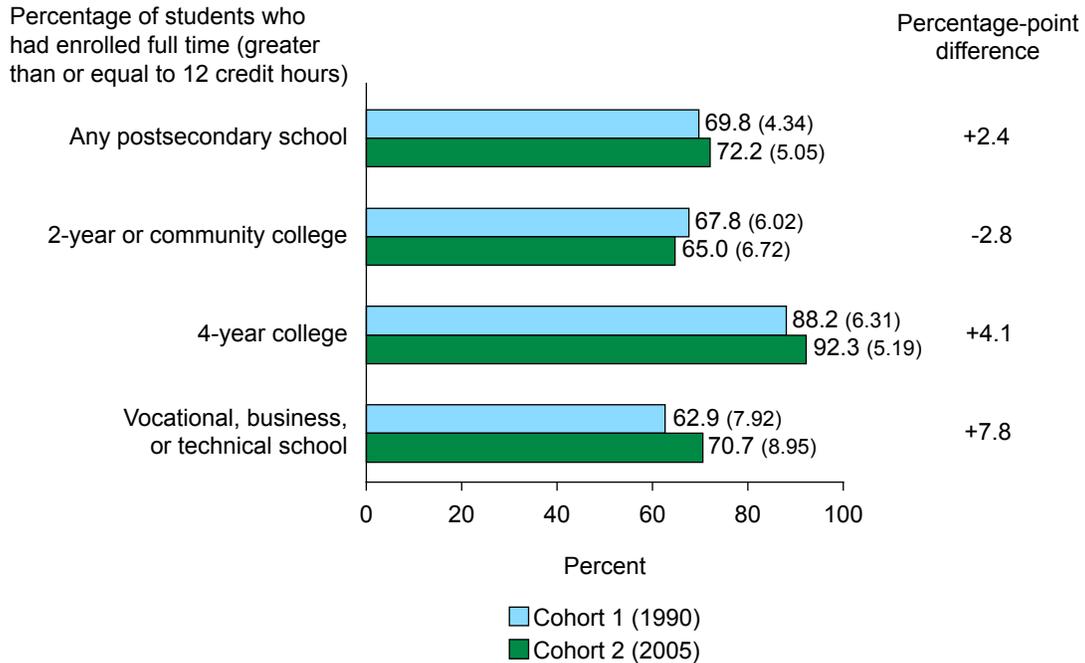
The findings reported thus far indicate that youth with disabilities differed between 1990 and 2005 in their rates of enrollment in postsecondary programs. This section shifts the focus from enrollment to comparisons between 1990 and 2005 of the experiences of those who had enrolled in these types of programs.

The original NLTS study measured many fewer postsecondary school experiences than did NLTS2. The NLTS2 report, *The Post-High School Outcomes of Youth With Disabilities up to 4 Years After High School* (Newman et al. 2009) presents findings related to the postsecondary school experiences described by NLTS2 but not NLTS, such as timing of enrollment, course of study at each type of postsecondary school, and receipt of accommodations and supports. The measures related to postsecondary experiences that were included in both NLTS and NLTS2 and reported here are intensity of enrollment, specifically whether students were enrolled on a full- or part-time basis, primary focus of study of those enrolled in 2-year or community college, goals related to postsecondary completion, and postsecondary completion rates.³⁴

Intensity. In 1990, 70 percent of students were enrolled full time in postsecondary education, and in 2005, postsecondary school was a full-time commitment for 72 percent of students with disabilities (figure 3, not a significant difference).

³⁴ There were too few students enrolled in postsecondary schools in 1990 to support presenting findings separately by disability category, high school leaving characteristics, or demographics.

Figure 3. Comparison between 1990 and 2005 of full-time enrollment of youth with disabilities out of high school up to 4 years and ever had enrolled in postsecondary school



NOTE: Standard errors are in parentheses. Findings are reported for youth with disabilities out of high school up to 4 years. NLTS percentages are weighted population estimates based on samples that range from approximately 230 to 990 youth with disabilities across variables. NLTS2 percentages are weighted population estimates based on samples that range from approximately 320 to 1,090 youth with disabilities across variables.

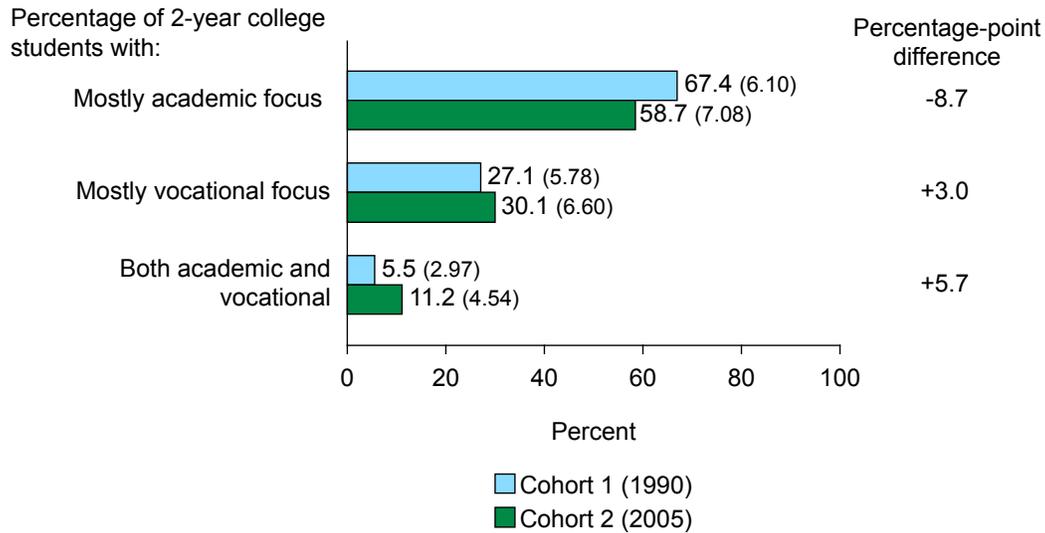
SOURCE: U.S. Department of Education, Office of Special Education Programs, National Longitudinal Transition Study (NLTS), Wave 2 parent/youth interview, 1990; U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 3 parent interview and youth interview/survey, 2005.

Primary focus of coursework at 2-year colleges. Two-year and community colleges frequently offer a wide range of instructional program options. With this wide range of options, students with disabilities varied in the types of courses they took while in postsecondary school. The primary focus of coursework at 2-year colleges did not differ significantly between 1990 and 2005 (figure 4).³⁵ At both points in time, 2-year or community college students were more likely to report being enrolled in an academic than in a vocational course of study; 67 percent majored in an academic and 27 percent in a vocational area in 1990 ($p < .001$), and 59 percent had an academic and 30 percent a vocational focus in 2005 ($p < .01$).

³⁵ NLTS respondents at 2-year colleges were asked, “[Have you/has *name of youth*] taken mostly vocational courses in a 2-year, junior, or community college to train for a job, like auto repair or office work, or have you taken mostly academic courses, like English or science?”

NLTS2 respondents at 2-year colleges were asked, “[Have you/has *name of youth*] taken mostly vocational courses to train for a job, like computer or business courses, or have you taken mostly academic courses, like English or science?”

Figure 4. Comparison between 1990 and 2005 of primary focus of courses taken at a 2-year or community college by youth with disabilities out of high school up to 4 years and had ever enrolled in postsecondary school



NOTE: Standard errors are in parentheses. Findings are reported for youth with disabilities out of high school up to 4 years. NLTS percentages are weighted population estimates based on a sample of approximately 480 youth with disabilities across variables. NLTS2 percentages are weighted population estimates based on a sample of approximately 640 youth with disabilities across variables.

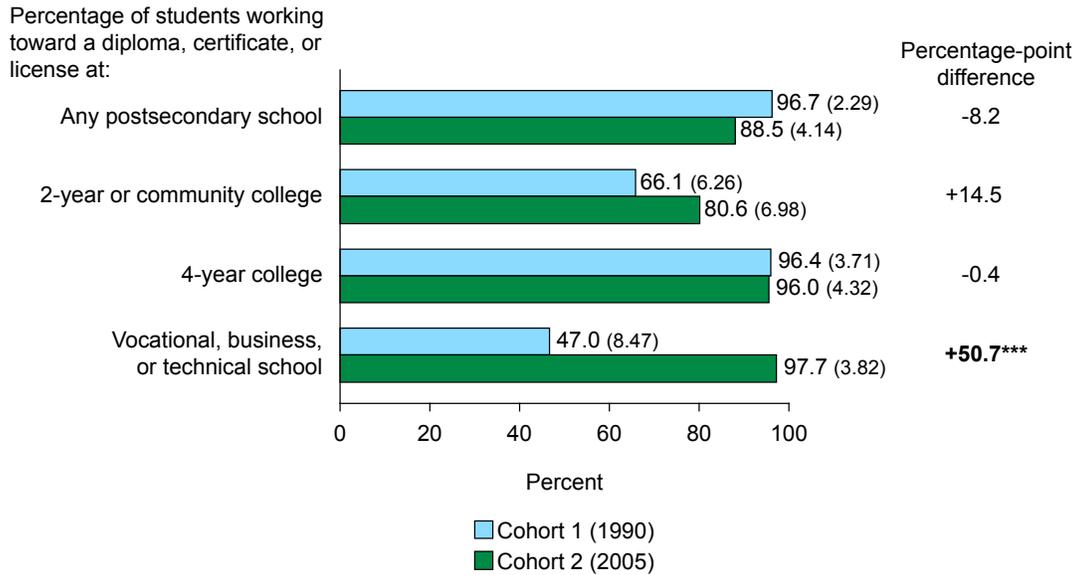
SOURCE: U.S. Department of Education, Office of Special Education Programs, National Longitudinal Transition Study (NLTS), Wave 2 parent/youth interview, 1990; U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 3 parent interview and youth interview/survey, 2005.

Postsecondary school completion goals. The economic benefits associated with college enrollment frequently are not realized by those who begin postsecondary education but fail to graduate. For example, the earning gap between those with a bachelor's degree and those with only a high school diploma has continuously widened over the past 30 years, whereas those who enroll in college but don't graduate have "made only slight gains" (Carey 2004, p. 3).

In both cohorts, the majority of students with disabilities who attended postsecondary school envisioned themselves graduating from the institution.³⁶ In 1990, 97 percent, and in 2005, 89 percent of students with disabilities who were currently enrolled in postsecondary school asserted that they were "working toward a diploma, certificate, or license" (figure 5). Assertions related to school completion did not differ significantly between 1990 and 2005 at most types of postsecondary schools, with the exception of vocational, business, or technical schools. Vocational, business, or technical school students in 2005 were approximately twice as likely as those in 1990 (98 percent vs. 47 percent, $p < .001$) to state that they were working toward a diploma, certificate or license, a 51 percentage-point difference ($p < .001$).

³⁶ In both studies respondents were asked, "[Are you/is *name of youth*] working toward a diploma, certificate, or license from this work?"

Figure 5. Comparison between 1990 and 2005 of school completion goal of postsecondary students with disabilities out of high school up to 4 years and enrolled at the time of the interview



*** $p < .001$.

NOTE: Standard errors are in parentheses. Findings are reported for youth with disabilities out of high school up to 4 years. NLTS percentages are weighted population estimates based on samples that range from approximately 220 to 610 youth with disabilities across variables. NLTS2 percentages are weighted population estimates based on samples that range from approximately 180 to 830 youth with disabilities across variables.

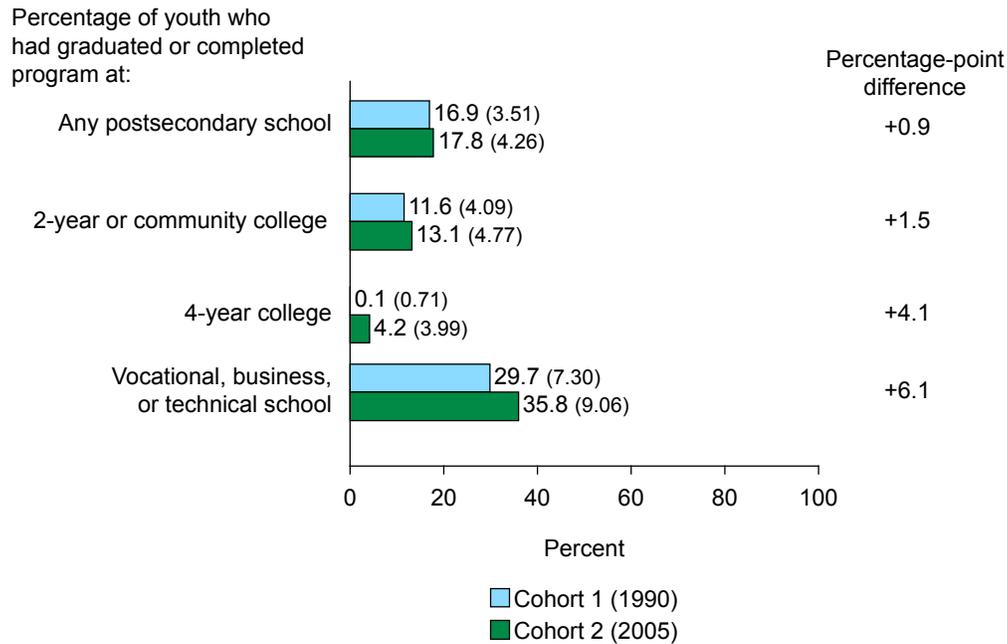
SOURCE: U.S. Department of Education, Office of Special Education Programs, National Longitudinal Transition Study (NLTS), Wave 2 parent/youth interview, 1990; U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 3 parent interview and youth interview/survey, 2005.

Postsecondary school completion rates. Despite the majority of postsecondary students asserting they were working toward a diploma, in both cohorts, when students left their postsecondary schools, few left because they had graduated or completed their programs.³⁷ Eighteen percent of postsecondary school leavers in 2005 and 17 percent in 1990 had completed their postsecondary program (figure 6).³⁸ Postsecondary completion rates did not differ significantly between 1990 and 2005 across types of postsecondary schools.

³⁷ In both studies respondents who had been in a postsecondary program earlier, but were not currently enrolled were asked, “[Have you/has *name of youth*] gotten a diploma, certificate, or license from [a postsecondary school]?”

³⁸ It is important to note that many youth in both NLTS and NLTS2 were out of high for less than one year in 1990 and 2005. Few youth who had ever enrolled in a postsecondary school and had since left the school would have been in their programs long enough to realistically be expected to have completed the program.

Figure 6. Comparison between 1990 and 2005 of postsecondary school completion of youth with disabilities out of high school up to 4 years and ever enrolled in postsecondary school



NOTE: Standard errors are in parentheses. Findings are reported for youth with disabilities out of high school up to 4 years. NLTS percentages are weighted population estimates based on samples that range from approximately 250 to 190 youth with disabilities across variables. NLTS2 percentages are weighted population estimates based on samples that range from approximately 250 to 1,120 youth with disabilities across variables.

SOURCE: U.S. Department of Education, Office of Special Education Programs, National Longitudinal Transition Study (NLTS), Wave 2 parent/youth interview, 1990; U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 3 parent interview and youth interview/survey, 2005.

Summary

This chapter compared the postsecondary enrollment and experiences of youth with disabilities who had been out of secondary school up to 4 years in 1990 and in 2005. Postsecondary school enrollment rates were higher in 2005 than in 1995, with 46 percent of youth with disabilities in 2005 reported ever to have enrolled in a postsecondary school, compared with 26 percent in 1995.

Youth with disabilities experienced a significantly larger difference in enrollment rates between 1990 and 2005 than did those in the general population (19 percentage points vs. 9 percentage points). Despite the larger difference for youth with disabilities, the gap in postsecondary attendance rates between the two groups continued. Forty-six percent of youth with disabilities ever had enrolled in postsecondary education in 2005, compared with 63 percent of similar-age youth in the general population.

Rates of ever having enrolled in postsecondary education were higher in 2005 than in 1990, across the types of postsecondary programs. Enrollment in 2-year and 4-year colleges, vocational, business, or technical schools demonstrated 19, 9, and 13 percentage-point differences between 1990 and 2005, respectively.

Youth in four of nine disability categories experienced significantly higher rates of ever having enrolled in postsecondary programs in 2005 than in 1990, specifically those with hearing impairments (23 percentage-point difference), mental retardation (20 percentage-point difference) learning disabilities (19 percentage-point difference), and emotional disturbances (17 percentage-point difference).

Across the various types of postsecondary programs, high school completers consistently evidenced significantly higher rates of having ever enrolled in postsecondary school in 2005 than in 1990. The rate of ever having enrolled in a postsecondary program for high school completers was 16 percentage points higher in 2005 compared with 1990. In contrast, rates were not significantly different between the two time periods for high school noncompleters, resulting in the continued gap between high school completers and noncompleters.

Youth with disabilities in the highest as well as the lowest parent household income categories were more likely to be enrolled in a postsecondary school in 2005 than in 1990. Youth with disabilities from families in the lowest income group experienced a 16 percentage-point difference, while those from families with higher incomes evidenced a 28 percentage-point difference in enrollment rates. Despite the significantly higher enrollment rates experienced by youth in the lowest income category in 2005 compared with 1990, those from the highest income households experienced a larger difference, thereby continuing the gap in postsecondary enrollment rates between those from the highest and lowest income households.

In examining differences by race or ethnicity, White youth with disabilities experienced significantly higher enrollment rates in 2005 compared with 1990 across the various types of postsecondary programs: 20 percentage points in any postsecondary program, 19 percentage points in 2-year colleges, 11 percentage points in 4-year colleges, and 11 percentage points in vocational, business, or technical schools. African American youth with disabilities experienced higher enrollment rates in 2005 compared with 1990 in 2-year colleges: 22 percentage points.

Both males and females had significantly higher rates of enrollment across types of postsecondary school in 2005 compared with 1990. For example, males experienced a 20 percentage-point and females a 19 percentage-point difference between cohorts in enrollment in any postsecondary school.

The measures related to postsecondary experiences that were included in both NLTS and NLTS2 were intensity of enrollment, specifically whether students were enrolled on a full- or part-time basis, primary focus of study of those enrolled in 2-year or community colleges, goals related to postsecondary completion, and postsecondary completion rates. None of these measures varied significantly between 1990 and 2005, with the exception of postsecondary completion goals, where vocational, business, or technical school students in 2005 were approximately twice as likely as those in 1990 (98 percent vs. 47 percent) to state that they were working toward a diploma, certificate or license, a 51 percentage point difference.

This chapter has presented differences in the postsecondary experiences of youth with disabilities. Chapter 3 will examine differences in employment experiences, and chapter 4 will focus on the overlap between these two outcomes, describing differences in engagement in school or work.