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Preparing for life after high school: The characteristics and experiences of youth in special education

Volume 3: Comparisons over time

Findings from the National Longitudinal Transition Study 2012

Full Report

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NLTS 2012
National Longitudinal Transition Study

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This report is available on the National Center for Education Evaluation and Regional Assistance website at https://ies.ed.gov/ncee/projects/evaluation/disabilities_nlts2012.asp.

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Disclosure of potential conflicts of interest

The research team for this study consists of key staff from Mathematica Policy Research and the Institute on Community Integration at the University of Minnesota. The organizations and the key staff members do not have financial interests that could be affected by findings from the study. No one on the Technical Working Group, convened by the research team to provide advice and guidance, has financial interests that could be affected by findings from the study.

Executive summary

For more than 40 years, policymakers have committed to supporting the education of students with disabilities, who have grown as a share of all students in the United States (Snyder, de Brey, & Dillow, 2016). Beginning with landmark legislation in 1975, the U.S. Congress mandated that students with disabilities have access to a free and appropriate public education and provided funds to school districts nationwide to help serve them. Since then, the legislation has been updated six times, most recently in the 2004 Individuals with Disabilities Education Act (IDEA), which emphasized helping youth prepare for postsecondary education, careers, and independent living. These and other changes in the educational, social, and economic landscapes may have affected all youth, raising interest in how the characteristics, experiences, and challenges of youth with disabilities have changed over time (Colby & Ortman, 2015; Dee, Jacob, & Schwartz, 2013; Oreopoulos & Petronijevic, 2013; Oreopoulos, von Wachter, & Heisz, 2012; Thapa, Cohen, Guffey, & Higgins-D'Alessandro, 2013).

The National Longitudinal Transition Study (NLTS) 2012 provides updated information on youth with disabilities in light of these changes, to inform efforts to address their needs. Sponsored by the U.S. Department of Education under a congressional mandate to study IDEA 2004 and the students it serves, the NLTS 2012 is the third in a series of such studies. It describes the backgrounds of secondary school youth and their functional abilities, activities in school and with friends, academic supports received from schools and parents, and preparation for life after high school. Through surveys in 2012 and 2013, the study collected data on a nationally representative set of nearly 13,000 students—mostly those with an individualized education program (IEP) and expected to receive special education services. The study also includes students without an IEP, who either have no identified disability or who have an impairment that does not qualify them for special education but allows them to receive accommodations through a 504 plan under the Rehabilitation Act, another federal law pertaining to the rights and needs of youth with disabilities.

This third volume of findings from the NLTS 2012 uses data from all three studies in the NLTS series to examine how the characteristics and experiences of youth in special education have changed over time, overall and for each of 12 disability groups defined by IDEA 2004. Most of the analyses examine trends for in-school youth ages 15 to 18 from 2003 to 2012, using the NLTS2 and NLTS 2012. When comparable data are available from the NLTS, the volume also examines trends starting in 1987 for youth ages 15 to 18 and youth ages 19 to 21 who were still enrolled in high school.

The trends from 2003 to 2012 for youth with an IEP ages 15 to 18 suggests several key points:

- **Youth with an IEP are more likely than a decade ago to live in households that face economic challenges.** The proportion of parents of youth with an IEP who reported that neither they nor their spouse had a paid job increased nearly 5 percentage points, from 15 percent in 2003 to 20 percent in 2012. Compared to those in 2003, parents of youth with an IEP in 2012 were twice as likely to report that their household received federal food benefits in the previous two years (16 versus 33 percent). The proportion of youth with an IEP who received Supplemental Security Income (SSI) benefits during that same period because they live in a low-income household and have a disability also increased from 16 to 21 percent, according to parents.

- **Youth with an IEP are about as healthy and able to perform some typical tasks independently as in the past, but they are also more likely to use behavioral medicines and have trouble understanding others.** Nearly three-quarters of parents of youth with an IEP in both 2003 and 2012 reported that their children had very good or excellent general health (72 and 71 percent). In addition, similar percentages of parents in

each year indicated that their children (ages 15 to 16) were able to perform five typical teenage activities of daily living—such as fixing their own meals, shopping, and getting to nearby places—without help (12 and 16 percent). However, according to parents, use of behavioral medicines among youth with an IEP increased from 17 to 26 percent, and the proportion who had trouble understanding what others said to them increased from 29 to 41 percent.

- **Engagement in school and extracurricular activities among youth with an IEP increased in the past decade, whereas the prevalence of negative events such as grade retention, suspensions, and expulsions was little changed.** From 2003 to 2012, the proportion of youth with an IEP who "agreed a lot" that they felt a part of their school rose by more than 20 percentage points (from 31 to 52 percent). In addition, their participation rate in school clubs and sports increased by 14 percentage points (from 48 to 62 percent), a trend consistent with IDEA 2004 regulations that emphasize ensuring access to extracurricular activities. Similar proportions of parents in 2003 and 2012 reported their children with an IEP had ever repeated a grade (35 and 37 percent), been suspended (34 and 32 percent), or been expelled from school (7 and 9 percent).

- **Youth with an IEP are more likely than in the past to receive supports at school but less likely to get them at home.** According to parents, receipt of any of several types of school-based special education services grew by 21 percentage points from 2003 to 2012 (44 versus 65 percent); this change occurred during a period when the 2002 No Child Left Behind Act and subsequent IDEA 2004 raised expectations that schools improve the academic proficiency of youth with an IEP. The supports with the largest growth were services from a tutor, reader, or interpreter (from 18 to 33 percent) and psychological counseling (from 13 to 28 percent), each of which rose by 15 percentage points. However, the proportion of parents who indicated that they helped their children with homework at least weekly declined by 7 percentage points, from 62 percent in 2003 to 55 percent in 2012. Nonetheless, parents were 16 percentage points more likely than in the past to report that they attended a parent-teacher conference (67 versus 83 percent).

- **Participation in key transition activities by youth with an IEP and their parents has declined, although they are just as likely to have gone to an IEP meeting.** Although most youth (ages 17 and 18) continue to report having gone to an IEP meeting in the past two years (74 percent in 2003 and 81 percent in 2012), the proportion who reported ever meeting with school staff to discuss their post-high school transition plans decreased (from 79 to 70 percent). Similarly, while the proportion of parents who reported going to an IEP meeting in the past two years was stable (89 percent in 2003 and 91 percent in 2012), the proportion of parents who reported ever meeting with school staff to discuss transition issues declined (from 79 to 60 percent). Working for pay while in high school, which some research links to better postsecondary employment and education success (Baer et al., 2003; Carter, Austin, & Trainor, 2012; McDonnall & O'Mally, 2012; Simonsen & Neubert, 2013; Wagner, Newman, & Javitz, 2014), declined for jobs not sponsored by schools (from 27 to 19 percent). This decline may partly reflect the lingering effects of the Great Recession from 2007 to 2009. The decline in paid work did not extend to school-sponsored work activities, in which participation was similar over the decade (14 percent in 2003 and 13 percent in 2012).

The trends from 2003 to 2012 differed across the 12 disability groups, as indicated by seven key experiences (a subset of those examined in this volume) that are noteworthy because previous research suggests they may be associated with outcomes after high school (as described in appendix A). These changes over time are summarized in table ES1, with upward trends denoted by a plus sign and downward trends by a minus sign.[1]

Table ES1. Disability groups that are more (+) or less (–) likely in 2012 than in 2003 to have key experiences that are linked with post-high school outcomes

	Independent living	Engagement		Support		Preparation and planning	
Disability group	Performed all five activities of daily living well	Participated in a school sport or club	Never suspended	Received school tutoring services	Parent helped with homework weekly	Met with school staff to discuss transition plans	Had a paid job not sponsored by school
Autism				+	–		
Deaf-blindness				+			
Emotional disturbance	+	+		+			
Hearing impairment						–	–
Intellectual disability		+	+	+	–		
Multiple disabilities				+			
Orthopedic impairment				+		–	
Other health impairment				+			–
Specific learning disability		+		+	–	–	
Speech or language impairment		+		+	–		
Traumatic brain injury		+				–	
Visual impairment			+	+			

Note: Cells containing a plus sign (+) indicate that youth in the disability group are more likely in 2012 than in 2003 to have the experience, by an amount that is both statistically significant at the .05 level and at least 5.0 percentage points. Cells containing a minus sign (–) indicate that youth in the disability group are less likely in 2012 than in 2003 to have the experience, by an amount that is both statistically significant at the .05 level and at least 5.0 percentage points. Cells containing no data indicate that youth in the disability group are not more or less likely in 2012 than in 2003 have the experience, by an amount that is both statistically significant at the .05 level and at least 5.0 percentage points.

Chapter 3 provides more detail on the activities of daily living measure. Receipt of school tutor services includes receipt of school services from a reader or interpreter. The reference period for participation in a school sport or club is the past year, and the reference period for receiving services from a tutor, reader, or interpreter at school is the past 12 months.

Source: National Longitudinal Transition Study 2012 and National Longitudinal Transition Study 2. Data on participation in a school sport or club, met with school staff to discuss transition plans, and has a paid job not sponsored by school are from youth survey respondents. Data for the other measures are from parent survey respondents.

- **Progress has been greatest for youth with emotional disturbance and intellectual disability, including increased participation in extracurricular activities and use of school services.** These two groups demonstrated upward trends in the greatest number of the key experiences linked to post-high school outcomes. From 2003 to 2012, youth with emotional disturbance reported growth in school sport and club participation (from 40 to 56 percent). The proportion of youth in this group who received services from a tutor, reader, or interpreter also increased from 15 to 29 percent, according to their parents. In addition, a growing proportion of parents of youth with emotional disturbance indicated that their children could

[1] The upward and downward trends identified with plus and minus signs are those that are both (1) statistically significant ($p < .05$), and (2) at least 5 percentage points in size. Cells in table ES1 have no data if either of these two conditions is not met.

perform five typical teenage tasks independently (from 5 to 12 percent). Youth with intellectual disability also increased their participation in school sports and clubs (from 36 to 56 percent) and their receipt of services from a tutor, reader, or interpreter (from 14 to 36 percent). Their suspension rates also fell (from 38 to 25 percent), but a smaller proportion of their parents indicated that they provided weekly homework help (from 70 to 59 percent).

- **Youth with deaf-blindness, multiple disabilities, and visual impairments made less progress.** They had fewer positive changes than those with emotional disturbance and intellectual disability in key experiences, but did not have any downward trends either. As reported by parents, the proportion of youth in each of these three disability groups who received services from a tutor, reader, or interpreter increased from 2003 to 2012. In addition, the proportion of youth with visual impairments who have been suspended from school declined from 14 to 5 percent in the past decade, according to their parents.
- **As a group, fewer youth with hearing impairments participated in transition planning or paid employment in a nonschool-sponsored job.** The proportion of youth with hearing impairments who indicated ever having met with school staff to discuss their transition plans decreased from 88 to 71 percent, and the proportion employed in a nonschool job declined from 35 to 14 percent. Youth with hearing impairments were the only disability group to experience downward trends without growth in at least one of the seven key measures.
- **For the other six groups, progress was mixed on the key experiences linked to post-high school success.** Youth with autism, orthopedic impairments, other health impairments, specific learning disabilities, speech or language impairments, and traumatic brain injuries each experienced a mix of upward and downward trends across the seven key measures.

Study design and research questions

This volume uses data from the three studies in the NLTS series to assess how the characteristics and experiences of youth with an IEP have changed over time. The most recent NLTS, the NLTS 2012, is a national study of nearly 13,000 youth with and without an IEP. These students were chosen to represent all students with and without an IEP in the United States who were enrolled in public school districts, charter schools, and special schools in grades 7 through 12 (or ungraded secondary classes). The study surveyed youth and their parents in 2012 or 2013, when the vast majority (97 percent) were 13 to 21 years old.[2,3] It spans multiple ages and grades to provide a broad view of students' school experiences at a point in time. The prior study in the series was the NLTS2, a nationally representative study of 13- to 16-year-old students in special education at public school districts and special schools in 2001. NLTS2 parents were interviewed in 2001, and then both parents and youth

[2] Youth were ages 12 to 23 when interviews took place. Less than two percent were 12 years old, and less than one percent were 22 or 23 years old. All students were enrolled in grades 7 through 12 or a secondary ungraded class when sampled for the study.

[3] Parent survey respondents provided proxy responses for youth who were unable to self-report even with accommodations offered by the study (16 percent of youth respondents overall; 19 percent of those with an IEP). Proxy responses were not obtained for questions that depended on the youth's perspective.

were interviewed in 2003, 2005, 2007, and 2009.[4] The original study, called the NLTS, was a nationally representative study of 13- to 21-year-old students in special education at public school districts and special schools in 1985. The study interviewed the parents first in 1987 and again in 1991 along with the students themselves. Each of the three studies included students who represent each of the disability categories recognized by IDEA at the time. In the case of the NLTS 2012, these disability groups were autism, deaf-blindness, emotional disturbance, hearing impairment (which includes deafness), intellectual disability, multiple disabilities, orthopedic impairment, other health impairment, specific learning disability, speech or language impairment, traumatic brain injury, and visual impairment. A unique feature of the NLTS 2012 is the inclusion of youth without an IEP, including those with no identified disability and those who receive disability accommodations through Section 504 of the Rehabilitation Act (but not IDEA special education services).

This volume focuses on youth with an IEP who were enrolled in school in the year they were surveyed. The findings are based on comparisons across time of averages for all youth with an IEP and for the 12 disability groups. Most analyses examine trends for in-school youth ages 15 to 18 from 2003 to 2012, using the NLTS2 and NLTS 2012 data. Where comparable data are available in 1987 from the NLTS (these are only available for some parent-reported measures), the volume also examines trends for youth ages 15 to 18 and for youth ages 19 to 21 who are still enrolled in high school.[5] While this report examines changes over time in youth and family characteristics and in youths' school experiences, it does not do both at the same time (e.g., showing how participation in extracurricular activities has changed for low-income youth in each disability group and for higher-income youth in each disability group) because of the complexity and number of tables this would involve. Differences that are statistically significant (not due to chance) and at least 5 percentage points are highlighted to call attention to the variation that is substantive and more policy relevant.[6]

The volume addresses the following five research questions:

1. How have the background characteristics of youth and the schools they attend changed?
2. Are the challenges youth face with health, functional abilities, and independent living different than in the past?
3. Are youth engaging in school in different ways or to different degrees?
4. Have the academic and special education supports that youth receive changed?
5. How have youth changed the way they prepare for life after high school?

[4] For NLTS2 Wave 2, parent survey respondents provided proxy responses for 47 percent of all completed youth surveys.

[5] For youth ages 19 to 21, findings are only reported for the aggregate group due to small sample sizes in some of the disability groups.

[6] The study team selected this level in consultation with the U.S. Department of Education's Institute of Education Sciences and content experts, judging differences of less magnitude not large enough to inform policy, practice, or the targeting of technical assistance. The 5 percentage point level was not empirically derived or based on an external standard. Some statistically significant differences in the report appear to be 5 percentage points because of rounding but are actually smaller. The discussion does not typically highlight these differences.

Detailed findings

Volume 3 from the NLTS 2012 includes additional information to address the research questions, beyond the key findings summarized earlier.

How have the background characteristics of youth and the schools they attend changed?

The characteristics of youth, their families, and their schools can play a role in shaping their experiences and aspirations. Studies have shown that lower socioeconomic status and school quality are associated with lower rates of high school completion, college enrollment, and later success in the labor market (Newman, Wagner, Knokey, et al., 2011; Brummet, 2014; Schifter, 2015; Wagner et al., 2014). Furthermore, there are longstanding concerns about whether youth with certain characteristics—such as being Black or male—are identified appropriately for special education (Coutinho & Oswald, 2005; Harry & Klingner, 2014; Morgan et al., 2015). Over the past three decades, shifts in the nation's demographics and several economic recessions have occurred alongside rising shares of Hispanic students and socioeconomically disadvantaged students, making it important to have updated information on the background characteristics of youth with disabilities in particular (U.S. Department of Education, National Center for Education Statistics, 2014, 2016).

- **The proportion of youth with an IEP whose families face economic challenges has increased over the past decade, with larger increases among some disability groups.** Overall, the proportion of youth with an IEP who do not have a working parent increased nearly 5 percentage points from 2003 to 2012 (from 15 to 20 percent), with increases of at least 8 percentage points for youth with autism, multiple disabilities, and other health impairments (table ES2). The proportion living in low-income households rose during this same period in four disability groups (emotional disturbance, hearing impairments, intellectual disability, and other health impairments). In addition, parent-reported receipt of federal food benefits through the Supplemental Nutrition Assistance Program (SNAP) doubled among all youth with an IEP (from 16 to 33 percent) and in every disability group except youth with deaf-blindness (table ES3). Reported receipt of federal disability benefits through the SSI program also climbed (from 16 to 21 percent) overall and specifically for youth with other health impairments (from 11 to 17 percent).

Table ES2. Percentages of youth with an IEP ages 15 to 18 living in households facing economic challenges, by disability group and year

	Youth living in households in which no parent has a paid job		Youth living in low-income households		
Disability group	2012	2003	2012	2003	1987
Youth ages 15 to 18	**20**	**15***	**56**	**50**	**59^✓**
Autism	17	9*✓	35	31	—
Deaf-blindness	‡	14!	37!	52	44
Emotional disturbance	27	25	61	50*✓	58
Hearing impairment	17	12	58	43*✓	54^✓
Intellectual disability	32	28	72	62*✓	69
Multiple disabilities	28	17*✓	51	45	62^✓
Orthopedic impairment	18	12	49	41	57^✓
Other health impairment	19	9*✓	46	37*✓	62*✓,^✓
Specific learning disability	17	12	58	50	57
Speech or language impairment	15	15	51	45	58^✓
Traumatic brain injury	17	12	49	40	—
Visual impairment	10	11	49	48	57

* = $p < .05$ for comparison with 2012 estimate; ^ = $p < .05$ for comparison with 2003 estimate; ✓= comparison is statistically significant and at least 5 percentage points in magnitude; ! = estimate is unstable because the standard error represents 30 to 50 percent of the estimate; — = not available; ‡ = reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents were asked to indicate their employment status and that of their spouse, if they have one, at the time of the survey. Parent survey respondents were also asked to indicate their household size and income in the previous year. Low household income is household income below 185 percent of the federal poverty level in each reference year for a family of four living in the continental United States. This table summarizes data presented in table 2.

Source: National Longitudinal Transition Study 2012; National Longitudinal Transition Study 2. The universe is youth who live with parents at least some of the time. More information is provided in appendix B.

Table ES3. Percentages of youth with an IEP ages 15 to 18 in households that received benefits through two federal assistance programs for low-income households in the past two years, by disability group and year

	Youth in households that received Supplemental Nutrition Assistance Program benefits in the past two years		Youth who received Supplemental Security Income benefits in the past two years	
Disability group	2012	2003	2012	2003
Youth ages 15 to 18	**33**	**16*✓**	**21**	**16*✓**
Autism	17	6*✓	28	26
Deaf-blindness	14!	13!	48	42
Emotional disturbance	44	24*✓	29	23
Hearing impairment	29	13*✓	31	24
Intellectual disability	44	21*✓	48	40
Multiple disabilities	35	13*✓	41	39
Orthopedic impairment	26	9*✓	38	35
Other health impairment	28	13*✓	17	11*✓
Specific learning disability	33	14*✓	14	9
Speech or language impairment	27	18*✓	11	8!
Traumatic brain injury	29	11*✓	30	23
Visual impairment	27	8*✓	33	33

* = $p < .05$ for comparison with 2012 estimate; ✓= comparison is statistically significant and at least 5 percentage points in magnitude; ! = estimate is unstable because the standard error represents 30 to 50 percent of the estimate.

Note: Parent survey respondents were asked whether anyone in the household received SNAP benefits in the last two years and whether anyone in the household received SSI benefits for the youth in the past two years. This table summarizes data presented in table 3.

Source: National Longitudinal Transition Study 2012; National Longitudinal Transition Study 2. The universe is youth who live with parents at least some of the time. More information is provided in appendix B.

- **The gender, racial, and ethnic makeup of youth with an IEP has been mostly stable.** Just over two-thirds of youth with an IEP overall were male in both 2003 and 2012 (table ES4). The proportions of all youth with an IEP who were Black and who were Hispanic were also similar over the decade (each are about one in five), and the same is true in most of the disability groups. Three exceptions are that, compared to 2003, in 2012 youth with autism were less likely to be Black (19 versus 12 percent), youth with intellectual disability were more likely to be Hispanic (11 versus 19 percent), and youth with other health impairments were more likely to be Black (9 versus 19 percent). In the prior decade (1987 to 2003), there was little change in the proportion of youth who were male (69 versus 68 percent) or Black (24 versus 18 percent) (tables 6 and 7). However, in the earlier decade there was significant growth in the proportion who were Hispanic (9 versus 20 percent; table 7), consistent with trends in the racial-ethnic composition of youth overall (U.S. Census Bureau, 1990, 2005, 2014).

Table ES4. Percentages of youth with an IEP ages 15 to 18 based on their demographic characteristics, by disability group and year

	Male		Black (not Hispanic)		Hispanic	
Disability group	2012	2003	2012	2003	2012	2003
Youth ages 15 to 18	**67**	**68**	**20**	**18**	**23**	**20**
Autism	84	85	12	19*✓	15	10
Deaf-blindness	69	60	15!	15	18!	19!
Emotional disturbance	74	74	25	18	19	17
Hearing impairment	54	47	13	17	31	27
Intellectual disability	59	59	28	32	19	11*✓
Multiple disabilities	65	63	18	15	18	13
Orthopedic impairment	62	55	13	12	26	18
Other health impairment	73	72	19	9*✓	16	12
Specific learning disability	65	70	20	17	26	23
Speech or language impairment	66	58	16	15	26	21!
Traumatic brain injury	66	68	15!	13	20	14
Visual impairment	52	54	13	15	22	19

* = $p < .05$ for comparison with 2012 estimate; ✓= comparison is statistically significant and at least 5 percentage points in magnitude; ! = estimate is unstable because the standard error represents 30 to 50 percent of the estimate.

Note: Parent survey respondents were asked to confirm or correct school district information on their children's gender and indicate their children's race and ethnicity. This table summarizes data presented in tables 6 and 7.

Source: National Longitudinal Transition Study 2012; National Longitudinal Transition Study 2. The universe is all youth. More information is provided in appendix B.

- **Over the past decade, 4 percent of youth with an IEP have attended schools only for students with disabilities.** This proportion was reported by parents of all youth with an IEP in both 2003 and 2012 (table ES5). This consistency across years is evident in all disability groups with the exception of youth with visual impairments, for whom attending a school just for students with disabilities declined from 18 percent in 2003 to 7 percent in 2012. IDEA 2004 encourages districts and schools to educate youth with disabilities in the least restrictive environment possible.

Table ES5. Percentages of youth with an IEP ages 15 to 18 who attend a school that serves only students with disabilities, by disability group and year

Disability group	2012	2003
Youth ages 15 to 18	**4**	**4**
Autism	10	14
Deaf-blindness	25!	41
Emotional disturbance	8	10
Hearing impairment	10	17
Intellectual disability	5	5!
Multiple disabilities	17	16
Orthopedic impairment	3!	5!
Other health impairment	2!	1!
Specific learning disability	1!	‡
Speech or language impairment	‡	‡
Traumatic brain injury	6!	9!
Visual impairment	7!	18*✓

* = $p < .05$ for comparison with 2012 estimate; ✓= comparison is statistically significant and at least 5 percentage points in magnitude; ! = estimate is unstable because the standard error represents 30 to 50 percent of the estimate; ‡ = reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents were asked what type of school their children currently attend. This table summarizes data presented in table 8.

Source: National Longitudinal Transition Study 2012; National Longitudinal Transition Study 2. The universe is all youth. More information is provided in appendix B.

Are the challenges youth face with health, functional abilities, and independent living different than in the past?

Students' health and abilities to communicate and act independently are associated with their development and future success (Carter et al., 2012; Currie, Stabile, Manivong, & Roos, 2010; Forrest, Bevans, Riley, Crespo, & Louis, 2011; Smith, 2009). In recognition of this, IDEA 2004 required that IEPs consider ways of not only increasing students' academic achievement but also helping them improve their functional performance. How students' health, functional abilities, and independence have changed are indicators of the extent to which IDEA's goal of preparing students with disabilities for the future is being fulfilled.

- **Most youth with an IEP continue to be healthy, but the use of prescription behavioral medicines has climbed over the past decade.** Nearly three-quarters of all youth with an IEP in both 2003 and 2012 (72 and 71 percent, respectively) had very good or excellent health according to parents (table ES6). However, parent responses also indicated that the use of behavioral medicines by youth increased by half over the same period, from 17 to 26 percent. Two factors appear to have contributed to this growth: (1) an increase in the proportion of youth who use these medicines among those with intellectual disability; and (2) growth in the number of youth with autism and with other health impairments, two disability groups that in the past decade included many youth who used behavioral medicines (Frazier et al., 2011).

Table ES6. Percentages of youth with an IEP ages 15 to 18 with very good or excellent health and who use prescription behavioral medicine, by disability group and year

	Has very good or excellent health		Uses prescription behavioral medicine	
Disability group	2012	2003	2012	2003
Youth ages 15 to 18	**71**	**72**	**26**	**17*✓**
Autism	74	77	44	44
Deaf-blindness	74	55*✓	16!	19
Emotional disturbance	69	63	47	39
Hearing impairment	67	73	14	8
Intellectual disability	56	61	26	18*✓
Multiple disabilities	58	58	34	28
Orthopedic impairment	58	65	21	19
Other health impairment	72	68	46	44
Specific learning disability	75	76	15	11
Speech or language impairment	81	77	10	13
Traumatic brain injury	68	62	38	28
Visual impairment	70	61	11	18

* = $p < .05$ for comparison with 2012 estimate; ✓= comparison is statistically significant and at least 5 percentage points in magnitude.

Note: Parent survey respondents were asked to rate their children's general health as excellent, very good, good, fair, or poor and whether their children are taking any prescription medicine to control their attention, behavior, activity level, or changes in mood, such as Ritalin or an antidepressant. This table summarizes data presented in tables 9 and 10.

Source: National Longitudinal Transition Study 2012; National Longitudinal Transition Study 2. The universe is all youth. More information is provided in appendix C.

- **Youth with an IEP are more likely than in the previous decade to have trouble understanding others.** The proportion of youth with an IEP who according to their parents had trouble understanding what other people say to them grew by more than 10 percentage points, from 29 to 41 percent (table ES7). However, there was no change in the proportion who were reported by parents to have trouble communicating using any method, including sign language or oral speech, with about one-quarter of youth (26 percent) having some trouble in both 2003 and 2012. Youth with autism were the only group to have experienced progress with both communicating and understanding others.

Table ES7. Percentages of youth with an IEP ages 15 to 18 who have communication needs, by disability group and year

	Youth who have any trouble communicating by any means		Youth who have any trouble understanding what other people say	
Disability group	2012	2003	2012	2003
Youth ages 15 to 18	**26**	**26**	**41**	**29*✓**
Autism	52	64*✓	70	78*✓
Deaf-blindness	70	67	85	65*✓
Emotional disturbance	17	15	41	35
Hearing impairment	48	55	72	55*✓
Intellectual disability	54	52	67	49*✓
Multiple disabilities	62	62	57	60
Orthopedic impairment	39	42	28	31
Other health impairment	19	26*✓	43	31*✓
Specific learning disability	18	20	31	21*✓
Speech or language impairment	33	43*✓	37	32
Traumatic brain injury	43	39	51	32*✓
Visual impairment	11	25*✓	16	22

*=$p < .05$ for comparison with 2012 estimate; ✓=comparison is statistically significant and at least 5 percentage points in magnitude.

Note: Parent survey respondents were asked how well their children communicate by any means and how well their children understand what other people say to them. This table summarizes data presented in tables 11 and 12.

Source: National Longitudinal Transition Study 2012; National Longitudinal Transition Study 2. The universe is all youth. More information is provided in appendix C.

- **Youth with an IEP are just as likely as those in the previous decade to perform typical teenage tasks independently, but less likely to be gaining personal finance experience.** Youth with an IEP overall and in most disability groups were as likely in 2012 as in 2003 to perform five activities of daily living according to parents, such as fixing meals and getting to places outside the home (table ES8). Youth with emotional disturbance were the only disability group to show an increase in performing all five activities without help (from 5 to 12 percent). However, proportionally fewer youth with an IEP reported having money they could decide how to spend (from 79 to 62 percent). Half of the disability groups experienced a similar downward trend, and no group in 2012 reported being more likely than youth in 2003 to have a bank account.

Table ES8. Percentages of youth with an IEP ages 15 to 18 who demonstrate capabilities to function independently and manage money, by disability group and year

	Youth who perform all five daily living activities without help at least pretty well or usually (ages 15 to 16)		Youth who have an allowance or other money they can decide how to spend		Youth who have a savings or checking account	
Disability group	2012	2003	2012	2003	2012	2003
Youth ages 15 to 18	**16**	**12**	**62**	**79*✓**	**46**	**52**
Autism	5	2!	62	73	51	65
Deaf-blindness	‡	‡	50	70	36	53
Emotional disturbance	12	5*✓	61	70	42	42
Hearing impairment	19	19	62	76*✓	50	59
Intellectual disability	11	10!	60	69	36	46
Multiple disabilities	6!	4!	54	76*✓	39	51
Orthopedic impairment	8!	4!	58	73*✓	46	62*✓
Other health impairment	12	9!	64	78*✓	51	64*✓
Specific learning disability	20	13	63	84*✓	46	54
Speech or language impairment	20	22	63	70	53	49
Traumatic brain injury	‡	‡	65	82*✓	49	70*✓
Visual impairment	6!	5!	67	75	52	59

* = $p < .05$ for comparison with 2012 estimate; ✓=comparison is statistically significant and at least 5 percentage points in magnitude; ! = estimate is unstable because the standard error represents 30 to 50 percent of the estimate; ‡ = reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents were asked how well their children accomplished five daily living activities without help: fixing their own breakfast or lunch, doing laundry, cleaning their living areas, buying things they need at the store, and getting to places outside the home. Possible ratings for the first measure are very well, pretty well, not very well, not at all well, and not allowed. Possible ratings for the last four measures are always, usually, sometimes, or never. Youth survey respondents were asked whether they have a savings or checking account, and whether they have an allowance or other money they can decide how to spend. This table summarizes data presented in tables 14 and 15.

Source: National Longitudinal Transition Study 2012; National Longitudinal Transition Study 2. The universe for the first measure is youth who live with parents at least some of the time and are younger than 17. The universe for the remaining measures is all youth. More information is provided in appendix C.

Are youth engaging in school in different ways or to different degrees?

Students' engagement at school is a crucial component of youth development that may have important academic benefits (Anderson, Christenson, Sinclair, & Lehr, 2004; Sinclair, Christenson, & Thurlow, 2005; Juvonen, Espinoza, & Knifsend, 2012; Wang & Eccles, 2012a). Examples of engagement include positive interactions with peers and adults at school, participating in class and extracurricular activities, and completing school work. Conversely, suspensions, expulsions, and arrests are indicators of disengagement. Research suggests that student

engagement at school is positively associated with academic performance and school completion, whereas disengagement is negatively associated with these outcomes (Finn, 1989; Noltemeyer, Ward, & Mcloughlin, 2015; Wang & Fredricks, 2014). Nationally, participation in sports, lessons, and clubs for the general population of youth decreased between 2006 and 2011 and the proportion who have ever been suspended from school increased during a similar period, underscoring the importance of examining changes in engagement at school for youth with an IEP (Dye & Johnson, 2009; Laughlin, 2014; U.S. Department of Education, National Center for Education Statistics, 2012).

- **Youth with an IEP increasingly feel connected to school, but there is little change in a particular form of bullying.** Overall and in nearly all disability groups, the proportion of youth with an IEP who agreed "a lot" that they are part of their school rose by more than 20 percentage points, from 31 to 52 percent (table ES9). The vast majority of youth with an IEP also continued to feel that school is a safe place (93 percent in 2003 and 89 percent in 2012). Similar proportions of youth with an IEP reported being teased or called names at school during the school year as well (37 percent in 2003 and 31 percent in 2012). However, four disability groups were less likely to report being teased—those with emotional disturbance, multiple disabilities, speech or language impairments, or traumatic brain injuries.

Table ES9. Percentages of youth with an IEP ages 15 to 18 who have positive attitudes about school and who were teased at school, by disability group and year

	Youth who agree a lot that they are part of the school		Youth agree a lot or a little that they feel safe in school		Youth who were teased or called names at school	
Disability group	2012	2003	2012	2003	2012	2003
Youth ages 15 to 18	**52**	**31*✓**	**89**	**93***	**31**	**37**
Autism	53	25*✓	92	95	38	46
Deaf-blindness	65	45	100	98	‡	47
Emotional disturbance	41	32	85	90	41	57*✓
Hearing impairment	51	38	85	87	36	42
Intellectual disability	58	39*✓	89	92	41	37
Multiple disabilities	68	41*✓	90	81	30	51*✓
Orthopedic impairment	71	47*✓	92	94	25	36
Other health impairment	57	31*✓	87	94*✓	38	45
Specific learning disability	51	29*✓	89	94*✓	26	33
Speech or language impairment	53	24*✓	91	93	25	37*✓
Traumatic brain injury	56	22*✓	92	94	38	59*✓
Visual impairment	64	44*✓	95	98	27	39

* = $p < .05$ for comparison with 2012 estimate; ✓= comparison is statistically significant and at least 5 percentage points in magnitude; ‡ = reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Youth survey respondents, excluding proxies, were asked how strongly they agree or disagree that they are part of the school, how strongly they agree or disagree with feeling safe in school, and whether they were teased or called names at school in the school year. This table summarizes data presented in tables 16, 17, and 18.

Source: National Longitudinal Transition Study 2012; National Longitudinal Transition Study 2. The universe is youth who are not homeschooled. More information is provided in appendix D.

- **Participation in extracurricular activities is growing among youth with an IEP, primarily in clubs rather than sports.** Overall, 61 percent of youth with an IEP in 2003 were involved in a school or out-of-school club or sports team within the past year, compared with 74 percent in 2012 (table ES10). Their participation rates climbed during this period in both school-sponsored activities (from 48 to 62 percent) and out-of-school activities (from 38 to 54 percent). Most of the growth in these school and out-of-school activities was in clubs rather than sports teams, especially clubs focused on volunteering (from 2 to 29 percent), fine arts (from 10 to 26 percent), and academics (from 1 to 9 percent) (appendix D, tables D-11 to D-17).

Table ES10. Percentages of youth with an IEP ages 15 to 18 who participated in a school or out-of-school sport or club in the past year, by disability group and year

	Youth who participated in a school or out-of-school club or sports team		Youth who participated in a school club or sports team		Youth who participated in an out-of-school club or sports team	
Disability group	2012	2003	2012	2003	2012	2003
Youth ages 15 to 18	**74**	**61*✓**	**62**	**48*✓**	**54**	**38*✓**
Autism	75	51*✓	59	44	58	30*✓
Deaf-blindness	75	85	73	56	38	66*✓
Emotional disturbance	72	52*✓	56	40*✓	50	26*✓
Hearing impairment	73	63	62	57	54	34*✓
Intellectual disability	71	48*✓	56	36*✓	50	30*✓
Multiple disabilities	69	68	54	54	50	41
Orthopedic impairment	71	70	60	53	52	45
Other health impairment	76	64	62	51	57	38*✓
Specific learning disability	75	64*✓	65	50*✓	52	42*✓
Speech or language impairment	79	57*✓	71	47*✓	58	35*✓
Traumatic brain injury	72	57	62	34*✓	52	39
Visual impairment	85	77	74	68	62	37*✓

* = $p < .05$ for comparison with 2012 estimate; ✓= comparison is statistically significant and at least 5 percentage points in magnitude.

Note: Youth survey respondents were asked whether they participated in any of the following school activities outside of class in the past 12 months: school sports team; music, dance, art, or theater; student government; academic subject matter club; volunteer or community service group; vocational or career-focused student organization; or other school-sponsored clubs or activities. Youth survey respondents were also asked whether they had taken part in any of the following nonschool activities in the past 12 months: organized sport supervised by an adult; music, dance, art, or theater lessons; a religious youth group or religious instruction; math, science, or computer camps or lessons, volunteer or community service group; scouting or another group or club activity; or another camp or type of nonschool activity. This table summarizes data presented in tables 19 and 20.

Source: National Longitudinal Transition Study 2012; National Longitudinal Transition Study 2. The universe is youth who are not homeschooled. More information is provided in appendix D.

- **The incidence of grade retention, suspension, and expulsion among youth with an IEP has remained stable during the past decade.** Across the disability groups, few changes have occurred between 2003 and 2012 in the proportions of youth who ever repeated a grade or were suspended or expelled, according to parents (table ES11). About one in three youth have repeated a grade (35 and 37 percent, respectively), and the same proportion have been suspended (34 and 32 percent, respectively) in each year. Less than one in ten youth have ever been expelled from school (7 and 9 percent, respectively in 2003 and 2012). Suspension rates have fallen for youth with intellectual disability (from 38 to 25 percent) and visual impairments (from 14 to 5 percent).

Table ES11. Percentages of youth with an IEP ages 15 to 18 who have repeated a grade, been suspended, or been expelled from school, by disability group and year

	Youth who have repeated a grade		Youth who have received an out-of-school suspension		Youth who have been expelled from school	
Disability group	2012	2003	2012	2003	2012	2003
Youth ages 15 to 18	**37**	**35**	**32**	**34**	**9**	**7**
Autism	24	19	20	22	4	2!
Deaf-blindness	44	43	‡	16!	‡	‡
Emotional disturbance	35	30	68	75	21	24
Hearing impairment	30	28	19	25	6	2*
Intellectual disability	45	43	25	38*✓	7	8
Multiple disabilities	29	28	18	22	4	3
Orthopedic impairment	23	25	9	14	‡	3!
Other health impairment	36	35	39	39	14	11
Specific learning disability	41	35	29	28	7	5
Speech or language impairment	31	32	20	23	5	5
Traumatic brain injury	29	29	27	35	‡	4!
Visual impairment	20	22	5!	14*✓	‡	‡

* = $p < .05$ for comparison with 2012 estimate; ✓=comparison is statistically significant and at least 5 percentage points in magnitude; ! = estimate is unstable because the standard error represents 30 to 50 percent of the estimate; ‡ = reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents were asked whether their children have ever been held back a grade, have ever had an out-of-school suspension, and have ever been expelled. This table summarizes data presented in tables 22 and 23.

Source: National Longitudinal Transition Study 2012; National Longitudinal Transition Study 2. The universe is all youth. More information is provided in appendix D.

Have the academic and special education supports that youth receive changed?

Both IDEA 1997 and 2004 increased the emphasis on improving the academic achievement of youth in special education and involving parents in their children's education. Schools and parents can help students with disabilities stay engaged and succeed in school in a variety of ways. Schools support youth with an IEP by offering special education services that aim to develop academic and functional competencies as well as instructional accommodations that can help them overcome barriers to learning (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011). Parents can also help youth in their educational progression by participating in meetings or other activities at school, identifying service needs, or helping with homework—forms of assistance associated with positive student outcomes (Jeynes, 2007; Wagner et al., 2014; Wang, Dishion, Stormshak, & Willett, 2011).

- **Receipt of school-provided support services, particularly tutoring and psychological services, has grown among youth with an IEP.** The proportion of youth using any support services at school grew between 2003 and 2012, both overall (from 44 to 65 percent) and among disability groups, based on parent reports (table ES12). These support services include tutoring, reader or interpreter services, speech or language therapy, audiology services, psychological or mental health counseling, physical or occupational therapy, orientation and mobility services, and special transportation. The largest growth was in receipt of services from a tutor, reader, or interpreter, which increased from 18 to 33 percent, and psychological or mental health counseling, which increased from 13 to 28 percent.

Table ES12. Percentages of youth with an IEP ages 15 to 18 who received support services at school, by disability group and year

	Youth who received any support services at school		Youth who received services from a tutor at school		Youth who received psychological or mental health counseling at school	
Disability group	2012	2003	2012	2003	2012	2003
Youth ages 15 to 18	**65**	**44*✓**	**33**	**18*✓**	**28**	**13*✓**
Autism	80	86	27	12*✓	34	16*✓
Deaf-blindness	94	93	55	23*✓	12!	9!
Emotional disturbance	79	49*✓	29	15*✓	62	29*✓
Hearing impairment	84	82	46	43	17	13
Intellectual disability	76	58*✓	36	14*✓	30	16*✓
Multiple disabilities	91	80*✓	33	14*✓	31	14*✓
Orthopedic impairment	85	76	29	11*✓	22	9*✓
Other health impairment	62	42*✓	36	18*✓	33	15*✓
Specific learning disability	52	36*✓	34	20*✓	17	10
Speech or language impairment	69	61	25	12*✓	22	14!
Traumatic brain injury	66	56	34	19	35	16*✓
Visual impairment	69	73	36	21*✓	8!	12

* = $p < .05$ for comparison with 2012 estimate; ^ = $p < .05$ for comparison with 2003 estimate; ✓ = comparison is statistically significant and at least 5 percentage points in magnitude; ! = estimate is unstable because the standard error represents 30 to 50 percent of the estimate.

Note: Parent survey respondents were asked whether their children received the following support services in the past 12 months: tutoring or reader/interpreter services, speech or language therapy, audiology services, psychological or mental health counseling, physical or occupational therapy, orientation and mobility services, and special transportation. This table summarizes data presented in tables 25 and 27.

Source: National Longitudinal Transition Study 2012; National Longitudinal Transition Study 2. The universe is youth whose parent reported that they received special education. More information is provided in appendix E.

- **Parents of youth with an IEP are more likely now than in the past decade to attend parent-teacher conferences, but less likely to help with homework.** The proportion of parents who indicated that they attended a regular parent-teacher conference during the past school year grew from 67 to 83 percent for youth with an IEP overall and by at least 10 percentage points in nearly all disability groups between 2003 and 2012 (table ES13). However, the proportion of parents who reported providing weekly homework help declined by 7 percentage points, from 62 to 55 percent. Parents were just as likely in 2012 as in 2003 to say that they discussed school experiences regularly with their children (84 and 87 percent, respectively) and attended school meetings and events (74 percent in both years) (table 30).

Table ES13. Percentages of youth with an IEP ages 15 to 18 whose parent attended a parent-teacher conference and whose parent helped with homework at least once a week, by disability group and year

	Youth whose parent attended a parent-teacher conference		Youth whose parent helped with homework at least once a week	
Disability group	2012	2003	2012	2003
Youth ages 15 to 18	**83**	**67*✓**	**55**	**62*✓**
Autism	87	78*✓	48	60*✓
Deaf-blindness	84	63*✓	66	48
Emotional disturbance	82	69*✓	48	48
Hearing impairment	82	67*✓	60	58
Intellectual disability	84	67*✓	59	70*✓
Multiple disabilities	84	63*✓	56	51
Orthopedic impairment	82	66*✓	62	62
Other health impairment	85	71*✓	59	63
Specific learning disability	83	67*✓	55	63*✓
Speech or language impairment	75	63*✓	55	65*✓
Traumatic brain injury	84	61*✓	61	60
Visual impairment	83	57*✓	60	53

* = $p < .05$ for comparison with 2012 estimate; ✓=comparison is statistically significant and at least 5 percentage points in magnitude.

Note: Parent survey respondents were asked whether they or another adult in the household attended a parent-teacher conference in the current school year and how often they helped youth with homework in the current school year. This table summarizes data presented in tables 28 and 29.

Source: National Longitudinal Transition Study 2012; National Longitudinal Transition Study 2. The universe for the first measure is youth who are enrolled in school in a school setting. The universe for the second measure is youth who live with parents at least some of the time, are not homeschooled, and do not live in a residential school. More information is provided in appendix E.

Table ES14. Percentages of youth with an IEP ages 15 to 18 whose parent talks with them regularly about school experiences and whose parent attended a general school meeting, by disability group and year

	Youth whose parents talk with them regularly about school experiences		Youth whose parent attended a general school meeting	
Disability group	2012	2003	2012	2003
Youth ages 15 to 18	**84**	**87**	**74**	**74**
Autism	86	84	75	75
Deaf-blindness	78	85	81	68
Emotional disturbance	85	85	67	66
Hearing impairment	84	90	74	74
Intellectual disability	80	80	66	69
Multiple disabilities	83	84	73	76
Orthopedic impairment	83	94*✓	77	79
Other health impairment	87	94*✓	74	76
Specific learning disability	83	88	77	76
Speech or language impairment	87	88	75	71
Traumatic brain injury	87	93	75	77
Visual impairment	93	88	78	74

* = $p < .05$ for comparison with 2012 estimate; ✓= comparison is statistically significant and at least 5 percentage points in magnitude.

Note: Parent survey respondents were asked how often they or another adult in the household talk with youth about school experiences in the current school year and how often they or another adult attended a general school meeting in the current school year. This table summarizes data presented in table 30.

Source: National Longitudinal Transition Study 2012; National Longitudinal Transition Study 2. The universe for the first measure is youth who live with parents at least some of the time and are enrolled in school in a school setting. The universe for the second measure is youth who are enrolled in school in a school setting. More information is provided in appendix E.

How have youth changed the way they prepare for life after high school?

Parents and schools play important roles in helping youth with an IEP prepare for their transition to adulthood. Since 1990, IDEA has required schools to invite youth with an IEP and their parents to attend transition-planning meetings to discuss postsecondary goals and help them reach those goals. IDEA 2004 expanded on this requirement by stipulating that the goals be measurable and reflect not only youths' interests and preferences but also their strengths. Some research suggests that the process of helping youth formulate and pursue their transition goals may improve their outcomes later in life (Test et al., 2009). Another way youth prepare for life after high school is through working in paid or unpaid jobs. Research has linked working during high school, particularly in paid jobs, to higher employment rates after graduation among youth with an IEP (Baer et al., 2003; Carter et al., 2012; McDonnall & O'Mally, 2012; Simonsen & Neubert, 2013; Wagner et al., 2014). Although paid work experience in high school may be important, the Great Recession may have made that experience harder to come by, because the greatest increases in unemployment nationally were among younger people and those with less schooling (Hoynes, Miller, & Schaller, 2012).

- **Youth and parents are less likely to have discussed transition plans with school staff than in the previous decade.** From 2003 to 2012, the proportion of youth (ages 17 to 18) and their parents who reported ever having met with school staff to discuss post-high school transition plans declined by nearly 10 percentage points for youth (79 versus 70 percent) and almost 20 percentage points for parents (79 versus 60 percent) (table ES15). However, their reported participation rates in IEP meetings in the past two years did not decline during this period (from 74 to 81 percent for youth, and from 89 to 91 percent for parents) (table 32). The declining prevalence of transition planning might reflect the policy change in IDEA 2004 that delayed the age when youth must start this planning process from 14 to 16 years old, which may have made it less likely for parents and students to have had memorable discussions about these issues with schools. Alternatively, it may reflect a declining emphasis on transition planning within the context of all IEP meetings, or a combination of these and perhaps other factors. In addition, parents reported that youth who attend IEP or transition-planning meetings were less likely than a decade ago to provide input during the meeting: 69 percent provided at least some input in 2003, compared with 61 percent in 2012.

Table ES15. Percentages of youth with an IEP ages 17 to 18 and parents who attended a transition-planning meeting, by disability group and year

	Youth who met with school staff to develop transition plans		Youth whose parent met with school staff to develop transition plans		Youth who provided at least some input in IEP and transition planning	
Disability group	2012	2003	2012	2003	2012	2003
Youth ages 17 to 18	**70**	**79*✓**	**60**	**79*✓**	**61**	**69*✓**
Autism	63	75	65	78*✓	41	32
Deaf-blindness	51!	83	78	80	41!	55
Emotional disturbance	71	69	66	79*✓	65	68
Hearing impairment	71	88*✓	58	82*✓	73	73
Intellectual disability	66	64	65	78*✓	44	44
Multiple disabilities	52	70	64	82*✓	37	33
Orthopedic impairment	63	88*✓	61	85*✓	66	61
Other health impairment	75	79	56	85*✓	66	72
Specific learning disability	72	83*✓	56	78*✓	67	77
Speech or language impairment	66	82	54	72*✓	67	65
Traumatic brain injury	55	81*✓	51	80*✓	67	58
Visual impairment	69	82	67	81	79	71

* = $p < .05$ for comparison with 2012 estimate; ✓ = comparison is statistically significant and at least 5 percentage points in magnitude; ! = estimate is unstable because the standard error represents 30 to 50 percent of the estimate.

Note: Youth survey respondents and parent survey respondents, respectively, were asked whether they (or another adult in the household in the case of parents) have met with teachers to develop a transition plan (that is, goals for what youth will do after high school and a plan for how to achieve them). Parent survey respondents were also asked to describe the youth's role in his/her IEP and transition planning. The response options were as follows: took a leadership role, provided some input, was present but participated very little, or did not participate at all. At least some input is defined as providing some input or taking a leadership role.

Source: National Longitudinal Transition Study 2012; National Longitudinal Transition Study 2. The universe for the first two measures is youth whose parent reported that they received special education services in the past year and are 17 or 18 years old. The universe for the third measure is youth whose parent reported that they received special education services in the past year and whose parent or another adult in the household attended an IEP in the past two years or ever attended a transition-planning meeting, and are 17 or 18 years old. More information is provided in appendix F.

- **Paid employment in a job not sponsored by school among youth with an IEP has declined, but participation in school-sponsored work activities remained stable.** The proportion of youth with an IEP overall who reported having a job that is not sponsored by school at the time of the interview declined from 27 percent in 2003 to 19 percent in 2012 (table ES16). Those with hearing impairments and other health impairments experienced the largest declines (from 35 to 14 percent and from 42 to 23 percent, respectively). By contrast, youth with an IEP overall were about as likely in both 2003 and 2012 to report having participated in school-sponsored work in the past year (14 and 13 percent, respectively). Although the proportions of youth in most disability groups with school-sponsored jobs were stable from 2003 to 2012, the percentage rose for youth with autism from 11 to 21 percent.

Table ES16. Percentages of youth with an IEP ages 15 to 18 who have a paid job and who had a school-sponsored job, by disability group and year

	Youth who currently have a paid job		Youth who had a school-sponsored work activity in the past year	
Disability group	2012	2003	2012	2003
Youth ages 15 to 18	**19**	**27*✓**	**13**	**14**
Autism	6	7!	21	11!*✓
Deaf-blindness	‡	‡	‡	45!
Emotional disturbance	19	19	14	16!
Hearing impairment	14	35*✓	15	11!
Intellectual disability	11	16	23	16
Multiple disabilities	11	14!	21	17!
Orthopedic impairment	6!	‡	12	‡
Other health impairment	23	42*✓	10	8
Specific learning disability	23	29	10	15
Speech or language impairment	19	29	7	7!
Traumatic brain injury	19	37	18	27!
Visual impairment	12	22	12	16

* = $p < .05$ for comparison with 2012 estimate; ✓=comparison is statistically significant and at least 5 percentage points in magnitude; ! = estimate is unstable because the standard error represents 30 to 50 percent of the estimate; ‡ = reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Youth survey respondents were asked whether they currently have a paid job and whether they had a school-sponsored job in the past 12 months. This table summarizes data presented in tables 34 and 35.

Source: National Longitudinal Transition Study 2012; National Longitudinal Transition Study 2. The universe for the first measure is youth who are enrolled in school in a school setting. More information is provided in appendix F.

Additional publications and data collection

This volume is the third of three publications from the NLTS 2012 Phase I series reporting findings about youth in special education in 2012 and 2013. Volume 1 focuses on comparisons of youth with an IEP and youth without an IEP (Lipscomb et al., 2017a). Volume 2 focuses on comparisons of youth with an IEP across disability groups (Lipscomb et al., 2017b). The three volumes are available on the Institute of Education Sciences website for the NLTS 2012.

Later reports will examine outcomes for the youth described in Volumes 1 through 3, based on data collected in 2016 and beyond.

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Tables

Chapter 1. Why and how is this study being conducted?

For more than 40 years, policymakers have committed to supporting the education of students with disabilities, who have grown as a share of all students in the United States (Snyder, de Brey, & Dillow, 2016). Concern that these needs were not being adequately met led Congress to pass landmark legislation in 1975, now known as the Individuals with Disabilities Education Act (IDEA). IDEA mandates that students with disabilities have access to a free, appropriate public education. It also authorizes nationwide funding to help school districts provide services to meet students' unique needs. A core component of IDEA is the requirement that schools and families work together to develop an individualized education program (IEP) for each student in special education to guide the provision of educational and related services that the student needs to progress academically. Congress has updated IDEA several times, most recently in 2004, placing an increased emphasis on helping youth prepare for postsecondary education, careers, and independent living.

Despite these policies, concern about the challenges youth with an IEP face and interest in understanding their experiences remains. Research beginning more than two decades ago found that many of these youth struggled during and after high school, although the extent and nature of their challenges varied with their characteristics (see, for example, Newman, Wagner, Cameto, Knokey, & Shaver, 2010; Wagner et al., 1991). Since then, the educational, social, and economic landscapes for all youth, including those with an IEP, have changed in important ways. Schools and teachers face greater demands to help students progress academically, and school climate has received greater public attention (Dee, Jacob, & Schwartz, 2013; Thapa, Cohen, Guffey, & Higgins-D'Alessandro, 2013). The nation is more racially and ethnically diverse, the economy is recovering from the Great Recession (from 2007 to 2009), and employers place greater value on postsecondary education (Colby & Ortman, 2015; Oreopoulos & Petronijevic, 2013; Oreopoulos, von Wachter, & Heisz, 2012).

The National Longitudinal Transition Study (NLTS) 2012 provides updated information on youth with disabilities in light of these changes. Sponsored by the U.S. Department of Education under a congressional mandate to examine IDEA 2004, the NLTS 2012 is the third study in the NLTS series. The new study offers a current picture of the backgrounds of secondary school youth and their functional abilities, activities in school and with friends, academic supports received from schools and parents, and preparation for life after high school. The NLTS 2012 collected data that, for the first time, allow direct comparisons of youth with and without an IEP. The study also compares youth with different disabilities and uses data from the prior studies in the NLTS series to examine trends in their characteristics and experiences over three decades. Three initial report volumes have been developed, each with a different focus (see box 1). Together, the volumes are designed to inform efforts by educators and policymakers to address the needs of youth in special education.

Box 1. Three volumes reporting findings from the National Longitudinal Transition Study 2012

Preparing for life after high school: The characteristics and experiences of youth in special education

Volume 1: Comparisons of youth in special education with other youth examines the characteristics of youth in special education overall and how these youth are faring relative to their peers. Comparisons are made between youth with and without an IEP, and within the latter group, those with a disability under Section 504 of the Rehabilitation Act. The findings highlight the distinctive features of the characteristics and experiences of youth with an IEP.

Volume 2: Comparisons of youth in special education across disability groups describes the characteristics of youth in 12 disability groups based on IDEA 2004 definitions and how these groups of youth are faring relative to one another. The findings highlight the diversity of needs and challenges faced by youth in special education.

Volume 3: Comparisons of youth in special education over time identifies trends in the characteristics and experiences of youth in special education over the past three decades. The findings highlight the extent of progress students in special education are making.

Note: The three volumes are available on the Institute of Education Sciences website for the NLTS 2012.

This volume, the third from the NLTS 2012, examines how the characteristics and experiences of youth ages 15 to 21 in special education have changed over time, using data from the three studies in the NLTS series. It provides information to assess the progress that the nation has made in preparing youth with an IEP for life after high school. The report also aims to inform policymakers and educators who seek new ways to improve special education services.

In addition to describing the trends for youth with an IEP overall, this report examines how the characteristics and experiences of youth have changed for 12 disability groups (see table 1 and box 2 for definitions of the groups). Based on states' annual reporting for each group over time—from 1987, when the data for the original NLTS were collected, to 2012, representing the current study—the number of youth with an IEP increased by 74 percent overall, with growth in all but one disability group.[7] Youth with intellectual disabilities are the exception: the size of that group decreased by 13 percent. The number of youth with other health impairments (which encompasses many types of impairments including epilepsy, asthma, diabetes, and attention deficit hyperactivity disorders [ADHD]) grew the most, increasing by more than 1,600 percent over the past three decades. During this period, youth with an IEP (ages 15 to 21) grew from 8 percent of total enrollment in public secondary schools in 1987 to 11 percent in 2003 and to 12 percent in 2012 (Snyder et al., 2016; U.S. Department of Education, 1989, 2006, 2012).

Table 1. Percentage growth in the number of youth with an IEP ages 15 to 21, by disability group

Disability group	2012 (NLTS 2012)	2003 (NLTS2)	1987 (NLTS)	Percentage growth: 1987 to 2012	Percentage growth: 1987 to 2003	Percentage growth: 2003 to 2012
Youth with an IEP overall	**1,702,082**	**1,583,976**	**978,382**	**74**	**62**	**7**
Autism	100,113	20,916	—	—	—	379
Deaf-blindness	517	529	272	90	94	2
Emotional disturbance	158,517	176,357	113,863	39	55	−10
Hearing impairment	20,965	20,658	11,068	89	87	1
Intellectual disability	185,131	218,513	213,569	−13	2	−15
Multiple disabilities	49,684	44,801	18,395	170	144	11
Orthopedic impairment	17,331	19,802	12,212	42	62	−12
Other health impairment	235,022	100,678	13,523	1,638	644	133
Specific learning disability	864,471	925,063	554,424	56	67	−7
Speech or language impairment	52,383	41,251	36,188	45	14	27
Traumatic brain injury	10,275	7,698	—	—	—	33
Visual impairment	7,673	7,710	4,868	58	58	0

— = not available.

NLTS is National Longitudinal Transition Study.

Note: Because the disability growth rates are based on the universe of youth identified in each disability group, statistical tests were not conducted to determine whether they differed across groups or periods. The year listed indicates the calendar year in which the school year ends. For example, 2012 represents the 2011–2012 school year. Autism and traumatic brain injury were not recognized as separate disability groups until IDEA 1990.

Source: U.S. Department of Education (2012, 2006, 1989).

[7] In this report, data collected in 2012–2013 are referred to as 2012, data collected in 2003 are referred to as 2003, and data collected in 1987 as 1987.

The growth in the number of youth in each disability group has not been steady over time. For most disability groups, the increases took place primarily in the early period, from 1987 to 2003. During the recent decade, from 2003 to 2012, the number of youth declined in five disability groups: deaf-blindness, emotional

Box 2. Definitions of 12 disability groups recognized by the Individuals with Disabilities Education Act for adolescent youth

Autism means a developmental disability significantly affecting verbal and nonverbal communication and social interaction, generally evident before age 3, which adversely affects a child's educational performance. Other characteristics often associated with autism are engagement in repetitive activities and stereotyped movements, resistance to environmental change or change in daily routines, and unusual responses to sensory experiences.

Deaf-blindness means concomitant hearing and visual impairments, the combination of which causes such severe communication and other developmental and educational needs that they cannot be accommodated in special education programs solely for children with either deafness or blindness.

Emotional disturbance means a condition exhibiting one or more of the following characteristics over a long period and to a marked degree that adversely affects a child's educational performance: (1) an inability to learn that cannot be explained by intellectual, sensory, or health factors; (2) an inability to build or maintain satisfactory interpersonal relationships with peers and teachers; (3) inappropriate types of behavior or feelings under normal circumstances; (4) a general pervasive mood of unhappiness or depression; or (5) a tendency to develop physical symptoms or fears associated with personal or school problems.

Hearing impairment (includes deafness)[1] is a limited ability to hear, whether permanent or fluctuating, which adversely affects a child's educational performance. The term as used in the study includes deafness, which means a hearing impairment that is so severe that the child is impaired in processing linguistic information through hearing, with or without amplification, which adversely affects a child's educational performance.

Intellectual disability means significantly below-average general intellectual functioning, existing concurrently with deficits in adaptive behavior and manifested during the developmental period, which adversely affects a child's educational performance.

Multiple disabilities are concomitant impairments (such as intellectual disability-blindness or intellectual disability-orthopedic impairment), the combination of which causes such severe educational needs that cannot be accommodated in special education programs solely for one of the impairments. Multiple disabilities does not include deaf-blindness.

Orthopedic impairment means a severe orthopedic impairment that adversely affects a child's educational performance. The term includes impairments caused by a congenital anomaly, impairments caused by disease (for example, bone tuberculosis), and impairments from other causes (for example, cerebral palsy, amputations, fractures, or burns).

Other health impairment means having limited strength, vitality, or alertness, including greater awareness of external stimuli that can result in reduced attention to the educational environment, which (1) is due to chronic or acute health problems such as asthma, attention deficit disorder or attention deficit/hyperactivity disorder (ADHD), diabetes, epilepsy, a heart condition, hemophilia, lead poisoning, leukemia, nephritis, rheumatic fever, sickle cell anemia, and Tourette syndrome; and (2) adversely affects a child's educational performance.

Specific learning disability means a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which can manifest itself in the imperfect ability to listen, think, speak, read, write, spell, or perform mathematical calculations, including conditions such as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia.

Speech or language impairment means a communication disorder, such as stuttering, impaired articulation, language impairment, or a voice impairment, which adversely affects a child's educational performance.

Traumatic brain injury means an acquired injury to the brain caused by an external physical force, resulting in total or partial functional disability or psychosocial impairment, or both, which adversely affects a child's educational performance. Traumatic brain injury applies to open or closed head injuries resulting in impairments in one or more areas, such as cognition; language; memory; attention; reasoning; abstract thinking; judgment; problem-solving; sensory, perceptual, and motor abilities; psychosocial behavior; physical functions; information processing; and speech.

Visual impairment (including blindness) means a vision impairment that, even with correction, adversely affects a child's educational performance. The term includes both partial sight and blindness.

[1] IDEA 2004 recognizes hearing impairment and deafness as separate categories. Because youth with these disabilities are small groups, they are combined in this volume under "hearing impairment."

Note: The definitions in this box incorporate minor editorial changes that do not change the meaning of those in IDEA 2004.

Source: Individuals with Disabilities Education Act, 34 C.F.R. Part 300 § 300.8 (C).

disturbance, intellectual disability, orthopedic impairments, and specific learning disabilities. However, the number identified in other groups has continued to climb. Autism grew the most from 2003 to 2012 (379 percent growth), which may reflect greater awareness of the condition, improved approaches for identifying it, or other factors that affect its actual prevalence among youth (Blumberg et al., 2013).

Changes to IDEA may be partly responsible for some of the trends in disability group identification. For instance, IDEA did not recognize autism and traumatic brain injury as distinct disability categories until 1990. In addition, IDEA 2004 encouraged states to develop new approaches for identifying specific learning disabilities. The change was intended to shift away from a model of identification based on the size of the discrepancy between achievement and IQ measures to an approach referred to as response to intervention (RTI) that includes universal screening and increasingly intensive interventions designed to support learning (Cortiella & Horowitz, 2014). This approach aims to provide early assistance for struggling students and reduce the number who need IDEA services for a specific learning disability. Box 3 summarizes major changes to IDEA since 1990, to provide context for the trends reported in this volume.

Box 3. Major changes to IDEA in 1990, 1997, and 2004 for youth with an IEP

1990 amendments

- **Autism and traumatic brain injury**: IDEA began recognizing these two disabilities as distinct categories of disability.
- **IEP development and transition planning**: IEPs for youth ages 16 and older need to include a transition plan. This plan identifies a coordinated set of activities designed to promote the student's movement from school to post-school life. Schools must invite youth with an IEP and their parents to a transition-planning meeting that includes a discussion of postsecondary goals and the assistance needed to reach those goals.

1997 amendments

- **Discipline**: Schools cannot suspend or expel students with disabilities for behavior that is a manifestation of their disability.
- **Accountability**: Schools must include all students with disabilities in standard state assessments and develop an alternate assessment for those who cannot participate even with accommodations.
- **Inclusion in the general education curriculum**: IEPs must describe how students with disabilities will be involved with and progress in the general education curriculum designed for all students.
- **Parent participation**: The roles of parents in disability evaluation, IEP development, and placement decisions are strengthened. For example, parents are included in placement decisions, whereas before they only had a right to be included in IEP meetings.
- **IEP development and transition planning**: A statement of transition service needs is to be provided to youth starting at age 14. The transition plan must consider their preferences and interests, as well as include an examination of their coursework and a determination of whether they are on track for their goals at graduation.

2004 amendments

- **IEP development and transition planning**: IEPs must include statements about not only the students' levels of academic achievement but also their functional performance. Transition planning must begin no later than age 16, the age originally specified in the 1990 amendments before being lowered to age 14 in 1997. Transition plans must include the development of appropriate postsecondary goals that can be measured. Students' goals and transition services must consider their strengths along with their preferences and interests.
- **Discipline**: School personnel may consider circumstances on a case-by-case basis when considering appropriate discipline for students with disabilities who violate codes of conduct. The amendments provide standards for determining whether misconduct is caused by the disability or a failure to implement the IEP.
- **Specific learning disabilities**: Schools no longer need to document the existence of a discrepancy between IQ and achievement to identify a specific learning disability. They may instead use RTI approaches, which include early

interventions and assessments of whether youth are able to make sufficient progress to meet grade-level standards without special education services.

- **Parent participation**: To communicate about the development of a student's IEP, schools and parents can use conference calls and other means that do not require a parent's physical presence.
- **Preparation for further education**: The free, appropriate public education provided to students should be designed to prepare them not only for employment and independent living, but also for further education.
- **Disproportionality**: States must collect and report data by student race and ethnicity to determine whether any racial or ethnic groups are disproportionately being identified for special education, suspended, or expelled.

Note: This box focuses on major changes affecting youth with an IEP and is not intended to be comprehensive of all amendments to IDEA.

Source: Public Law 101-476 (1990 amendments); Public Law 105-17 (1997 amendments); Public Law 108-446 (2004 amendments).

Overview of the National Longitudinal Transition Study 2012 and its predecessors

The NLTS 2012 is a national study of nearly 13,000 youth, including youth with an IEP (81 percent) and without an IEP (19 percent). These students were chosen to be representative of all students with and without an IEP in the United States in grades 7 through 12 (or ungraded secondary classes) who were enrolled in public school districts, charter schools, and special schools. Among the youth with an IEP are students who represent each of 12 disability categories recognized by IDEA 2004: autism, deaf-blindness, emotional disturbance, hearing impairment,[8] intellectual disability, multiple disabilities, orthopedic impairment, other health impairment, specific learning disability, speech or language impairment, traumatic brain injury, and visual impairment. Among the youth without an IEP are students who represent those who receive disability accommodations in accordance with Section 504 of the Rehabilitation Act (although they do not receive IDEA special education services).[9] The study surveyed youth and their parents in 2012 or 2013, when the vast majority of youth (97 percent) were 13 to 21 years old.[10] It spans multiple ages and grades to provide a broad view of students' school experiences at a point in time. In this volume, we refer to the NLTS 2012 as providing data for 2012, because the data represent the student population in this year.

Two earlier studies in the NLTS series were conducted over the past three decades. The first study, called the NLTS, was a nationally representative study of over 6,800 13- to 21-year-old students in special education at public school districts and special schools in 1985. The study interviewed the students' parents in summer and

[8] Because youth with deafness and hearing impairments are small groups, they have been combined into one group for this study.

[9] Section 504 is a civil rights statute that bars the exclusion of individuals from programs and activities that receive federal assistance based on their having a physical or mental impairment that substantially limits major life activities. Examples of major life activities include the following: performing manual tasks, speaking, learning, working, thinking, and communicating. Section 504 also covers individuals who have a history of, or are regarded as having, a physical or mental impairment that limits major life activities. The definition of a disability is broader under Section 504 than under IDEA 2004, which requires disabilities to adversely affect students' educational performance. Five percent of the nearly 13,000 youth receive disability accommodations through Section 504 but do not have an IEP.

[10] Youth were ages 12 to 23 when interviews took place. Less than 2 percent were 12 years old, and less than 1 percent were 22 or 23 years old. All students were enrolled in grades 7 through 12 or a secondary ungraded class when sampled for the study.

fall 1987, and then both students and parents from fall 1990 through winter 1991. The second study, the NLTS2, included more than 9,200 youth with an IEP who were ages 13 to 16 in December 2000. The NLTS2 conducted parent interviews in 2001 and interviews with both parents and youth in 2003. Additional waves of the study were conducted in 2005, 2007, and 2009, focusing mostly on students' post-high school outcomes.

This volume draws on data from all three studies in the NLTS series to examine trends in students' characteristics and high school experiences over the past three decades for youth with an IEP overall and for disability groups. Most analyses examine trends for in-school youth ages 15 to 18 from 2003 to 2012, using Wave 2 of the NLTS2 and NLTS 2012 data. The study team selected the 2003 year of the NLTS2 because the vast majority of NLTS2 students were high school age and the data for the first time included both youth-reported and parent-reported information, as is the case in the NLTS 2012. Where comparable data were available in 1987 from the original NLTS (only available for some parent-reported measures), the volume extends the trends back a decade to 1987 for youth ages 15 to 18 and adds trends for youth ages 19 to 21 who are still enrolled in secondary school.[11] In these instances, the volume refers to youth ages 15 to 18 as "younger youth" and those ages 19 to 21 as "older youth." Trend data are not available for older youth in 2003, given that the oldest youth in the NLTS2 were 19 years old. For each of the three studies, the study team identified youth in the relevant age range for whom data were available and re-weighted their responses to make them representative of all youth of those ages with an IEP in the appropriate study year (2012, 2003, and 1987). Box 4 provides more information on the three data sources and the presentation of information in this volume. Appendix A presents more detail on the weighting procedure as well as other technical notes and methodology.

Box 4. The NLTS series at a glance

Students in the studies and how they were selected

All three studies in the NLTS series provide information on nationally representative sets of students at specific points in time. To represent all youth with an IEP in the United States for each disability category, the study teams first drew nationally representative samples of districts. The participating districts provided lists of enrolled students with their IEP status and category, from which students within each category were selected. See appendix A for more detail on the study.

The NLTS 2012 provides information on students in grades 7 through 12 or who were ages 13 to 21 and attended secondary ungraded classes when selected for the study in December 2011. Of the 572 sampled districts, charter schools, and special schools for deaf and/or blind students, 432 (76 percent) agreed to participate in the study. Of the 17,476 sample members with an IEP, surveys were completed for 10,459 parents and 8,960 youth, response rates of 60 and 51 percent, respectively. This volume examines two age groups of youth with an IEP who were enrolled in school and surveyed during 2012 or 2013: those ages 15 to 18 and ages 19 to 21. The findings for younger youth who were enrolled in school are based on 5,194 observations for parent-reported measures and 4,400 observations for youth-reported measures. The findings for older youth who were enrolled in school are based on 957 observations for parent-reported measures and 777 observations for youth-reported measures.

The NLTS2 provides information on students with an IEP who were ages 13 to 16 in December 2000. The study sampled 3,712 local education agencies and special schools, of which 538 (15 percent) agreed to participate. In 2003, of the 11,276 sample members, surveys were completed for 6,714 parents and 6,322 youth (60 and 56 percent of the initial sample) when youth were ages 15 to 19. The findings in this volume are based on 5,457 observations for parent-reported measures and 2,773 observations for youth-reported measures for youth ages 15 to 18 who were enrolled in school in 2003.

[11] For youth ages 19 to 21, findings are only reported for the aggregate group due to small sample sizes in some of the disability groups.

The NLTS provides information on students with an IEP who were ages 13 to 21 in 1985. Of the 712 sampled local education agencies and special schools, 325 (46 percent) agreed to participate in the study. Out of a possible 10,369 sample members, surveys were completed for 6,896 parents (67 percent) during summer and fall 1987, when youth were ages 15 to 23. The parent-reported findings in this volume are based on 3,941 observations for youth ages 15 to 18 and 1,404 observations for youth ages 19 to 21.

Collection of information for the study

The NLTS 2012 parent and youth surveys were completed during winter, spring, and summer 2012 and 2013, using a combination of computer-assisted interviewing (over the telephone and in person) and responses to web-based surveys. Parent survey respondents provided proxy responses for youth who were unable to self-report even with accommodations offered by the study (19 percent of youth with an IEP overall). Proxy responses were not obtained for questions that depended on the youth's perspective. See appendix A for more detail.

The NLTS2 parent and youth surveys were completed in winter and spring 2003 using telephone surveys. Nonrespondents to the telephone survey received a written version of the survey by mail. Parents provided proxy responses to the youth survey if they did not think the youth would be able to accurately answer questions, both over the telephone and in a written questionnaire; 47 percent of youth survey respondents were parent proxies.

The NLTS parent surveys were completed during summer and fall 1987 using telephone surveys. The data collection process did not allow for responses to the parent survey by a proxy.

Analysis and presentation of information collected

This volume presents comparisons of group averages and tests for statistically significant differences over time.[1] Because of the large number of comparisons made, the text highlights only the statistically significant differences that are at least 5 percentage points between time points. The study team selected this level in consultation with IES and content experts, judging differences of less magnitude not large enough to inform policy, practice, or the targeting of technical assistance. The 5 percentage point level was not empirically derived or based on an external standard. The main analyses are for youth who were 15 to 18 years old in 2003 and 2012, although findings are also reported for youth who were 19 to 21 years old and for youth in 1987, data permitting. For youth ages 19 to 21, findings are only reported for the aggregate group due to small sample sizes in some of the disability groups.

Limitations of comparing across studies in the NLTS series

The trends presented in this volume could partially reflect changes in the disability groups recognized in federal legislation or in the ways that youth with different disabilities are identified. In particular, autism and traumatic brain injury were not recognized as separate disability groups until IDEA 1990. As such, they are not included as disability categories in the NLTS, but they are included in the NLTS2 and NLTS 2012. The trends may also partly reflect differences in the study design, such as the methods the three NLTS studies used to recruit districts and students. See appendix A for more detail on each study.

Because low response rates can lead to bias in results if survey nonrespondents have different characteristics than the respondents, the studies used several methods to examine the potential for nonresponse bias in the parent and youth surveys (see appendix A for detail). Together, the results from applying these methods suggest that nonresponse adjustments to the weights succeeded in limiting the potential for bias. However, it remains possible that the nonresponse-adjusted weights do not fully account for all differences between respondents and nonrespondents. Thus, readers should draw conclusions with caution. Another limitation is that the study only describes trends among groups of youth with an IEP; it does not attempt to definitively explain the origin of those trends.

[1] The threshold for statistical significance in the report is $p < .05$. Given the large number of comparisons in the report, an increased chance exists that a trend will appear to be upward or downward on at least one measure by random chance alone. Multiple comparison adjustments have not been made in the findings presented in this report, perhaps increasing the number of statistically significant findings.

Key questions of interest and the organization of the volume

This volume is organized around five questions of interest to policymakers, educators, and other stakeholders. As such, only the survey measures most relevant to addressing these questions that can be compared across the studies in the NLTS series are analyzed in this report (appendix A provides more detail about the measures). While this report examines changes over time in youth and family characteristics and in youths' school experiences, it does not do both at the same time (e.g., showing how participation in extracurricular activities has changed for low-income youth in each disability group and for higher-income youth in each disability group) because of the complexity and number of tables this would involve.

- *Chapter 2: How have the background characteristics of youth and the schools they attend changed?* Shifts in the nation's demographics and economic climate as well as in IDEA itself (as noted above) could affect the types of youth receiving special education services overall or in specific disability groups. Characteristics such as income, race/ethnicity, age, gender, and school quality can influence youth experiences and aspirations, independent of or in concert with their disabilities. Documenting trends in the backgrounds of youth with an IEP and the schools they attend can shed light on the emerging challenges these youth face and provide useful context for interpreting findings described in other chapters of this report.

- *Chapter 3: Are the challenges youth face with health, functional abilities, and independent living different than in the past?* Helping youth with an IEP enhance their functional performance to achieve greater independence has become a key objective of transition planning under IDEA 2004. Because health conditions can influence functional performance and students' potential for becoming independent, examining the trends in the health, functional abilities, and levels of independence of youth with an IEP can indicate how their needs for supports and services might be changing.

- *Chapter 4: Are youth engaging in school in different ways or to different degrees?* Youth who enjoy school, are involved in activities, and stay out of trouble are more likely to progress in school (Finn, 1989; Noltemeyer, Ward, & Mcloughlin, 2015; Wang & Fredricks, 2014). Describing the shifts in how youth with an IEP engage in school, including their participation in extracurricular activities and the extent to which they experience negative events such as suspension or expulsion, provides useful information for helping to strengthen schools' connections with youth with an IEP.

- *Chapter 5: Have the academic and special education supports that youth receive changed?* Students' success hinges in part on whether they receive the academic supports and services they need to address their disabilities. Schools and parents are the two most important sources of these supports for students. IDEA requires that schools provide all appropriate services to youth with an IEP, and updates to the law over time have sought to increase parents' participation and their role in decision making. Examining trends in the types of support students receive at school and from their parents provides information on how youth are being served and might also reflect changes in students' needs, resources, or family priorities.

- *Chapter 6: How have youth changed the way they prepare for life after high school?* How successful youth will be at continuing their education, finding jobs, and being self-sufficient can depend on the steps they take to prepare for adulthood. To inform efforts to enhance the transition-planning process, it is particularly useful to examine shifts in how involved students are in defining their post-high school goals and how they

are preparing for future employment. The trends over time are important indicators of youth progress in achieving IDEA transition goals.

More detail on the NLTS series and the findings in this volume is available in appendices, described below.

- ***Appendix A: Technical notes and methodology.*** This appendix includes technical information on the NLTS 2012, NLTS2, and NLTS, as well as the analyses in this volume. The appendix includes sections describing the purpose and design of the study; the sample design; the parent and youth surveys; data collection methods, procedures, and results; the population of interest and the analytic sample; weighting; unit nonresponse bias analysis; imputation of variables; disclosure risk analysis and protection; statistical procedures; variance estimation; and analytic variables.
- ***Appendices B through F: Detailed tables for chapters 2 through 6.*** These appendices, one supporting each chapter, include detailed findings for measures in the main text and for supplemental measures.

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Chapter 2. How have the background characteristics of youth and the schools they attend changed?

The characteristics of youth, their families, and their schools can play a role in shaping their experiences and aspirations. These characteristics may influence students' outcomes in ways that are independent of or related to their disability. Research not limited to youth with disabilities suggests, for example, that lower socioeconomic status and school quality are linked to lower rates of high school completion, college enrollment, and later success in the labor market (Newman, Wagner, Knokey, et al., 2011; Aud, KewalRamani, & Frohlich, 2011; Fryer & Katz, 2013; Schifter, 2015; Wagner, Newman, & Javitz, 2014).

Key findings in chapter 2

- **The proportion of youth with an IEP whose families face economic challenges has grown over the past decade, with larger increases among some disability groups.** Overall, the proportion of youth with an IEP without a working parent rose by nearly 5 percentage points from 2003 to 2012 (from 15 to 20 percent), with increases of at least 8 percentage points for youth with autism, multiple disabilities, and other health impairments. The proportion living in low-income households grew during this same period in four disability groups (emotional disturbance, hearing impairments, intellectual disability, and other health impairments). In addition, parent-reported receipt of federal food benefits through the Supplemental Nutrition Assistance Program doubled among all youth with an IEP (from 16 to 33 percent) and in every disability group except youth with deaf-blindness. Reported receipt of federal disability benefits through the Supplemental Security Income (SSI) Program also climbed (from 16 to 21 percent) overall and specifically for youth with other health impairments (from 11 to 17 percent).
- **The gender, racial, and ethnic makeup of youth with an IEP has mostly been stable.** Just over two-thirds of youth with an IEP overall were male in both 2003 and 2012. The proportions who were Black and who were Hispanic were also similar over the decade (each are about one in five), and the same is true in most of the disability groups. Three exceptions are that, compared to 2003, in 2012 youth with autism were less likely to be Black (19 versus 12 percent), youth with intellectual disability were more likely to be Hispanic (11 versus 19 percent), and youth with other health impairments were more likely to be Black (9 versus 19 percent). In the prior decade (1987 to 2003), there was little change in the proportion of youth who were male (69 versus 68 percent) or Black (24 versus 18 percent). However, in the earlier decade there was significant growth in the proportion who were Hispanic (9 versus 20 percent), consistent with trends in the racial-ethnic composition of youth overall (U.S. Bureau of the Census, 1990, 2005, 2014).
- **Over the past decade, 4 percent of youth with an IEP have attended schools only for students with disabilities**. This proportion was reported by parents of all youth with an IEP in both 2003 and 2012. This consistency across years is evident in all disability groups with the exception of youth with visual impairments, for whom attending a school just for students with disabilities declined from 18 percent in 2003 to 7 percent in 2012. IDEA 2004 encourages districts and schools to educate youth with disabilities in the least restrictive environment possible.

Ongoing changes in the nation's demographics and economic climate could affect the types of youth receiving special education services and their outcomes in early adulthood. Between 2003 and 2012, the proportions of youth in public schools who were White (59 to 51 percent) and Black (17 to 16 percent) decreased, while the proportions of youth who were Hispanic, Asian, and other race increased (Snyder et al., 2016). The national unemployment rate also increased from 6 to 8 percent over the same period (U.S. Department of Labor, Bureau

of Labor Statistics, 2014). These trends also may mask trends for youth with disabilities specifically. In 2012, males and Black youth represented larger shares of youth with an IEP than of youth without an IEP, and youth with an IEP were more likely than their peers to be socioeconomically disadvantaged.

Detailed tables supporting the findings presented in this chapter are available in appendix B.

The proportion of youth with an IEP whose families face economic challenges has grown over the past decade, with larger increases among some disability groups

In 2012, the lingering effects of the recession following the financial crisis affected many families. The national unemployment rate was just over 8 percent, compared with 6 percent in 2003 (U.S. Department of Labor, Bureau of Labor Statistics, 2014). The proportion of high school youth eligible for the federal free or reduced-price lunch program, which depends on the federal poverty level (and to a lesser extent community poverty via community-based eligibility rules), rose from 30 percent in 2004 to 42 percent in 2011.[12] Similarly, the proportion of all children receiving federal food assistance benefits through the Supplemental Nutrition Assistance Program (SNAP) rose 13 percentage points, from 15 percent in 2003 to 28 percent in 2012 (Child Stats.gov, n.d.; Cunnyngham & Brown, 2003; Gray & Eslami, 2014). Nationally, households of youth with an IEP in 2012 were more likely than those of other youth to have low incomes and receive SNAP benefits (Volume 1).

[12] These statistics are based on public high schools in the United States in the Common Core of Data for the 2003–2004 and 2011–2012 school years that had nonmissing counts for total students, students eligible for free lunch, and students eligible for reduced-price lunch.

- **Living with nonworking parents and in low-income households has become more common among youth with an IEP in several disability groups** (table 2; see tables B-1 and B-2 for more detail). According to their parents, overall the proportion of youth with an IEP who did not have an employed parent in their household increased by nearly 5 percentage points from 2003 to 2012, from 15 to 20 percent. The rate of parent joblessness rose particularly for youth with autism, multiple disabilities, and other health impairments. Over the same time period, the proportion of youth who lived in low-income households increased in four disability groups that represent about one-third of all youth with an IEP in 2012: emotional disturbance, hearing impairments, intellectual disabilities, and other health impairments. Having lived in a low-income household was about as common for youth with an IEP overall in 1987 as in 2012 (59 and 56 percent, respectively).

Table 2. Percentages of youth with an IEP ages 15 to 18 living in households facing economic challenges, by disability group and year

	Youth living in households in which no parent has a paid job		Youth living in low-income households		
Disability group	2012	2003	2012	2003	1987
Youth ages 15 to 18	**20**	**15***	**56**	**50**	**59^✓**
Autism	17	9*✓	35	31	—
Deaf-blindness	‡	14!	37!	52	44
Emotional disturbance	27	25	61	50*✓	58
Hearing impairment	17	12	58	43*✓	54^✓
Intellectual disability	32	28	72	62*✓	69
Multiple disabilities	28	17*✓	51	45	62^✓
Orthopedic impairment	18	12	49	41	57^✓
Other health impairment	19	9*✓	46	37*✓	62*✓,^✓
Specific learning disability	17	12	58	50	57
Speech or language impairment	15	15	51	45	58^✓
Traumatic brain injury	17	12	49	40	—
Visual impairment	10	11	49	48	57

* = $p < .05$ for comparison with 2012 estimate; ^ = $p < .05$ for comparison with 2003 estimate; ✓= comparison is statistically significant and at least 5 percentage points in magnitude; ! = estimate is unstable because the standard error represents 30 to 50 percent of the estimate; — = not available; ‡ = reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents were asked to indicate their employment status and that of their spouse, if they have one, at the time of the survey, and to indicate their household size and income in the previous year. Data for a small number of observations were imputed when not available from either the parent survey or the sample information. Low household income is household income below 185 percent of the federal poverty level, which was $22,350 in 2012, $18,100 in 2003, $11,000 in 1987 for a family of four living in the continental United States in 2012.

Source: National Longitudinal Transition Study 2012; National Longitudinal Transition Study 2. The universe is youth who live with parents at least some of the time. More information is provided in appendix B, tables B-1 and B-2.

- **Compared with a decade ago, youth with an IEP are more likely to receive federal benefits, particularly food assistance** (table 3; see tables B-3 to B-5 for more detail). From 2003 to 2012, the proportion of all youth with an IEP in households that received SNAP food assistance doubled from 16 to 33 percent, based on parent reports. Receipt of SNAP rose in every disability group except for youth with deaf-blindness. Although participation in SNAP grew, the proportion of youth with an IEP who received Temporary Assistance for Needy Families (TANF), another federal program that targets low-income households and through which states provide welfare benefits, was fairly stable, at 8 percent in 2003 and 10 percent in 2012. A growing share of youth overall received SSI benefits, for which eligibility depends on youths' disability conditions in addition to their households' financial needs.[13] Youth participation in SSI increased from 16 to 21 percent, although this growth appears to be concentrated among those with other health impairments (from 11 to 17 percent).

Table 3. Percentages of youth with an IEP ages 15 to 18 in households that received benefits through three federal assistance programs for low-income households in the past two years, by disability group and year

	Youth's household received Supplemental Nutrition Assistance Program (SNAP) benefits in the past two years		Youth's household received Temporary Assistance for Needy Families (TANF) benefits in the past two years		Youth who received Supplemental Security Income (SSI) benefits in the past two years	
Disability group	2012	2003	2012	2003	2012	2003
Youth ages 15 to 18	**33**	**16*✓**	**10**	**8**	**21**	**16*✓**
Autism	17	6*✓	5	5	28	26
Deaf-blindness	14!	13!	‡	9!	48	42
Emotional disturbance	44	24*✓	14	13	29	23
Hearing impairment	29	13*✓	10	7	31	24
Intellectual disability	44	21*✓	14	11	48	40
Multiple disabilities	35	13*✓	10	7	41	39
Orthopedic impairment	26	9*✓	6	6	38	35
Other health impairment	28	13*✓	8	8	17	11*✓
Specific learning disability	33	14*✓	8	6	14	9
Speech or language impairment	27	18*✓	7	11	11	8!
Traumatic brain injury	29	11*✓	6!	6	30	23
Visual impairment	27	8*✓	7!	3	33	33

* = $p < .05$ for comparison with 2012 estimate; ✓= comparison is statistically significant and at least 5 percentage points in magnitude; ! = estimate is unstable because the standard error represents 30 to 50 percent of the estimate; ‡ = reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents were asked whether anyone in the household received SNAP benefits in the past two years, whether anyone in the household received SSI benefits for the youth in the past two years, and whether anyone in the household received TANF or state welfare benefits in the past two years.

Source: National Longitudinal Transition Study 2012; National Longitudinal Transition Study 2. The universe is youth who live with parents at least some of the time. More information is provided in appendix B, tables B-3, B-4, and B-5.

[13] Parents were asked about SSI benefits for youth, although adults with disabilities also can be eligible for SSI.

- **Youth with intellectual disability, multiple disabilities, other health impairments, or traumatic brain injuries are more likely to live in single-parent households than a decade ago** (table 4; see table B-6 for more detail). Overall, about one-third of parents in both 2003 and 2012 said they were neither married nor in a marriage-like relationship (31 and 37 percent, respectively).[14] However, the proportion of youth in single-parent households grew among those with intellectual disability, multiple disabilities, other health impairments, and traumatic brain injuries. These four groups represented 28 percent of youth with an IEP in 2012. Going back even further, between 1987 and 2012 there was little change in the proportion of youth with an IEP who lived in a single-parent household (35 and 37 percent, respectively), declining over this longer period only for youth with speech or language impairments (from 43 to 32 percent).

Table 4. Percentages of youth with an IEP ages 15 to 18 whose parent is not married or in a marriage-like relationship, by disability group and year

Disability group	2012	2003	1987
Youth ages 15 to 18	**37**	**31**	**35**
Autism	28	23	—
Deaf-blindness	32	35	‡
Emotional disturbance	48	43	41
Hearing impairment	37	30	35
Intellectual disability	43	36*✓	37
Multiple disabilities	41	26*✓	35
Orthopedic impairment	33	29	37
Other health impairment	38	25*✓	42^✓
Specific learning disability	35	29	32
Speech or language impairment	32	30	43*✓,^✓
Traumatic brain injury	39	26*✓	—
Visual impairment	25	30	34

* = $p < .05$ for comparison with 2012 estimate; ^ = $p < .05$ for comparison with 2003 estimate; ✓= comparison is statistically significant and at least 5 percentage points in magnitude; — = not available; ‡ = reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents were asked if they are married, in a marriage-like relationship, separated, divorced, widowed, or single (and never married).

Source: National Longitudinal Transition Study 2012; National Longitudinal Transition Study 2; National Longitudinal Transition Study. The universe is youth who live with parents at least some of the time. More information is provided in appendix B, table B-6.

- **Youth with an IEP in 2012 are less likely to have private health insurance than in the past, but the proportion without any health insurance appears unchanged** (table 5; see tables B-7 to B-9 for more detail). The proportion of youth with private health insurance, as reported by parents, decreased by 16 percentage points from 2003 to 2012, from 67 to 51 percent. Reductions in private health insurance coverage ranged from 12 to 20 percentage points in seven disability groups: emotional disturbance, hearing impairments, intellectual disability, other health impairments, specific learning disabilities, speech or language impairments, and traumatic brain injuries. Despite these declines, the proportion of youth not covered by

[14] The term *marriage-like relationship* is not defined in either the NLTS 2012 parent survey or the NLTS2 parent survey from which the item was drawn. For this report, the term has been interpreted as including domestic partnerships. However, parents may have interpreted the term in other ways.

some form of health insurance did not increase (8 percent in 2003 and 2012), suggesting that those who did not have private coverage obtained insurance through a government-assisted or public health plan.[15]

Table 5. Percentages of youth with an IEP ages 15 to 17 who have private health insurance and who do not have any health insurance, by disability group and year

	Youth who have private health insurance		Youth who have neither private nor public health insurance	
Disability group	2012	2003	2012	2003
Youth ages 15 to 17	**51**	**67*✓**	**8**	**8**
Autism	71	77	2!	2!
Deaf-blindness	58	56	‡	4!
Emotional disturbance	42	62*✓	6	8!
Hearing impairment	45	62*✓	7	6
Intellectual disability	30	49*✓	6	10
Multiple disabilities	50	59	3!	5
Orthopedic impairment	52	61	5!	7!
Other health impairment	56	74*✓	5	4
Specific learning disability	52	71*✓	10	8
Speech or language impairment	58	71*✓	9	6!
Traumatic brain injury	54	72*✓	‡	3!
Visual impairment	53	63	7!	5!

* = $p < .05$ for comparison with 2012 estimate; ✓= comparison is statistically significant and at least 5 percentage points in magnitude; ! = estimate is unstable because the standard error represents 30 to 50 percent of the estimate; ‡ = reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents were asked if the youth was currently enrolled in private health insurance and whether the youth was currently enrolled in government-assisted or public health insurance.

Source: National Longitudinal Transition Study 2012; National Longitudinal Transition Study 2. The universe is youth who live with parents at least some of the time, who do not live alone, with a spouse or roommate, or in military housing, and are younger than 18. More information is provided in appendix B, tables B-7, B-8, and B-9.

The gender, racial, and ethnic makeup of youth with an IEP has mostly been stable

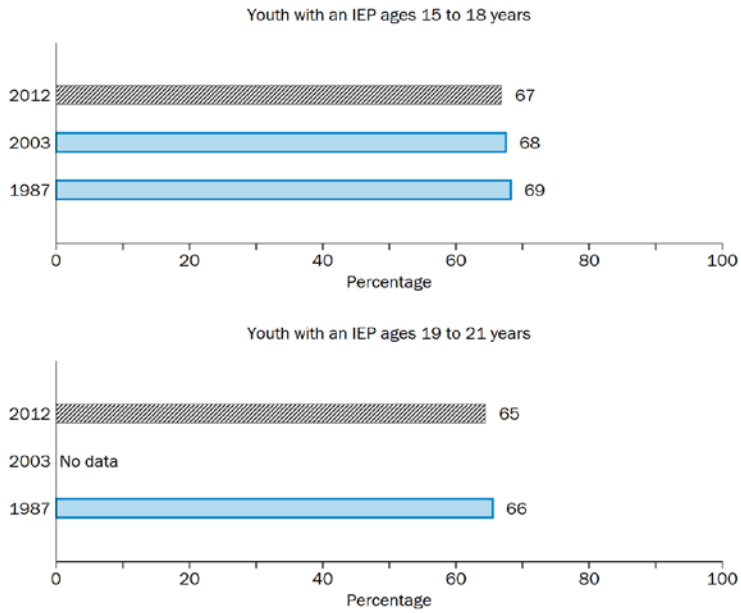
Ensuring appropriate access to special education has been a longstanding goal among policymakers and educators, in part to help address outcome disparities by gender, race, and ethnicity for students in general. Over the last several decades, boys have fallen behind girls in terms of academic achievement and attainment (Freeman, 2004). And although the achievement gap between students from different racial or ethnic groups has closed somewhat, gaps remain for Black students (Bohrnstedt, Kitmitto, Ogut, Sherman, & Chan, 2015) and Hispanic students (Hemphill & Vanneman, 2011). Prior research using the National Household Education Surveys in 2003 and 2012 indicates that the composition of youth in public schools has changed over the last decade. Although youth are just as likely to be male (51 and 52 percent, respectively), they are less likely to be White (62 to 52 percent) and more likely to be Hispanic (16 to 23 percent) (Vaden-Kiernan & McManus, 2005; Noel, Stark, & Redford, 2015). Furthermore, longstanding concerns remain about whether males and minority students are

[15] For both NLTS 2012 and NLTS2, only youth who did not have private health insurance coverage were asked about their coverage by public or government health insurance. The data in both studies were collected before the first open enrollment period in fall 2013 for health insurance through marketplaces established by the Affordable Care Act.

being identified appropriately for special education and whether these or other groups of students are being over- or under-identified (Coutinho & Oswald, 2005; Harry & Klingner, 2014; Morgan et al., 2015).

- **About two-thirds of youth with an IEP overall are male, and this proportion has held steady over the past 25 years** (figure 1 and table 6; see table B-10 for more detail). The proportions of all youth with an IEP who are male were similar across the decades for both younger youth and older youth. Among younger youth, there were three exceptions: youth with other health impairments, specific learning disabilities, and speech or language impairments. Specifically, the share of younger males rose from 1987 to 2012 for youth with other health impairments (from 54 to 73 percent) and speech or language impairments (from 57 to 66 percent) and fell for youth with specific learning disabilities (from 72 to 65 percent).

Figure 1. Percentages of youth with an IEP who are male, by year and age group



* = $p < .05$ for comparison with 2012 estimate; ✓= comparison is statistically significant and at least 5 percentage points in magnitude.

Exhibit reads: The bar graphs compare youth with an IEP in 2012 (gray bar) to two groups. The key comparison is between youth with an IEP in 2012 and those in 2003 (top blue bar). Youth with an IEP in 2012 are also compared with those in 1987 (bottom blue bar). An asterisk next to the bar indicates whether the difference with youth with an IEP in 2012 is statistically significant (at the .05 level), and a check mark notes a statistically significant difference of at least 5 percentage points. Data from 2003 are not available for youth with an IEP ages 19 to 21 years.

Note: Parent survey respondents were asked to confirm or correct school district information on their children's gender. Sample information was used when parent-reported data were not available.

Source: National Longitudinal Transition Study 2012; National Longitudinal Transition Study 2; National Longitudinal Transition Study. The universe is all youth. More information is provided in appendix B, table B-10.

Table 6. Percentages of youth with an IEP ages 15 to 18 who are male, by disability group and year

Disability group	2012	2003	1987
Youth ages 15 to 18	**67**	**68**	**69**
Autism	84	85	—
Deaf-blindness	69	60	61
Emotional disturbance	74	74	76
Hearing impairment	54	47	52
Intellectual disability	59	59	58
Multiple disabilities	65	63	68
Orthopedic impairment	62	55	54
Other health impairment	73	72	54*✓,^✓
Specific learning disability	65	70	72*✓
Speech or language impairment	66	58	57*✓
Traumatic brain injury	66	68	—
Visual impairment	52	54	57

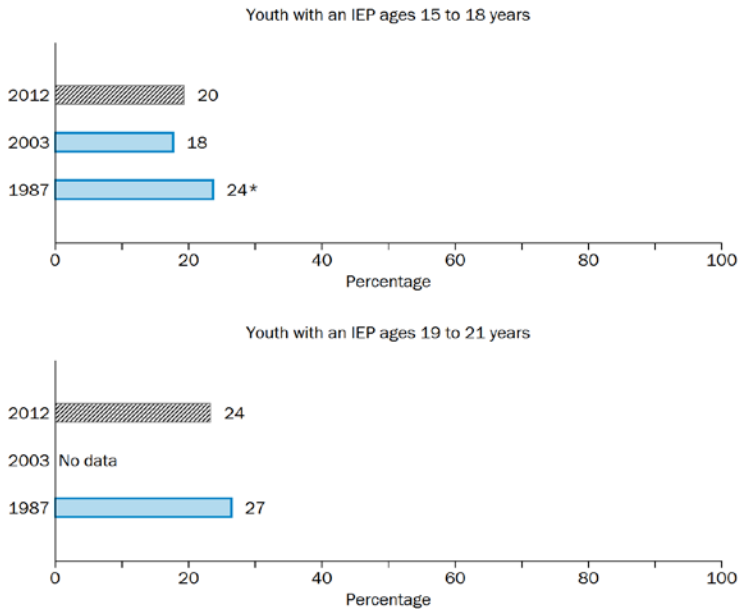
* = $p < .05$ for comparison with 2012 estimate; ^ = $p < .05$ for comparison with 2003 estimate; ✓= comparison is statistically significant and at least 5 percentage points in magnitude; — = not available.

Note: Parent survey respondents were asked to confirm or correct school district information on their children's gender. Sample information was used when parent-reported data were not available.

Source: National Longitudinal Transition Study 2012; National Longitudinal Transition Study 2; National Longitudinal Transition Study. The universe is all youth. More information is provided in appendix B, table B-10.

- **Although the proportions of youth with an IEP overall who are Black and Hispanic have mostly been stable, there have been changes among some disability groups** (figures 2 and 3 and table 7; see tables B-11 to B-13 for more detail). Over the decades, Black students represented a similar share of younger youth with an IEP (18 percent in 2003 and 20 percent in 2012) and of older youth with an IEP (27 percent in 1987 and 24 percent in 2012), according to parents. Among all students, the proportions of students who are Black have held steady as well (17 percent in 2003 and 16 percent in 2012) (Snyder et al., 2016). However, during the most recent decade (2003 to 2012), the proportion of Black students decreased among younger youth with autism (from 19 to 12 percent) and increased among those with other health impairments (from 9 to 19 percent). The proportion of youth with an IEP who are Hispanic has held steady over the most recent decade (20 and 23 percent) but, like the general population of U.S. students,[16] it increased over the past 25 years (from 9 percent in 1987 to 23 percent in 2012). This increase occurred in all disability groups except those with deaf-blindness and multiple disabilities.

Figure 2. Percentages of youth with an IEP who are Black, by year and age group



* = $p < .05$ for comparison with 2012 estimate; ✓= comparison is statistically significant and at least 5 percentage points in magnitude.

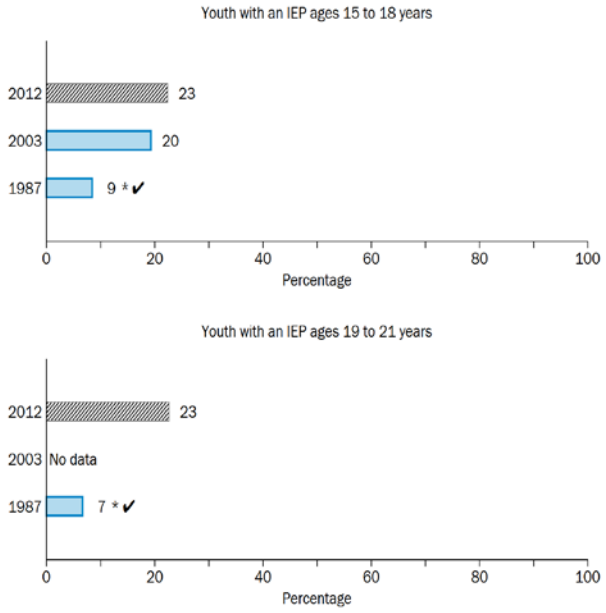
Exhibit reads: The bar graphs compare youth with an IEP in 2012 (gray bar) to two groups. The key comparison is between youth with an IEP in 2012 and those in 2003 (top blue bar). Youth with an IEP in 2012 are also compared with those in 1987 (bottom blue bar). An asterisk next to the bar indicates whether the difference with youth with an IEP in 2012 is statistically significant (at the .05 level), and a check mark notes a statistically significant difference of at least 5 percentage points. Data from 2003 are not available for youth with an IEP ages 19 to 21 years.

Note: Parent survey respondents were asked to indicate their children's race and ethnicity. Sample information was used when parent-reported data were not available. Black includes African American.

Source: National Longitudinal Transition Study 2012; National Longitudinal Transition Study 2; National Longitudinal Transition Study. The universe is all youth. More information is provided in appendix B, table B-11.

[16] Enrollment of Hispanic students grew from 10 percent of the general population in public and private elementary and secondary schools in 1987 to 18 percent in 2003 and 26 percent in 2012 (U.S. Census Bureau, 1990, 2005, 2014).

Figure 3. Percentages of youth with an IEP who are Hispanic, by year and age group



* = $p < .05$ for comparison with 2012 estimate; ✓= comparison is statistically significant and at least 5 percentage points in magnitude.

Exhibit reads: The bar graphs compare youth with an IEP in 2012 (gray bar) to two groups. The key comparison is between youth with an IEP in 2012 and those in 2003 (top blue bar). Youth with an IEP in 2012 are also compared with those in 1987 (bottom blue bar). An asterisk next to the bar indicates whether the difference with youth with an IEP in 2012 is statistically significant (at the .05 level), and a check mark notes a statistically significant difference of at least 5 percentage points. Data from 2003 are not available for youth with an IEP ages 19 to 21 years.

Note: Parent survey respondents were asked to indicate their children's race and ethnicity. Sample information was used when parent-reported data were not available. Hispanic includes Latino.

Source: National Longitudinal Transition Study 2012; National Longitudinal Transition Study 2; National Longitudinal Transition Study. The universe is all youth. More information is provided in appendix B, table B-12.

Table 7. Percentages of youth with an IEP ages 15 to 18 who are Black or Hispanic, by disability group and year

	Black (not Hispanic)			Hispanic		
Disability group	2012	2003	1987	2012	2003	1987
Youth ages 15 to 18	**20**	**18**	**24*,^✓**	**23**	**20**	**9*✓,^✓**
Autism	12	19*✓	—	15	10	—
Deaf-blindness	15!	15	14!	18!	19!	15!
Emotional disturbance	25	18	22	19	17	6*✓,^✓
Hearing impairment	13	17	21*✓	31	27	14*✓,^✓
Intellectual disability	28	32	32	19	11*✓	6*✓
Multiple disabilities	18	15	22	18	13	13
Orthopedic impairment	13	12	20^✓	26	18	15*✓
Other health impairment	19	9*✓	19^✓	16	12	26*✓,^✓
Specific learning disability	20	17	22	26	23	9*✓,^✓
Speech or language impairment	16	15	29*✓,^✓	26	21!	15*✓
Traumatic brain injury	15!	13	—	20	14	—
Visual impairment	13	15	24*✓,^✓	22	19	9*✓,^✓

* = $p < .05$ for comparison with 2012 estimate; ^ = $p < .05$ for comparison with 2003 estimate; ✓= comparison is statistically significant and at least 5 percentage points in magnitude; ! = estimate is unstable because the standard error represents 30 to 50 percent of the estimate; — = not available.

Note: Parent survey respondents were asked to indicate their children's race and ethnicity. Sample information was used when parent-reported data were not available. Black includes African American. Hispanic includes Latino.

Source: National Longitudinal Transition Study 2012; National Longitudinal Transition Study 2; National Longitudinal Transition Study. The universe is all youth. More information is provided in appendix B, tables B-11, B-12, and B-13.

Over the past decade, 4 percent of youth with an IEP have attended schools only for students with disabilities

Over the past few decades, interest and legislative support have grown for including youth with disabilities in educational settings with other students. From the enactment of IDEA in 1975, schools have been required to place youth with an IEP in the "least restrictive environment" that enables them to receive a free and appropriate education. Since then, amendments to the law have emphasized the importance of ensuring that students with disabilities are involved with, and can make progress in, the general education curriculum. Research suggests that youth with disabilities who are educated in an inclusive setting are more likely to enroll and persist in postsecondary education (Rojewski, Lee, & Gregg, 2015). However, when students' needs cannot be met in a regular public school, parents and district staff can decide that they are better served through schools for students with disabilities only.

As reported by parents, the proportion of all youth with an IEP who attend schools exclusively for students with disabilities remained at 4 percent over the past decade (table 8; see table B-14 for more detail). Youth with visual impairments were less likely attend such schools, the proportion decreasing from 18 percent in 2003 to 7 percent in 2012. This disability group represented less than 1 percent of youth with an IEP in 2012.

Table 8. Percentages of youth with an IEP ages 15 to 18 who attend a school that serves only students with disabilities, by disability group and year

Disability group	2012	2003
Youth ages 15 to 18	**4**	**4**
Autism	10	14
Deaf-blindness	25!	41
Emotional disturbance	8	10
Hearing impairment	10	17
Intellectual disability	5	5!
Multiple disabilities	17	16
Orthopedic impairment	3!	5!
Other health impairment	2!	1!
Specific learning disability	1!	‡
Speech or language impairment	‡	‡
Traumatic brain injury	6!	9!
Visual impairment	7!	18*✓

* = $p < .05$ for comparison with 2012 estimate; ✓= comparison is statistically significant and at least 5 percentage points in magnitude; ! = estimate is unstable because the standard error represents 30 to 50 percent of the estimate; ‡ = reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents were asked what type of school their children currently attend.

Source: National Longitudinal Transition Study 2012; National Longitudinal Transition Study 2. The universe is all youth. More information is provided in appendix B, table B-14.

Chapter 3. Are the challenges youth face with health, functional abilities, and independent living different than in the past?

The extent to which students are healthy, able to communicate with others, and becoming independent can have important implications for their development and future success (Carter, Austin, & Trainor, 2012; Currie, Stabile, Manivong, & Roos, 2010; Forrest, Bevans, Riley, Crespo, & Louis, 2011; Smith, 2009). Congress added a requirement to the Individuals with Disabilities Education Act (IDEA) in 2004 that individualized educational programs (IEPs) include services designed to improve students' functional and not just academic performance. Functional performance is understood to be nonacademic and related to successful day-to-day life and future independence (U.S. Department of Education, 2006). How students' health, functional abilities, and independence have changed is one indicator of whether IDEA's goal of preparing students with disabilities for the future is being more fully fulfilled.

Key findings in chapter 3

- **Most youth with an IEP continue to be healthy, but the use of prescription behavioral medicines has climbed over the past decade.** Nearly three-quarters of all youth with an IEP in both 2003 and 2012 (72 and 71 percent, respectively) had very good or excellent health according to parents. However, parent responses also indicated that youths' use of behavioral medicines increased by half over the same period, from 17 to 26 percent. Two factors appear to have contributed to this growth: (1) an increase in the proportion of youth who use these medicines among those with intellectual disability; and (2) growth in the number of youth with autism and with other health impairments, two disability groups that in the past decade included many youth who used behavioral medicines (Frazier et al., 2011).
- **Youth with an IEP are more likely than in the previous decade to have trouble understanding others.** The proportion of youth with an IEP who, according to their parents, had trouble understanding what other people say to them grew by more than 10 percentage points, from 29 to 41 percent. However, there was no change in the proportion having trouble communicating using any method including sign language or oral speech, with about one-quarter of youth (26 percent) having had some trouble in both 2003 and 2012. Youth with autism were the only group to have experienced progress with both communicating with and understanding others.
- **Youth with an IEP are just as likely as those in the previous decade to perform typical teenage tasks independently but less likely to be gaining personal finance experience.** Youth with an IEP overall and in most disability groups were as likely in 2012 as in 2003 to perform five activities of daily living, according to parents, such as fixing meals and getting to places outside the home. Youth with emotional disturbance were the only disability group to show an increase in performing all five activities without help (from 5 to 12 percent). However, proportionally fewer youth with an IEP reported having money they could decide how to spend, declining from 79 percent in 2003 to 62 percent in 2012. Half of the disability groups experienced a similar downward trend, and no group in 2012 reported being more likely than youth in 2003 to have a bank account.

Detailed tables supporting the findings presented in this chapter are available in appendix C.

Most youth with an IEP continue to be healthy, but the use of prescription behavioral medicines has climbed over the past decade

Health and medical conditions can be important factors in students' academic progress and post-high school transitions (Forrest et al., 2011; Currie et al., 2010). Overall, youth with an IEP are more likely than their peers to have poorer health (see Volume 1). Among them, health status is a particular concern for those with intellectual disability, multiple disabilities, and orthopedic impairments (see Volume 2). Policymakers and educators have become interested in the growing use of prescription behavioral medicines (Angold, Erkanli, Egger, & Costello, 2000)—typically among those with emotional disorders, behavioral disorders, and ADHD—and what happens when youth either do not take or rely excessively on them (Mattison, Rundberg-Rivera, & Michel, 2014; Setlik, Bond, & Ho, 2009; Wilens et al., 2008).[17]

- **The proportion of youth with an IEP who have very good or excellent health has been stable during the past decade, and it increased among those with deaf-blindness** (table 9; see table C-1 for more detail). In both 2003 and 2012, nearly three-quarters of all youth with an IEP had very good or excellent general health, according to their parents (72 and 71 percent, respectively). This consistency across years is evident in all disability groups except for youth with deaf-blindness (who make up less than 1 percent of all youth with an IEP), where the proportion who have at least very good health rose from 55 percent in 2003 to 74 percent in 2012.

Table 9. Percentages of youth with an IEP ages 15 to 18 who have very good or excellent health, by disability group and year

Disability group	2012	2003
Youth ages 15 to 18	**71**	**72**
Autism	74	77
Deaf-blindness	74	55*✓
Emotional disturbance	69	63
Hearing impairment	67	73
Intellectual disability	56	61
Multiple disabilities	58	58
Orthopedic impairment	58	65
Other health impairment	72	68
Specific learning disability	75	76
Speech or language impairment	81	77
Traumatic brain injury	68	62
Visual impairment	70	61

* = $p < .05$ for comparison with 2012 estimate; ✓= comparison is statistically significant and at least 5 percentage points in magnitude.

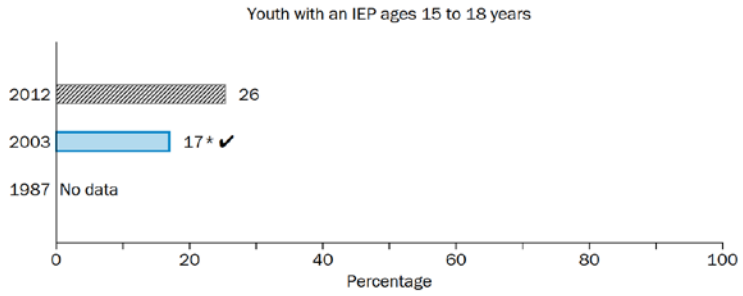
Note: Parent survey respondents were asked to rate their children's general health as excellent, very good, good, fair, or poor.

Source: National Longitudinal Transition Study 2012; National Longitudinal Transition Study 2. The universe is all youth. More information is provided in appendix C, table C-1.

[17] Visser et al. (2014) found that parent-reported ADHD diagnoses by a health care provider among children ages 4 through 17 increased from 7.6 to 11.0 percent from 2003 to 2011. They also reported that the proportion of children taking medication for ADHD increased during this period from 4.8 to 6.1 percent.

- **Use of behavioral medicines among youth with an IEP increased by 50 percent over the past decade** (figure 4 and table 10; see table C-2 for more detail). As reported by parents, the proportion of youth with an IEP using prescription medicine to control their attention, behavior, activity level, or changes in mood rose 9 percentage points, from 17 percent in 2003 to 26 percent in 2012. Two factors appear to have contributed to this trend. The first factor is the close to 50 percent increase in the use of these medications among those with intellectual disabilities (from 18 percent in 2003 to 26 percent in 2012). The second factor is the substantial growth in the number of youth in two disability groups that, in the previous decade, included many youth who used behavioral medicines: autism and other health impairments (including ADHD, see chapter 1) (Frazier et al., 2011).

Figure 4. Percentages of youth with an IEP ages 15 to 18 who use prescription behavioral medicine, by year



* = $p < .05$ for comparison with 2012 estimate; ✓= comparison is statistically significant and at least 5 percentage points in magnitude.

Exhibit reads: The bar graph compares youth with an IEP in 2012 (gray bar) to those in 2003 (blue bar). An asterisk next to the bar indicates whether the difference with youth with an IEP in 2012 is statistically significant (at the .05 level), and a check mark notes a statistically significant difference of at least 5 percentage points. Data from 1987 are not available.

Note: Parent survey respondents were asked whether their children are taking any prescription medicine to control their attention, behavior, activity level, or changes in mood, such as Ritalin or an antidepressant.

Source: National Longitudinal Transition Study 2012; National Longitudinal Transition Study 2. The universe is all youth. More information is provided in appendix C, table C-2.

Table 10. Percentages of youth with an IEP ages 15 to 18 who use prescription behavioral medicine, by disability group and year

Disability group	2012	2003
Youth ages 15 to 18	**26**	**17*✓**
Autism	44	44
Deaf-blindness	16!	19
Emotional disturbance	47	39
Hearing impairment	14	8
Intellectual disability	26	18*✓
Multiple disabilities	34	28
Orthopedic impairment	21	19
Other health impairment	46	44
Specific learning disability	15	11
Speech or language impairment	10	13
Traumatic brain injury	38	28
Visual impairment	11	18

* = $p < .05$ for comparison with 2012 estimate; ✓= comparison is statistically significant and at least 5 percentage points in magnitude; ! = estimate is unstable because the standard error represents 30 to 50 percent of the estimate.

Note: Parent survey respondents were asked whether their children are taking any prescription medicine to control their attention, behavior, activity level, or changes in mood, such as Ritalin or an antidepressant.

Source: National Longitudinal Transition Study 2012; National Longitudinal Transition Study 2. The universe is all youth. More information is provided in appendix C, table C-2.

Youth with an IEP are more likely than in the previous decade to have trouble understanding others

Functional limitations, such as those relating to communication, sensory, and motor abilities, can make it more challenging for youth to engage in educational activities, obtain employment, and live independently (Wagner, Newman, Cameto, Garza & Levine, 2005). During the past decade, new assistive technologies and other advances such as computer applications were developed to mitigate some of these limitations (Blum, 2005; Chantry & Dunford, 2010). However, the rapid growth in autism, a social and communicative disorder, may have also increased the prevalence of functional challenges among students with disabilities overall (Adreon & Durocher, 2007; Happé, Booth, Charlton, & Hughes, 2006). In addition, growing emphasis on academic accountability for all students, such as occurred under the 2001 No Child Left Behind Act, could both reflect and contribute to rising expectations about what youth should be able to understand.

- **Although the proportion of youth with an IEP who have trouble communicating has changed little overall during the past decade, four groups—including youth with autism—show progress in these functional abilities** (table 11; see table C-3 for more detail). In both 2003 and 2012, 26 percent of youth with an IEP were reported by their parents as having trouble communicating by any means, including sign language, manual communication, lip reading, cued speech, oral speech, and a communication board or book. However, these communication challenges became less common among youth with autism, other health impairments, speech or language impairments, or visual impairments; together, these four groups make up 15 percent of youth with an IEP.

Table 11. Percentages of youth with an IEP ages 15 to 18 who have trouble communicating, by disability group and year

Disability group	2012	2003
Youth ages 15 to 18	**26**	**26**
Autism	52	64*✓
Deaf-blindness	70	67
Emotional disturbance	17	15
Hearing impairment	48	55
Intellectual disability	54	52
Multiple disabilities	62	62
Orthopedic impairment	39	42
Other health impairment	19	26*✓
Specific learning disability	18	20
Speech or language impairment	33	43*✓
Traumatic brain injury	43	39
Visual impairment	11	25*✓

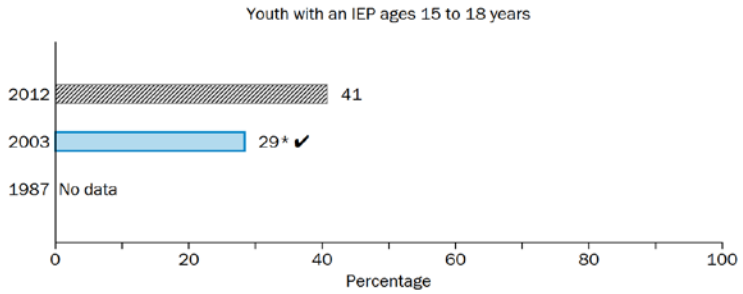
* = $p < .05$ for comparison with 2012 estimate; ✓= comparison is statistically significant and at least 5 percentage points in magnitude.

Note: Parent survey respondents were asked how well their children communicate by any means. Means of communication include sign language, manual communication, lip reading, cued speech, oral speech, and a communication board or book. Trouble refers to parents' responses of a little trouble, a lot of trouble, or no ability, versus a response of no trouble.

Source: National Longitudinal Transition Study 2012; National Longitudinal Transition Study 2. The universe is all youth. More information is provided in appendix C, table C-3.

- **Larger shares of youth with an IEP are having trouble understanding others now than in the past, both overall and in six disability groups** (figure 5 and table 12; see table C-4 for more detail). The percentage of all youth with an IEP having trouble understanding what others say to them, according to parents, rose from 29 to 41 percent between 2003 and 2012. According to parents, youth in six disability groups that made up 83 percent of all youth with an IEP in 2012—deaf-blindness, hearing impairment, intellectual disability, other health impairment, specific learning disability, and traumatic brain injury—were more likely than those in 2003 to have trouble understanding others. In contrast, youth with autism were the only group to experience progress in both communicating with and understanding others.

Figure 5. Percentages of youth with an IEP ages 15 to 18 who have trouble understanding what other people say to them, by year



* = $p < .05$ for comparison with 2012 estimate; ✓= comparison is statistically significant and at least 5 percentage points in magnitude.

Exhibit reads: The bar graph compares youth with an IEP in 2012 (gray bar) to those in 2003 (blue bar). An asterisk next to the bar indicates whether the difference with youth with an IEP in 2012 is statistically significant (at the .05 level), and a check mark notes a statistically significant difference of at least 5 percentage points. Data from 1987 are not available.

Note: Parent survey respondents were asked how well their children understand what other people say to them. Trouble refers to parents' responses of a little trouble, a lot of trouble, or no ability, versus a response of no trouble.

Source: National Longitudinal Transition Study 2012; National Longitudinal Transition Study 2. The universe is all youth. More information is provided in appendix C, table C-4.

Table 12. Percentages of youth with an IEP ages 15 to 18 who have trouble understanding what other people say to them, by disability group and year

Disability group	2012	2003
Youth ages 15 to 18	**41**	**29*✓**
Autism	70	78*✓
Deaf-blindness	85	65*✓
Emotional disturbance	41	35
Hearing impairment	72	55*✓
Intellectual disability	67	49*✓
Multiple disabilities	57	60
Orthopedic impairment	28	31
Other health impairment	43	31*✓
Specific learning disability	31	21*✓
Speech or language impairment	37	32
Traumatic brain injury	51	32*✓
Visual impairment	16	22

* = $p < .05$ for comparison with 2012 estimate; ✓= comparison is statistically significant and at least 5 percentage points in magnitude.

Note: Parent survey respondents were asked how well their children understand what other people say to them. Trouble refers to parents' responses of a little trouble, a lot of trouble, or no ability, versus a response of no trouble.

Source: National Longitudinal Transition Study 2012; National Longitudinal Transition Study 2. The universe is all youth. More information is provided in appendix C, table C-4.

Youth with an IEP are just as likely as those in the previous decade to perform typical teenage tasks independently, but less likely to be gaining personal finance experience

The ability to function independently at home and in the community may signal the extent to which youth are likely to need help from others in carrying out basic tasks in the future. Typical teenage "activities of daily living" can include fixing meals, doing laundry, straightening up living areas, shopping, and getting to nearby places. In addition, other activities such as opening bank accounts and managing money provide experiences that will be useful for establishing financial independence. A key goal of IDEA is to help youth develop the capacity to live as independently as possible. Most notably, IDEA 2004 added a requirement that IEPs include services designed to improve functional as well as academic performance, as a way to facilitate independence after high school.

- **Although overall the ability of youth with an IEP to perform daily tasks on their own has not changed, youth with autism, deaf-blindness, emotional disturbance, and specific learning disabilities have made progress** (tables 13 and 14; see tables C-5 to C-10 for more detail). Parents reported that youth with an IEP overall (ages 15 to 16) and in most disability groups in 2012 were as likely as those in 2003 to perform each of five activities of daily living usually or pretty well, according to parents. However, in 2012 a higher proportion of youth performed at least one of these activities among those with autism, deaf-blindness, emotional disturbance, or specific learning disabilities. Among these groups, only youth with emotional disturbance showed gains in performing all five activities of daily living without help, from 5 to 12 percent. This disability group represented 9 percent of all youth with an IEP in 2012.

Table 13. Percentages of youth with an IEP ages 15 to 16 who complete activities of daily living without help at least pretty well or usually, by disability group and year

	Fixes own breakfast or lunch		Does laundry		Straightens up own room or living area		Buys a few items they need		Gets to places outside the home	
Disability group	2012	2003	2012	2003	2012	2003	2012	2003	2012	2003
Youth ages 15 to 16	**56**	**53**	**34**	**31**	**50**	**47**	**43**	**42**	**87**	**91***
Autism	44	40	15	9	40	38	21	15	59	47*✓
Deaf-blindness	48	42	39!	12!	71	48	21!	24	79	42*✓
Emotional disturbance	53	55	28	16*✓	37	29	41	30	92	95
Hearing impairment	57	63	39	45	60	53	41	54	91	90
Intellectual disability	41	45	22	19	45	48	28	31	65	72
Multiple disabilities	28	30	18	19	36	26	26	27	52	55
Orthopedic impairment	24	39	13!	17	28	27	27	32	61	60
Other health impairment	54	61	30	30	42	34	42	38	90	90
Specific learning disability	64	53*✓	40	36	58	51	50	47	94	95
Speech or language impairment	59	64	38	38	59	57	49	51	92	94
Traumatic brain injury	53	54	13!	24	37	36	28	25	87	85
Visual impairment	47	47	27	19	55	39	40	30	61	60

* = $p < .05$ for comparison with 2012 estimate; ✓= comparison is statistically significant and at least 5 percentage points in magnitude; !=estimate is unstable because the standard error represents 30 to 50 percent of the estimate.

Note: Parent survey respondents were asked to indicate the youth's ability to perform the activity without help. Possible ratings for the first measure are very well, pretty well, not very well, not at all well, and not allowed. Possible ratings for the last four measures are always, usually, sometimes, or never.

Source: National Longitudinal Transition Study 2012; National Longitudinal Transition Study 2. The universe is youth who live with parents at least some of the time and are younger than age 17. More information is provided in appendix C, tables C-5, C-6, C-7, C-8, and C-9.

Table 14. Percentages of youth with an IEP ages 15 to 16 who perform all five activities of daily living pretty well or usually, by disability group and year

Disability group	2012	2003
Youth ages 15 to 16	**16**	**12**
Autism	5	2!
Deaf-blindness	‡	‡
Emotional disturbance	12	5*✓
Hearing impairment	19	19
Intellectual disability	11	10!
Multiple disabilities	6!	4!
Orthopedic impairment	8!	4!
Other health impairment	12	9!
Specific learning disability	20	13
Speech or language impairment	20	22
Traumatic brain injury	‡	‡
Visual impairment	6!	5!

* = $p < .05$ for comparison with 2012 estimate; ✓= comparison is statistically significant and at least 5 percentage points in magnitude; ! = estimate is unstable because the standard error represents 30 to 50 percent of the estimate; ‡ = reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents were asked to indicate the youth's ability to perform five activities of daily living without help: fixing breakfast or lunch, doing laundry, straightening up their living area, buying things they need at the store, and getting to places outside the home. Possible ratings for the first measure are very well, pretty well, not very well, not at all well, and not allowed. Possible ratings for the last four measures are always, usually, sometimes, or never.

Source: National Longitudinal Transition Study 2012; National Longitudinal Transition Study 2. The universe is youth who live with parents at least some of the time and are younger than age 17. More information is provided in appendix C, table C-10.

- **Youth with an IEP overall and in six disability groups are less likely than those in the previous decade to decide how to spend money, and some of these groups are also less likely to have a bank account** (table 15; see tables C-11 to C-12 for more detail). Overall, the proportion of youth who reported having an allowance or money from a job that they could decide how to spend declined by 17 percentage points between 2003 and 2012 (from 79 to 62 percent). Youth in six disability groups experienced this downward trend: hearing impairment, multiple disabilities, orthopedic impairment, other health impairment, specific learning disability, and traumatic brain injury. Youth in three of these groups—orthopedic impairment, other health impairments, and traumatic brain injury—were also less likely to have a bank account. The decline in youths' engagement with personal finance may be related to a reduction in their paid employment during the decade (chapter 6), to their parents' greater economic challenges (chapter 3), or to other factors.

Table 15. Percentages of youth with an IEP ages 15 to 18 who are gaining experience managing money, by disability group and year

	Has money to spend, such as from an allowance or job		Has a checking or savings account	
Disability group	2012	2003	2012	2003
Youth ages 15 to 18	**62**	**79*✓**	**46**	**52**
Autism	62	73	51	65
Deaf-blindness	50	70	36	53
Emotional disturbance	61	70	42	42
Hearing impairment	62	76*✓	50	59
Intellectual disability	60	69	36	46
Multiple disabilities	54	76*✓	39	51
Orthopedic impairment	58	73*✓	46	62*✓
Other health impairment	64	78*✓	51	64*✓
Specific learning disability	63	84*✓	46	54
Speech or language impairment	63	70	53	49
Traumatic brain injury	65	82*✓	49	70*✓
Visual impairment	67	75	52	59

* = $p < .05$ for comparison with 2012 estimate; ✓= comparison is statistically significant and at least 5 percentage points in magnitude.

Note: Youth survey respondents were asked whether they have a savings or checking account, and whether they have an allowance or other money they can decide how to spend.

Source: National Longitudinal Transition Study 2012; National Longitudinal Transition Study 2. The universe is all youth. More information is provided in appendix C, tables C-11 and C-12.

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Chapter 4. Are youth engaging in school in different ways or to different degrees?

Students' engagement at school is a crucial component of youth development that may have important academic benefits (Anderson, Christenson, Sinclair, & Lehr, 2004; Sinclair, Christenson, & Thurlow, 2005; Juvonen, Espinoza, & Knifsend, 2012; Wang & Eccles, 2012b). Positive interactions with peers and adults at school, participating in class and extracurricular activities, and completing school work are all dimensions of engagement. Conversely, suspensions, expulsions, and arrests are indicators of disengagement. Research has found that school engagement is positively associated with academic performance, whereas disengagement is negatively associated with these outcomes (Finn, 1989; Noltemeyer et al., 2015; Wang & Fredricks, 2014).

Key findings in chapter 4

- **Youth with an IEP increasingly feel connected to school, but there is little change in a particular form of bullying.** Overall and in nearly all disability groups, the proportion of youth with an IEP who agreed "a lot" that they are part of their school rose by more than 20 percentage points, from 31 to 52 percent. The vast majority of youth with an IEP also continued to feel that school is a safe place (93 percent in 2003 and 89 percent in 2012). Similar proportions of youth with an IEP reported being teased or called names at school during the school year as well (37 percent in 2003 and 31 percent in 2012). However, four disability groups were less likely to report being teased—those with emotional disturbance, multiple disabilities, speech or language impairments, or traumatic brain injuries.
- **Participation in extracurricular activities is growing among youth with an IEP, primarily in clubs rather than sports.** Overall, 61 percent of youth with an IEP in 2003 were involved in a school or out-of-school club or sports team within the past year, compared with 74 percent in 2012. Their participation rates climbed during this period in both school-sponsored activities (from 48 to 62 percent) and out-of-school activities (from 38 to 54 percent). Most of the growth in these school and out-of-school activities was in clubs rather than sports teams, especially clubs focused on volunteering (from 2 to 29 percent), fine arts (from 10 to 26 percent), and academics (from 1 to 9 percent).
- **The incidence of grade retention, suspension, and expulsion among youth with an IEP has remained stable during the past decade.** Across the disability groups, few changes occurred between 2003 and 2012 in the proportions of youth who ever repeated a grade or were suspended or expelled, according to parents. About 1 in 3 youth had repeated a grade (35 and 37 percent, respectively), and the same proportion had been suspended (34 and 32 percent, respectively) in each year. Less than 1 in 10 youth had ever been expelled from school (7 and 9 percent, respectively in 2003 and 2012). Suspension rates have fallen for youth with intellectual disability (from 38 to 25 percent) and visual impairments (from 14 to 5 percent).

Public interest in student engagement has grown, particularly over the past decade. Concerns about bullying and violence have led schools to renew their focus on promoting a safe environment (Cornell & Mayer, 2010). Educators have also begun to reconsider disciplinary policies in light of how suspensions can negatively affect students and how much more common suspensions and expulsions are among youth with an individualized education program (IEP) than among their peers (Sullivan, Van Norman, & Klingbeil, 2014; Zablocki & Krezmien, 2013; see Volume 1). The Individuals with Disabilities Education Act (IDEA) 2004 gives school personnel new authority to apply discipline policies on a case-by-case basis, out of concern that suspensions and expulsions may not always be appropriate and can lead youth to remain out of school for substantial periods of time. IDEA 2004 also aims to ensure that students with disabilities have equal opportunities to participate in

academic and nonacademic activities, including sports and clubs. Trends in student engagement and disengagement can provide some indication of the extent of progress in achieving positive educational objectives.

Detailed tables supporting the findings presented in this chapter are available in appendix D.

Youth with an IEP increasingly feel connected to school, but there is little change in teasing

Feeling good about school can both reflect and contribute to students' engagement in the learning process. Research has linked positive attitudes toward school with better academic performance and stronger ties to classmates (Bond et al., 2007; Sinclair et al., 2005). Feeling unsafe at school, in contrast, might be a source of stress and anxiety that inhibits academic performance or social development.

Concerns about school safety, particularly about bullying, have contributed to an increase in the number of states passing bullying-prevention legislation during the past decade (National Center for Mental Health Promotion and Youth Violence Prevention, 2011). Federal policymakers also have sought to address this problem and have focused particularly on reducing bullying experienced by students with disabilities. For example, the U.S. Department of Education notified school districts that bullying can deny youth with an IEP their rights under IDEA (U.S. Department of Education, 2013). National data indicate that reports of bullying declined from 28 percent of all adolescents in 2005 to 22 percent in 2013 (U.S. Department of Education, National Center for Education Statistics, 2014), perhaps reflecting the success of some efforts to address this problem, or simply a change in the extent to which bullying is reported. Even if this decline for all students represents a real trend, questions remain about whether bullying experiences have declined specifically among youth with an IEP and, more broadly, how their perceptions of the school environment have changed.

- **The proportion of youth with an IEP reporting a positive connection with school grew by two-thirds over the past decade** (table 16; see tables D-1 to D-2 for more detail). Overall, the percentage of youth with an IEP who agreed "a lot" that they felt a part of their school increased by 21 percentage points, from 31 percent in 2003 to 52 percent in 2012.[18] Nearly all of the disability groups were more likely in 2012 than in 2003 to feel part of the school, except for those with deaf-blindness, emotional disturbance, or hearing impairments, for whom there was no change. In addition, about 9 in 10 youth with an IEP reported agreeing at least a little that an adult at school cares about them, both in 2003 and 2012. However, the proportion increased in five disability groups—emotional disturbance, multiple disabilities, speech or language impairments, traumatic brain injuries, and visual impairments—which represent 16 percent of all youth with an IEP.

[18] The construction of the youth who agree that they feel a part of their school is based on those who agreed "a lot" due to comparability concerns between the NLTS 2012 and NLTS2.

Table 16. Percentages of youth with an IEP ages 15 to 18 with positive views about their school experience, by disability group and year

	Agree a lot that they are part of the school		Agree that a school adult cares about them	
Disability group	2012	2003	2012	2003
Youth ages 15 to 18	**52**	**31*✓**	**91**	**86***
Autism	53	25*✓	97	94
Deaf-blindness	65	45	85	97
Emotional disturbance	41	32	92	83*✓
Hearing impairment	51	38	93	86
Intellectual disability	58	39*✓	88	83
Multiple disabilities	68	41*✓	93	76*✓
Orthopedic impairment	71	47*✓	95	87
Other health impairment	57	31*✓	92	89
Specific learning disability	51	29*✓	89	87
Speech or language impairment	53	24*✓	91	77*✓
Traumatic brain injury	56	22*✓	97	86*✓
Visual impairment	64	44*✓	97	89*✓

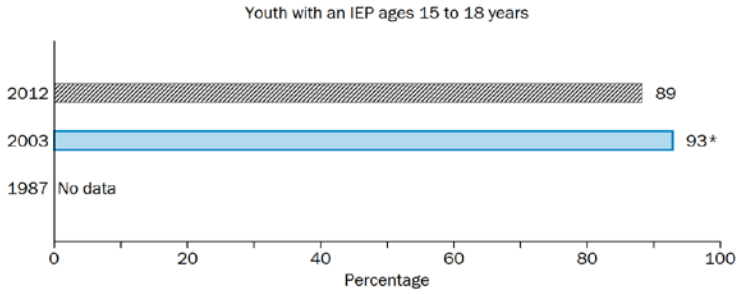
*= $p < .05$ for comparison with 2012 estimate; ✓= comparison is statistically significant and at least 5 percentage points in magnitude.

Note: Youth survey respondents, excluding proxies, were asked how strongly they agree or disagree that they are part of the school and that a school adult cares about them. The response categories were agree a lot, agree a little, disagree a little, and disagree a lot. Positive views for the first measure are responses of agree a lot, and positive views for the second measure are agree a lot or agree a little.

Source: National Longitudinal Transition Study 2012; National Longitudinal Transition Study 2. The universe is youth who are not homeschooled. More information is provided in appendix D, tables D-1 and D-2.

- **Youth with an IEP overall are as likely to feel safe at school as in the past decade, though some groups feel less safe** (figure 6 and table 17; see tables D-3 to D-4 for more detail). Overall, about 9 in 10 youth with an IEP in both 2003 and 2012 reported feeling safe at school. However, the proportion who felt safe at school declined among two groups: those with other health impairments and those with specific learning disabilities (from 94 to 87 percent and 94 to 89 percent, respectively). Together, these two groups comprise two-thirds of all youth with an IEP. The proportion of youth who reported having things taken from them at school was similar over the decade (26 percent in 2003 and 21 percent in 2012). Two exceptions are youth with multiple disabilities, who reported a reduction in theft (from 32 to 14 percent), and youth with orthopedic impairments (from 7 to 20 percent), who reported an increase. These groups make up only 4 percent of all youth with an IEP.

Figure 6. Percentages of youth with an IEP ages 15 to 18 who agree that they feel safe at school, by year



* = $p < .05$ for comparison with 2012 estimate; ✓= comparison is statistically significant and at least 5 percentage points in magnitude.

Exhibit reads: The bar graph compares youth with an IEP in 2012 (gray bar) to those in 2003 (blue bar). An asterisk next to the bar indicates whether the difference with youth with an IEP in 2012 is statistically significant (at the .05 level), and a check mark notes a statistically significant difference of at least 5 percentage points. Data from 1987 are not available.

Note: Youth survey respondents, excluding proxies, were asked how strongly they agree or disagree with feeling safe in school. The response categories were agree a lot, agree a little, disagree a little, and disagree a lot. Positive views are responses of agree a lot or agree a little.

Source: National Longitudinal Transition Study 2012; and National Longitudinal Transition Study 2. The universe is youth who are not homeschooled. More information is provided in appendix D, table D-3.

Table 17. Percentages of youth with an IEP ages 15 to 18 with positive views about school safety, by disability group and year

	Feel safe in school		Had items stolen from my locker, desk, or other place at school	
Disability group	2012	2003	2012	2003
Youth ages 15 to 18	**89**	**93***	**21**	**26**
Autism	92	95	14	11
Deaf-blindness	100	98	‡	21!
Emotional disturbance	85	90	28	36
Hearing impairment	85	87	27	32
Intellectual disability	89	92	24	25
Multiple disabilities	90	81	14	32*✓
Orthopedic impairment	92	94	20!	7*✓
Other health impairment	87	94*✓	28	26
Specific learning disability	89	94*✓	19	25
Speech or language impairment	91	93	22	24
Traumatic brain injury	92	94	25	16!
Visual impairment	95	98	13	17

* = $p < .05$ for comparison with 2012 estimate; ✓= comparison is statistically significant and at least 5 percentage points in magnitude; ! = estimate is unstable because the standard error represents 30 to 50 percent of the estimate; ‡ = reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Youth survey respondents, excluding proxies, were asked how strongly they agree or disagree with feeling safe in school and whether they had items stolen from their locker, desk, or other place at school. The response categories were agree a lot, agree a little, disagree a little, and disagree a lot. Positive views are responses of agree a lot or agree a little.

Source: National Longitudinal Transition Study 2012; National Longitudinal Transition Study 2. The universe is youth who are not homeschooled. More information is provided in appendix D, tables D-3 and D-4.

- **About one-third of youth with an IEP report one form of bullying—having been teased or called names at school—both now and a decade ago** (table 18; see table D-5 for more detail). Overall, about one-third of

youth with an IEP reported being teased at school in 2003 and 2012 (37 and 31 percent, respectively). However, there was a decline among four disability groups that together make up 16 percent of all youth with an IEP (youth with emotional disturbance, multiple disabilities, traumatic brain injury, or speech or language impairment). The reported declines in teasing of youth with deaf-blindness, emotional disturbance, and multiple disabilities are important to highlight because these groups were the most likely to report being teased in 2003.

Table 18. Percentages of youth with an IEP ages 15 to 18 who were teased or called names at school, by disability group and year

Disability group	2012	2003
Youth ages 15 to 18	**31**	**37**
Autism	38	46
Deaf-blindness	‡	47
Emotional disturbance	41	57*✓
Hearing impairment	36	42
Intellectual disability	41	37
Multiple disabilities	30	51*✓
Orthopedic impairment	25	36
Other health impairment	38	45
Specific learning disability	26	33
Speech or language impairment	25	37*✓
Traumatic brain injury	38	59*✓
Visual impairment	27	39

* = $p < .05$ for comparison with 2012 estimate; ✓= comparison is statistically significant and at least 5 percentage points in magnitude; ! = estimate is unstable because the standard error represents 30 to 50 percent of the estimate; ‡ = reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Youth survey respondents, excluding proxies, were asked whether they were teased or called names at school. The response categories were agree a lot, agree a little, disagree a little, and disagree a lot. Positive views are responses of agree a lot or agree a little.

Source: National Longitudinal Transition Study 2012; National Longitudinal Transition Study 2. The universe is youth who are not homeschooled. More information is provided in appendix D, tables D-5.

Participation in extracurricular activities is growing among youth with an IEP, primarily in clubs rather than sports

Participating in organized extracurricular activities is considered a way to enrich students' lives, help them build esteem and social connections, and gain admission to competitive colleges (Eime, Young, Harvey, Charity, & Payne, 2013; Swanson, 2002). These activities can include sports teams as well as clubs, such as those focused on the arts, academic subjects, volunteering or community service, and career and technical training. In addition to school-sponsored extracurricular activities, many community organizations offer similar kinds of opportunities. Studies have linked participating in these kinds of extracurricular activities with improved academic performance, educational attainment, and labor market success (Barron, Ewing, & Waddell, 2000; Lipscomb, 2007; Stevenson, 2010). Nationally, participation in sports, lessons, and clubs for the general population of youth ages 12 to 17 decreased between 2006 and 2011 (Dye & Johnson, 2009; Laughlin, 2014), underscoring the importance of examining the trends for youth with an IEP.

- **Youth with an IEP are more likely now than a decade ago to participate in extracurricular activities, organized either through or outside of school** (table 19; see tables D-6 to D-8 for more detail). Youth with an IEP overall reported that their participation in sports or clubs grew by 13 percentage points overall between 2003 and 2012 (from 61 to 74 percent). This growth in extracurricular participation reflects increases in the percentages participating in both activities that are school sponsored (from 48 to 62 percent) and that are organized out of school (from 38 to 54 percent). Increases in both school and out-of-school activities occurred among youth in four groups—those with emotional disturbance, intellectual disability, specific learning disability, or speech or language impairments.

Table 19. Percentages of youth with an IEP ages 15 to 18 who participated in a school or out-of-school sport or club in the past year, by disability group and year

	Youth who participated in a school or out-of-school club or sports team		Youth who participated in a school club or sports team		Youth who participated in an out-of-school club or sports team	
Disability group	2012	2003	2012	2003	2012	2003
Youth ages 15 to 18	**74**	**61*✓**	**62**	**48*✓**	**54**	**38*✓**
Autism	75	51*✓	59	44	58	30*✓
Deaf-blindness	75	85	73	56	38	66*✓
Emotional disturbance	72	52*✓	56	40*✓	50	26*✓
Hearing impairment	73	63	62	57	54	34*✓
Intellectual disability	71	48*✓	56	36*✓	50	30*✓
Multiple disabilities	69	68	54	54	50	41
Orthopedic impairment	71	70	60	53	52	45
Other health impairment	76	64	62	51	57	38*✓
Specific learning disability	75	64*✓	65	50*✓	52	42*✓
Speech or language impairment	79	57*✓	71	47*✓	58	35*✓
Traumatic brain injury	72	57	62	34*✓	52	39
Visual impairment	85	77	74	68	62	37*✓

* = $p < .05$ for comparison with 2012 estimate; ✓= comparison is statistically significant and at least 5 percentage points in magnitude.

Note: Youth survey respondents were asked whether they participated in any of the following school activities outside of class in the past 12 months: school sports team; music, dance, art, or theater; student government; academic subject matter club; volunteer or community service group; vocational or career-focused student organization; or other school-sponsored clubs or activities. Youth survey respondents were also asked whether they had taken part in any of the following nonschool activities in the past 12 months: organized sport supervised by an adult; music, dance, art, or theater lessons; a religious youth group or religious instruction; math, science, or computer camps or lessons, volunteer or community service group; scouting or another group or club activity; or another camp or type of nonschool activity.

Source: National Longitudinal Transition Study 2012; National Longitudinal Transition Study 2. The universe is youth who are not homeschooled. More information is provided in appendix D, tables D-6, D-7, and D-8.

- **Participation in clubs increased more than 20 percentage points, but sports involvement changed little overall** (table 20, see tables D-9 to D-10 for more detail). The proportion of youth with an IEP overall who reported being in a club organized either through or outside of school increased 23 percentage points, from 40 percent in 2003 to 63 percent in 2012. Club participation rates grew in 9 of the 12 disability groups. By contrast, about a third of youth with an IEP overall in both 2003 and 2012 reported participating in sports teams (31 and 38 percent). However, sports participation rates did increase in seven disability groups that make up 36 percent of all youth with an IEP: autism, hearing impairment, intellectual disability, orthopedic impairment, other health impairment, speech or language impairment, and traumatic brain injury. Engaging youth in all disability groups in sports has been identified by the Government Accountability Office (2010) as an ongoing challenge for schools.

Table 20. Percentages of youth with an IEP ages 15 to 18 who participated in a sport or club, by disability group and year

	Youth who participated in a club		Youth who participated in a sports team	
Disability group	2012	2003	2012	2003
Youth ages 15 to 18	**63**	**40*✓**	**38**	**31**
Autism	70	36*✓	31	8*✓
Deaf-blindness	63	58	65	37!
Emotional disturbance	61	37*✓	31	26
Hearing impairment	64	37*✓	46	28*✓
Intellectual disability	61	27*✓	35	14*✓
Multiple disabilities	58	38*✓	39	34
Orthopedic impairment	64	57	35	15*✓
Other health impairment	65	44*✓	37	25*✓
Specific learning disability	61	43*✓	41	35
Speech or language impairment	64	37*✓	51	26*✓
Traumatic brain injury	65	44*✓	34	17!*✓
Visual impairment	76	65	29	27

* = $p < .05$ for comparison with 2012 estimate; ✓= comparison is statistically significant and at least 5 percentage points in magnitude; ! = estimate is unstable because the standard error represents 30 to 50 percent of the estimate.

Note: Youth survey respondents were asked whether they participated in any of the following school activities outside of class in the past 12 months: school sports team; music, dance, art, or theater; student government; academic subject matter club; volunteer or community service group; vocational or career-focused student organization; or other school-sponsored clubs or activities. Youth survey respondents were also asked whether they had taken part in any of the following nonschool activities in the past 12 months: organized sport supervised by an adult; music, dance, art, or theater lessons; a religious youth group or religious instruction; math, science, or computer camps or lessons, volunteer or community service group; scouting or another group or club activity; or another camp or type of nonschool activity.

Source: National Longitudinal Transition Study 2012; National Longitudinal Transition Study 2. The universe is youth who are not homeschooled. More information is provided in appendix D, tables D-9 and D-10.

- **The largest growth has been in volunteering or community service clubs, followed by clubs focused on fine arts and academics** (table 21; see tables D-11 to D-17 for more detail). Combining school and out-of-school extracurricular activities, the largest growth in youth-reported participation from 2003 to 2012 has been in clubs focused on volunteering (2 versus 29 percent). In addition, youth with an IEP increasingly participated in clubs emphasizing fine arts (from 10 to 26 percent), which include music, art, dance, and theater, and academic clubs (from 1 to 9 percent), such as those focused on math or science.

Table 21. Percentages of youth with an IEP ages 15 to 18 who participated in a volunteer, arts, academic, or vocational activity, by year

All youth with an IEP	2012	2003
Youth who participated in a volunteer group	29	2!*✓
Youth who participated in a fine arts club or lesson	26	10*✓
Youth who participated in an academic club or lesson	9	1!*✓
Youth who participated in a vocational or career club	7	3*

* = $p < .05$ for comparison with 2012 estimate; ✓= comparison is statistically significant and at least 5 percentage points in magnitude; ! = estimate is unstable because the standard error represents 30 to 50 percent of the estimate.

Note: Youth survey respondents were asked whether they participated in any of the following school activities outside of class in the past 12 months: music, dance, art, or theater; academic subject matter club; volunteer or community service group; or vocational or career-focused student organization. Youth survey respondents were also asked whether they had taken part in any of the following nonschool activities in the past 12 months: organized sport supervised by an adult; music, dance, art, or theater lessons; a religious youth group or religious instruction; math, science, or computer camps or lessons, volunteer or community service group; scouting or another group or club activity; or another camp or type of nonschool activity.

Source: National Longitudinal Transition Study 2012; National Longitudinal Transition Study 2. The universe is youth who are not homeschooled. More information is provided in appendix D, tables D-11, D-12, D-13, D-14, D-15, D-16, and D-17.

The incidence of grade retention, suspension, and expulsion among youth with an IEP has remained stable during the past decade

Student disengagement can be both the cause and the effect of difficulties in school and it can have longer-run consequences. Students who are held back a grade are less likely than other youth to graduate from high school (Jimerson, Anderson, & Whipple, 2002), and youth who are suspended or expelled from school are more likely than other youth to become involved in the juvenile justice system (Fabelo et al., 2011). Nationally, the percentage of all high school youth who were retained a grade in the past year remained stable at 3 percent in 2003 and 2012 (U.S. Department of Commerce, 2014), and the percentage of students who have ever been suspended from school increased from 17 percent in 2003 to 20 percent in 2012 (U.S. Department of Education, National Center for Education Statistics, 2012). The percentage of students who have ever been expelled was unchanged from 2004 to 2011 at 0.22 percent, although the proportion of expelled students who were Black or Hispanic has increased over time (U.S. Department of Education, 2007; U.S. Department of Education, 2014). Over the past decade, policymakers and educators sought to reduce rates of suspensions and expulsions, particularly among youth who have an IEP and youth who are Black, two groups that historically experienced these negative events most often (U.S. Department of Education, Office for Civil Rights, 2014). One part of the strategy was to more closely monitor these rates. For instance, in 2004 states were required to report how often and why youth with an IEP in different race and ethnicity groups were suspended and expelled, both overall and in each disability group. Ongoing concerns about continued high suspension and expulsion rates among youth

with an IEP led the U.S. Department of Education and the U.S. Department of Justice in 2015 to encourage districts to rethink their discipline policies.[19]

- **Just over a third of youth with an IEP, both now and a decade ago, repeated a grade** (table 22; see table D-18 for more detail). The proportion of all youth with an IEP who ever were retained was stable from 2003 to 2013 (35 and 37 percent, respectively), according to their parents. This pattern in grade retention is also evident for each disability group.

Table 22. Percentages of youth with an IEP ages 15 to 18 who have repeated a grade, by disability group and year

Disability group	2012	2003
Youth ages 15 to 18	**37**	**35**
Autism	24	19
Deaf-blindness	44	43
Emotional disturbance	35	30
Hearing impairment	30	28
Intellectual disability	45	43
Multiple disabilities	29	28
Orthopedic impairment	23	25
Other health impairment	36	35
Specific learning disability	41	35
Speech or language impairment	31	32
Traumatic brain injury	29	29
Visual impairment	20	22

* = $p < .05$ for comparison with 2012 estimate; ✓= comparison is statistically significant and at least 5 percentage points in magnitude.

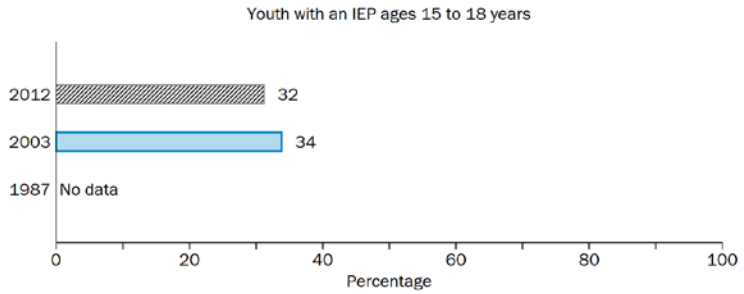
Note: Parent survey respondents were asked whether their child has ever been held back a grade in school since entering kindergarten.

Source: National Longitudinal Transition Study 2012; National Longitudinal Transition Study 2. The universe is youth who are enrolled in school. More information is provided in appendix D, table D-18.

- **Although youth with an IEP were as likely in 2012 as in 2003 to be suspended or expelled from school, suspension rates have fallen for those with intellectual disability and visual impairments** (figure 7 and table 23; see tables D-19 to D-20 for more detail). About one-third of youth with an IEP overall in both 2003 and 2012 had ever been suspended from school (34 and 32 percent, respectively), and less than 1 in 10 had been expelled (7 and 9 percent, respectively), according to parents. Nonetheless, suspension rates declined for youth with intellectual disability (from 38 to 25 percent) and visual impairments (from 14 to 5 percent).

[19] Although this 2015 initiative came after the NLTS 2012 data collection, it reflects policymakers' interests over the past decade in finding new ways to address negative student behavior, without suspending or expelling students.

Figure 7. Percentages of youth with an IEP ages 15 to 18 who have received an out-of-school suspension, by year



* = $p < .05$ for comparison with 2012 estimate; ✓= comparison is statistically significant and at least 5 percentage points in magnitude.

Exhibit reads: The bar graph compares youth with an IEP in 2012 (gray bar) to those in 2003 (blue bar). An asterisk next to the bar indicates whether the difference with youth with an IEP in 2012 is statistically significant (at the .05 level), and a check mark notes a statistically significant difference of at least 5 percentage points. Data from 1987 are not available.

Note: Parent survey respondents were asked whether their children have ever had an out-of-school suspension.

Source: National Longitudinal Transition Study 2012; National Longitudinal Transition Study 2. The universe is all youth. More information is provided in appendix D, table D-19.

Table 23. Percentages of youth with an IEP ages 15 to 18 who have received an out-of-school suspension and who have been expelled from school, by disability group and year

	Youth who have received an out-of-school suspension		Youth who have been expelled from school	
Disability group	2012	2003	2012	2003
Youth ages 15 to 18	**32**	**34**	**9**	**7**
Autism	20	22	4	2!
Deaf-blindness	‡	16!	‡	‡
Emotional disturbance	68	75	21	24
Hearing impairment	19	25	6	2*
Intellectual disability	25	38*✓	7	8
Multiple disabilities	18	22	4	3
Orthopedic impairment	9	14	‡	3!
Other health impairment	39	39	14	11
Specific learning disability	29	28	7	5
Speech or language impairment	20	23	5	5
Traumatic brain injury	27	35	‡	4!
Visual impairment	5!	14*✓	‡	‡

* = $p < .05$ for comparison with 2012 estimate; ✓= comparison is statistically significant and at least 5 percentage points in magnitude; ! = estimate is unstable because the standard error represents 30 to 50 percent of the estimate; ‡ = reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents were asked whether their children have ever had an out-of-school suspension and have ever been expelled.

Source: National Longitudinal Transition Study 2012; National Longitudinal Transition Study 2. The universe is all youth. More information is provided in appendix D, tables D-19 and D-20.

- **The proportion of youth with an IEP who were arrested has been stable over the past decade, overall and in each disability group** (table 24; see table D-21 for more detail). Overall, 8 percent of youth with an IEP in 2003 and 7 percent in 2012 had been arrested in the previous two years, according to their parents. The percentages were also similar for all of the disability groups in 2003 and 2012. Youth with an IEP are nevertheless three times more likely to be arrested than their peers (see Volume 1). The persistence of relatively high arrest rates continues to pose a challenge for youth because being arrested can make it more difficult for them to obtain jobs and housing as adults (Holzer, Raphael, & Stoll, 2003; Hagan & McCarthy, 2005).

Table 24. Percentages of youth with an IEP ages 15 to 18 who have been arrested in the past two years, by disability group and year

Disability group	2012	2003
Youth ages 15 to 18	**7**	**8**
Autism	1!	2!
Deaf-blindness	‡	‡
Emotional disturbance	21	31
Hearing impairment	3!	5!
Intellectual disability	5	4!
Multiple disabilities	3!	3!
Orthopedic impairment	‡	2!
Other health impairment	9	14!
Specific learning disability	6	5!
Speech or language impairment	4	9
Traumatic brain injury	2!	‡
Visual impairment	‡	‡

* = $p < .05$ for comparison with 2012 estimate; ✓= comparison is statistically significant and at least 5 percentage points in magnitude; ! = estimate is unstable because the standard error represents 30 to 50 percent of the estimate; ‡ = reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents were asked whether their children have been arrested in the past two years. An arrest is any time someone is taken into custody by police or a legal authority. The item response rate for youth who have been arrested in the past two years is less than 85 percent for data in 2003.

Source: National Longitudinal Transition Study 2012; National Longitudinal Transition Study 2. The universe is all youth. More information is provided in appendix D, table D-21.

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Chapter 5. Have the academic and special education supports that youth receive changed?

Schools and parents seek to help students with disabilities succeed in school in various ways. Under the Individuals with Disabilities Education Act (IDEA), schools are required to support youth with an individualized education program (IEP) by offering special education services that aim to develop academic and functional competencies as well as instructional accommodations that can help students overcome barriers to learning (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011). The No Child Left Behind Act (NCLB), beginning in 2002, further underscored an expectation that schools improve the academic proficiency of all students, including youth with an IEP, and IDEA 2004 included provisions to better align with NCLB goals. Both IDEA 2004 and NCLB may have altered the types of supports schools provide to youth in special education.

Parents can also help youth in their educational progression in ways that have been associated with academic, social, and behavioral outcomes (Jeynes, 2007; Wagner et al., 2014; Wang, Dishion, Stormshak, & Willett, 2011). For instance, parents can support their children by attending meetings and participating in activities at school, identifying service needs, or helping with homework. Parent participation has been a key concept in IDEA since 1997. The current law recognizes the importance of parental engagement for youth with an IEP by ensuring opportunities for parents to participate in discussions about their children's education program and services. IDEA 2004 specifically calls for greater flexibility in how parents can participate in meetings (such as via teleconference or phone) and also provide options for consolidating meetings to accommodate parents' schedules. States are required to track the extent to which schools facilitate parent involvement in their children's education (IDEA Part B Indicator 8).

Key findings in chapter 5

- **Receipt of school-provided support services has grown among youth with an IEP, particularly tutoring and psychological services.** The proportion of youth using any support services at school grew between 2003 and 2012, both overall (from 44 to 65 percent) and among almost all disability groups, based on parent reports. These support services include tutoring, reader or interpreter services, speech or language therapy, audiology services, psychological or mental health counseling, physical or occupational therapy, orientation and mobility services, and special transportation. The largest growth was in receipt of services from a tutor, reader, or interpreter, which increased from 18 to 33 percent, and psychological or mental health counseling, which increased from 13 to 28 percent.
- **Parents of youth with an IEP are more likely now than in the past decade to attend parent-teacher conferences, but less likely to help with homework.** The proportion of parents who indicated that they attended a regular parent-teacher conference during the past school year grew from 67 to 83 percent for youth with an IEP overall and by at least 10 percentage points in nearly all disability groups from 2003 to 2012. However, the proportion of parents who reported providing weekly homework help declined by 7 percentage points, from 62 to 55 percent. Parents were just as likely as in the past to say that they discuss school experiences regularly with their children (84 and 87 percent, respectively) and attend other types of school meetings and events (74 percent in both years).

Detailed tables supporting the findings presented in this chapter are available in appendix E.

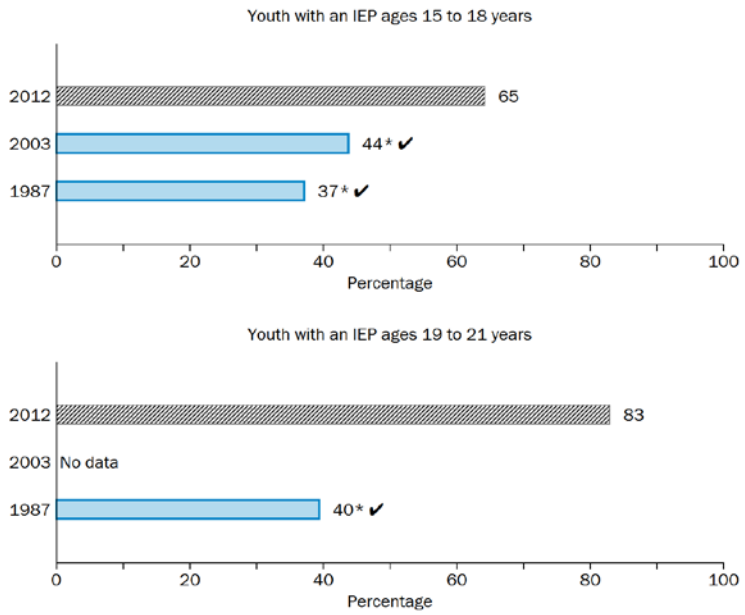
Receipt of school-provided support services has grown among youth with an IEP, particularly tutoring and psychological services

Under IDEA, schools provide students with support services to address their academic and functional needs. Support services can include tutoring, a reader or interpreter, psychological services, speech and language therapy, physical and occupational therapy, and others. Schools make a substantial investment in these services, accounting for about a quarter of all special education expenditures (Chambers, Parrish, & Harr, 2004).

The evolving policy environment has increased the emphasis on the academic achievement of all youth, including those with an IEP. Both IDEA 1997 and 2004 increased the emphasis on improving the academic achievement of youth in special education. Some of the 1997 amendments focused on including students with disabilities in state assessment systems and improving educational outcomes. IDEA 2004 went further in this regard, aligning IDEA more closely with NCLB, which expected states to include all students with disabilities in accountability systems using either regular or alternate assessments based on their needs (U.S. Department of Education, 2011). NCLB also promoted tutoring for youth in low-performing schools (Warkentien & Grady, 2009).

- **Use of a broad set of support services at school almost doubled over three decades, with most of the growth occurring over the past 10 years and among older youth** (figure 8 and table 25; see table E-1 for more detail). More than half (65 percent) of younger youth with an IEP (those ages 15 to 18) received at least one of the following support services at school in 2012, according to parents: tutoring, reader or interpreter services, speech or language therapy, audiology services, psychological or mental health counseling, physical or occupational therapy, orientation and mobility services, and special transportation.[20] This represents an increase of 21 percentage points since 2003 (44 percent), and of 28 percentage points compared to 1987 (37 percent). The growing use of these services at school among younger youth was concentrated in 5 of the 12 disability groups (emotional disturbances, intellectual disability, multiple disabilities, other health impairments, and specific learning disabilities). Youth ages 19 to 21 enrolled in secondary school also increased their use of these services, doubling the rate from 40 percent in 1987 to 84 percent in 2012.

Figure 8. Percentages of youth with an IEP who any received support services at school, by year and age group



* = $p < .05$ for comparison with 2012 estimate; ✓= comparison is statistically significant and at least 5 percentage points in magnitude.

Exhibit reads: The bar graphs compare youth with an IEP in 2012 (gray bar) to two groups. The key comparison is between youth with an IEP in 2012 and those in 2003 (top blue bar). Youth with an IEP in 2012 are also compared with those in 1987 (bottom blue bar). An asterisk next to the bar indicates whether the difference with youth with an IEP in 2012 is statistically significant (at the .05 level), and a check mark notes a statistically significant difference of at least 5 percentage points. Data from 2003 are not available for youth with an IEP ages 19 to 21 years.

Note: Parent survey respondents were asked whether their children received the following support services in the past 12 months: tutoring or reader/interpreter services, speech or language therapy, audiology services, psychological or mental health counseling, physical or occupational therapy, orientation and mobility services, and special transportation.

Source: National Longitudinal Transition Study 2012; National Longitudinal Transition Study 2; National Longitudinal Transition Study. The universe is youth who received special education at school. More information is provided in appendix E, table E-1.

[20] The services described in the note to figure 8 were the ones consistently captured in the NLTS, NLTS2, and NLTS 2012; data on the extent of changes in receipt of other services are not available.

Table 25. Percentages of youth with an IEP ages 15 to 18 who received any support services at school, by disability group and year

Disability group	2012	2003	1987
Youth ages 15 to 18	**65**	**44*✓**	**37*✓**
Autism	80	86	—
Deaf-blindness	94	93	91
Emotional disturbance	79	49*✓	32*✓,^✓
Hearing impairment	84	82	82
Intellectual disability	76	58*✓	51*✓
Multiple disabilities	91	80*✓	87
Orthopedic impairment	85	76	62*✓,^✓
Other health impairment	62	42*✓	42*✓
Specific learning disability	52	36*✓	32*✓
Speech or language impairment	69	61	37*✓,^✓
Traumatic brain injury	66	56	—
Visual impairment	69	73	50*✓,^✓

* = $p < .05$ for comparison with 2012 estimate; ^ = $p < .05$ for comparison with 2003 estimate; ✓= comparison is statistically significant and at least 5 percentage points in magnitude; — = not available.

Note: Parent survey respondents were asked whether their children received the following support services in the past 12 months: tutoring or reader/interpreter services, speech or language therapy, audiology services, psychological or mental health counseling, physical or occupational therapy, orientation and mobility services, and special transportation.

Source: National Longitudinal Transition Study 2012; National Longitudinal Transition Study 2; National Longitudinal Transition Study. The universe is youth who received special education at school. More information is provided in appendix E, table E-1.

- **Receipt of tutoring and psychological counseling services doubled over the past 25 years** (tables 26 and 27; see tables E-2 to E-7 for more detail). Parents of youth with an IEP reported that receipt of school-based services from a tutor, reader, or interpreter for youth with an IEP grew by 17 percentage points, from 16 percent in 1987 to 33 percent in 2012, with most of this growth occurring between 2003 and 2012. The use of psychological or mental health counseling at school grew by 20 percentage points from 1987 to 2012, from 8 to 28 percent. Receipt of speech or language therapy at school also increased by 10 percentage points, from 15 percent in 1987 to 25 percent in 2012. Increases in the receipt of services from a tutor, reader, or interpreter occurred for several groups, including youth with autism, intellectual disabilities, and multiple disabilities. Receipt of counseling services increased for 7 of the 12 disability groups, with the largest growth among youth with emotional disturbance (18 percent in 1987, 29 percent in 2003, and 62 percent in 2012).

Table 26. Percentages of youth with an IEP ages 15 to 18 who received selected support services at school, by year

All youth with an IEP	2012	2003	1987
Youth who received services from a tutor, reader, or interpreter	33	18*✓	16*✓
Youth who received speech or language therapy	24	18*✓	15*✓
Youth who received audiology services	3	2*	1*
Youth who received psychological or mental health counseling	28	13*✓	8*✓,^✓
Youth who received physical or occupational therapy	13	6*✓	13^✓
Youth who received special transportation	14	12	6*✓,^✓

* = $p < .05$ for comparison with 2012 estimate; ^ = $p < .05$ for comparison with 2003 estimate; ✓= comparison is statistically significant and at least 5 percentage points in magnitude.

Note: Parent survey respondents were asked whether their children received the following special education services in the past 12 months: tutoring or reader/interpreter services, speech or language therapy, audiology services, psychological or mental health counseling, physical or occupational therapy (including orientation and mobility services), and special transportation at school.

Source: National Longitudinal Transition Study 2012; National Longitudinal Transition Study 2; National Longitudinal Transition Study. The universe is youth who received special education at school. More information is provided in appendix E, tables E-2, E-3, E-4, E-5, E-6, and E-7.

Table 27. Percentages of youth with an IEP ages 15 to 18 who received services from a tutor at school and who received psychological counseling services at school, by disability group and year

	Youth who received services from a tutor at school			Youth who received psychological or mental health counseling at school		
Disability group	2012	2003	1987	2012	2003	1987
Youth ages 15 to 18	**33**	**18*✓**	**16*✓**	**28**	**13*✓**	**8*✓,^✓**
Autism	27	12*✓	—	34	16*✓	—
Deaf-blindness	55	23*✓	35!	12!	9!	‡
Emotional disturbance	29	15*✓	9*✓	62	29*✓	18*✓,^✓
Hearing impairment	46	43	40	17	13	12
Intellectual disability	36	14*✓	14*✓	30	16*✓	6*✓,^✓
Multiple disabilities	33	14*✓	15*✓	31	14*✓	14*✓
Orthopedic impairment	29	11*✓	18*✓,^✓	22	9*✓	8*✓
Other health impairment	36	18*✓	14*✓	33	15*✓	9*✓
Specific learning disability	34	20*✓	17*✓	17	10	7*✓
Speech or language impairment	25	12*✓	8*✓	22	14!	2!*✓,^✓
Traumatic brain injury	34	19	—	35	16*✓	—
Visual impairment	36	21*✓	21*✓	8!	12	7

* = $p < .05$ for comparison with 2012 estimate; ^ = $p < .05$ for comparison with 2003 estimate; ✓= comparison is statistically significant and at least 5 percentage points in magnitude; ! = estimate is unstable because the standard error represents 30 to 50 percent of the estimate; — = not available; ‡ = reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents were asked whether their children received the following special education services in the past 12 months: tutoring or reader/interpreter services and psychological or mental health counseling.

Source: National Longitudinal Transition Study 2012; National Longitudinal Transition Study 2; National Longitudinal Transition Study. The universe is youth who received special education at school. More information is provided in appendix E, tables E-2 and E-3.

Parents of youth with an IEP are more likely now than in the past decade to attend parent-teacher conferences, but less likely to help with homework

Some research suggests that parents can increase their children's academic engagement and achievement by providing more support at home and being involved in their child's school (Jeynes, 2007; Wang & Eccles, 2012a). Despite policy interest in greater parent engagement, such as the addition of a statutory definition of parent engagement in the No Child Left Behind Act (U.S. Department of Education, 2004), little has changed over the last decade in the extent to which parents of all students participate in school meetings, and the frequency with which parents help with homework has declined (Vaden-Kiernan & McManus, 2005; Noel et al., 2015; U.S. Department of Education, 2012). A key question is whether these overall trends in the general population are similar for parents of youth with an IEP.

- **Parents of youth with an IEP have increased their attendance at parent-teacher conferences by 16 percentage points during the past decade** (table 28; see table E-8 for more detail). The proportion of parents who reported that they or another adult in the household attended a parent-teacher conference during the past school year grew from 67 to 83 percent from 2003 to 2012. Attendance at parent-teacher conferences rose by almost 10 percentage points for youth in every disability group. These increases contrast with the lack of change in parent participation among parents of all students in elementary and secondary schools (77 percent in 2003 and 76 percent in 2012) (Noel et al., 2015; Vaden-Kiernan & McManus, 2005).

Table 28. Percentages of youth with an IEP ages 15 to 18 whose parent attended a parent-teacher conference, by disability group and year

Disability group	2012	2003
Youth ages 15 to 18	**83**	**67*✓**
Autism	87	78*✓
Deaf-blindness	84	63*✓
Emotional disturbance	82	69*✓
Hearing impairment	82	67*✓
Intellectual disability	84	67*✓
Multiple disabilities	84	63*✓
Orthopedic impairment	82	66*✓
Other health impairment	85	71*✓
Specific learning disability	83	67*✓
Speech or language impairment	75	63*✓
Traumatic brain injury	84	61*✓
Visual impairment	83	57*✓

* = $p < .05$ for comparison with 2012 estimate; ✓= comparison is statistically significant and at least 5 percentage points in magnitude.

Note: Parent survey respondents were also asked how often they attended a parent-teacher conference in the current school year. Possible responses are never, 1 to 2 times, 3 to 4 times, 5 to 6 times, and more than 5 to 6 times.

Source: National Longitudinal Transition Study 2012; National Longitudinal Transition Study 2. The universe is youth who are enrolled in school in a school setting. More information is provided in appendix E, table E-8.

- **Parents of youth with an IEP are less likely than in the past to provide homework assistance, and this is particularly the case among lower-income parents** (table 29; see tables E-9 to E-10 for more detail). The proportion of parents who reported that they or another adult in the household helped their child with homework at least once a week declined by 7 percentage points, from 62 percent in 2003 to 55 percent in 2012.[21] This mirrors a national trend in parental help with homework: the percentage of all students in grades 9 through 12 whose parents help with homework at least once per week decreased by 5 percentage points, from 41 percent in 2007 to 36 percent in 2012 (U.S. Department of Education, 2012). The decrease in homework help among parents of youth with an IEP overall was driven by the decrease in four groups: autism, intellectual disability, specific learning disabilities, and speech or language impairments. Additional analyses (table E-10) show that the decline in homework help by parents of youth with an IEP was concentrated among lower-income households. The proportion of lower-income parents who reported providing weekly homework help declined by 11 percentage points (from 66 to 55 percent), whereas the proportion of other parents was little changed (from 58 to 55 percent).

Table 29. Percentages of youth with an IEP ages 15 to 18 whose parent or another adult in the household helped them with homework at least once a week during the school year, by disability group and year

Disability group	2012	2003
Youth ages 15 to 18	**55**	**62*✓**
Autism	48	60*✓
Deaf-blindness	66	48
Emotional disturbance	48	48
Hearing impairment	60	58
Intellectual disability	59	70*✓
Multiple disabilities	56	51
Orthopedic impairment	62	62
Other health impairment	59	63
Specific learning disability	55	63*✓
Speech or language impairment	55	65*✓
Traumatic brain injury	61	60
Visual impairment	60	53

* = $p < .05$ for comparison with 2012 estimate; ✓= comparison is statistically significant and at least 5 percentage points in magnitude.

Note: Parent survey respondents were asked how often they or another adult in the household helped their child with homework each week. The response categories were 5 or more times a week, 3 to 4 times a week, 1 to 2 times a week, less than once a week, and never.

Source: National Longitudinal Transition Study 2012; National Longitudinal Transition Study 2. The universe is youth who live with parents at least some of the time, are not homeschooled, and do not live in a residential school. More information is provided in appendix E, table E-9.

[21] The decrease in parent homework help was offset by the concurrent increase in school-based services from a tutor, reader, or interpreter (though the study did not assess the relationship between the two trends). Specifically, the proportion of students who receive either school-based services from a tutor, reader, or interpreter or homework help from parents has not changed significantly in the past decade. However, the proportion who receive both types of support has increased by 9 percentage points (tables E-11 and E-12).

- **Parents' participation in their children's education, through discussing school experiences or attending meetings or activities at school, has not changed** (table 30; see tables E-13 to E-15 for more detail). Parents of youth with an IEP reported that they or another adult in the household regularly discussed school experiences with their children at approximately the same rates in 2012 as they did in 2003 (87 and 84 percent, respectively). Only parents of youth with orthopedic impairments or other health impairments were less likely in 2012 than they were in 2003 to discuss their children's school experiences regularly with them (94 to 83 percent and 94 to 87 percent, respectively). These two disability groups make up 15 percent of all youth with an IEP. From 2003 to 2012, the proportions of youth with an IEP whose parent reported attending a general school meeting was unchanged, at 74 percent, as were the proportions for every disability group. About one in five parents reported volunteering at school in both 2003 and 2012, and the proportions for every disability group did not change from 2003 to 2012. Among all parents of school-age youth in 2003 and 2012, the proportions who reported attending a general school meeting (88 and 87 percent) and volunteering at school (42 percent in both years) also did not change, although the proportions were larger (Noel et al., 2015; U.S. Department of Education, 2005).

Table 30. Percentages of youth with an IEP ages 15 to 18 whose parent talks with them regularly about school experiences, whose parent attended a general school meeting, and whose parent volunteered at school, by disability group and year

	Youth whose parents talk with them regularly about school experiences		Youth whose parent attended a general school meeting		Youth whose parent volunteered at school	
Disability group	2012	2003	2012	2003	2012	2003
Youth ages 15 to 18	**84**	**87**	**74**	**74**	**21**	**20**
Autism	86	84	75	75	28	29
Deaf-blindness	78	85	81	68	17!	28
Emotional disturbance	85	85	67	66	16	14
Hearing impairment	84	90	74	74	22	25
Intellectual disability	80	80	66	69	19	16
Multiple disabilities	83	84	73	76	27	26
Orthopedic impairment	83	94*✓	77	79	34	28
Other health impairment	87	94*✓	74	76	21	25
Specific learning disability	83	88	77	76	20	19
Speech or language impairment	87	88	75	71	24	29
Traumatic brain injury	87	93	75	77	23	23
Visual impairment	93	88	78	74	33	28

* = $p < .05$ for comparison with 2012 estimate; ✓= comparison is statistically significant and at least 5 percentage points in magnitude; ! = estimate is unstable because the standard error represents 30 to 50 percent of the estimate.

Note: Parent survey respondents were asked how often they or another adult in the household talk with youth about school experiences in the current school year, how often they or another adult attended a general school meeting in the current school year, and how often they or another adult volunteered at school in the current school year. Possible responses for the first measure are regularly, occasionally, rarely, and not at all. Possible responses for the second and third measures are never, 1 to 2 times, 3 to 4 times, 5 to 6 times, and more than 5 to 6 times.

Source: National Longitudinal Transition Study 2012; National Longitudinal Transition Study 2. The universe for the first measure is youth who live with parents at least some of the time and are enrolled in school in a school setting. The universe for the second and third measures is youth who are enrolled in school in a school setting. More information is provided in appendix E, tables E-13, E-14, and E-15.

Chapter 6. How have youth changed the way they prepare for life after high school?

Parents and schools also play important roles in helping youth with an individualized education program (IEP) transition to adulthood. Since 1990, the Individuals with Disabilities Education Act (IDEA) has required schools to invite youth with an IEP and their parents to meet with school staff to discuss goals for life after school and provide assistance to help them reach those goals. The amendments in 1997 strengthened the role that parents play in the development of the IEP and required that transition plans assess whether academic coursework helped youth make progress toward their goals. IDEA 2004 requires that the IEP include postsecondary goals that are measurable and that the transition plan reflect not only students' preferences and interests but also their strengths. Some research suggests that the process of helping youth formulate and pursue transition goals may improve their outcomes later in life (Test et al., 2009). However, IDEA 2004 delayed the age when transition planning is first required from 14 to 16 years old.

Key findings in chapter 6

- **Youth and parents are less likely to have discussed transition plans with school staff than in the previous decade.** From 2003 to 2012, the proportion of youth (ages 17 to 18) and their parents who reported ever having met with school staff to discuss post-high school transition plans declined by nearly 10 percentage points for youth (79 versus 70 percent) and almost 20 percentage points for parents (79 versus 60 percent). However, their participation rates in IEP meetings in the past two years did not decline during this period (from 74 to 81 percent for youth, and from 89 to 91 percent for parents). The declining prevalence of transition planning might reflect the policy change in IDEA 2004 that delayed the age when youth must start this planning process from 14 to 16 years old, which may have made it less likely for parents and students to have had memorable discussions about these issues with schools. Alternatively, it may reflect a declining emphasis on transition planning within the context of all IEP meetings, or a combination of these and perhaps other factors. In addition, parents reported that youth who attend IEP or transition-planning meetings were less likely than a decade ago to provide input during the meeting: 67 percent provided at least some input in 2003 compared with 59 percent in 2012.
- **Paid employment in a job not sponsored by school among youth with an IEP has declined, but participation in school-sponsored work activities remained stable.** The proportion of youth with an IEP overall who reported having a job that is not sponsored by school at the time of the interview declined from 27 percent in 2003 to 19 percent in 2012. Those with hearing impairments and other health impairments experienced the largest declines (from 35 to 14 percent and from 42 to 23 percent, respectively). By contrast, youth with an IEP overall were about as likely in both 2003 and 2012 to report having participated in school-sponsored work in the past year (14 and 13 percent, respectively). Although the proportions of youth in most disability groups with school-sponsored jobs were stable from 2003 to 2012, the percentage rose for youth with autism from 11 to 21 percent.

Another way youth prepare for life after high school is through working. Since the 1950s, schools have helped youth get paid and unpaid work experience through cooperative programs (co-ops), internships, school-based enterprises, and supported work (Johnson, 2012). Students can also obtain jobs on their own or with the help of their parents or others. Earlier research linked working during high school to higher postsecondary enrollment and employment rates after graduation among youth with an IEP (Baer et al., 2003; Carter et al., 2012; Cobb, Lipscomb, Wolgemuth, & Schulte, 2013; McDonnall & O'Mally, 2012; Simonsen & Neubert, 2013; Wagner

et al., 2014). If this linkage is true, given changes in the economic climate over the last decades, particularly with the recent Great Recession, shifts in high school work experience could have implications for youths' later work and career success.

Detailed tables supporting the findings presented in this chapter are available in appendix F.

Youth and parents are less likely to have discussed transition plans with school staff than in the previous decade

IDEA has long required that IEPs for high school students include a transition plan that outlines their goals relating to postsecondary education, employment, and independent living, and a plan for achieving those goals. School staff develop these transition plans and must attempt to involve youth and their parents in their formulation. Educational experts have emphasized the importance of actively engaging youth in the planning process to help them learn how to self-advocate and to ensure that the transition plan is appropriate (HEATH Resource Center, 2006; Rehfeldt, 2006; Sitlington & Clark, 2007). The changes to IDEA in 2004 emphasized that transition plans should consider not only students' interests and preferences but also their strengths, to focus on abilities rather than disabilities, to promote better outcomes in adulthood. In addition, IDEA 2004 sought to make it easier for parents to provide input into IEP meeting activities by allowing them to participate in meetings by phone or by consolidating meetings. However, IDEA 2004 also may have discouraged early transition planning by changing the age when this planning must begin from 14 to 16.

- **Although youth and parents are less likely to have ever met with school staff to discuss transition plans, they are just as likely to have gone to an IEP meeting in the past two years** (tables 31 and 32; see tables F-1 to F-4 for more detail). From 2003 to 2012, a declining proportion of youth with an IEP ages 17 to 18 reported having ever met with school staff to discuss their plans for after high school (from 79 to 70 percent). The proportion of parents reporting that they met with school staff for the same purpose also declined (from 79 to 60 percent).[22] In contrast to these trends, the proportion of youth and parents who reported going to an IEP meeting in the past two school years did not decline.[23] In both 2003 and 2012, about three-quarters

[22] The report examines reflections about transition experiences among youth starting at age 17 (and their parents). Youth survey data are incomplete for 16-year-olds' reporting of whether they have met with school staff to develop a transition plan (appendix A). Youth-reported meeting attendance including 16-year-olds is likely to be less than reported in table 30 based on the results for parents; parents' reports of their own attendance are 4 percentage points lower overall in 2012 and 2 percentage points lower overall in 2003 when 16-year-olds are included.

[23] IDEA 2004 gave parents who cannot attend IEP meetings in person the flexibility to participate by other methods, such as by telephone. The NLTS 2012 questions on participation in IEP meetings and transition planning came from NLTS2 surveys that were administered prior to this policy change. The questions asked respondents whether they went to an IEP meeting in the last two years and whether they ever met with school staff to discuss transition plans. Some NLTS 2012 respondents may have interpreted these questions as referring to in-person meetings only, in which case the proportions reported in this volume for 2012 may understate the combined in-person and remote participation rate. However, the remote attendance policy change is unlikely to explain the decline in the proportion of respondents who reported meeting with school staff to discuss transition plans because their reported participation in IEP meetings did not decline, as would be expected for any systematic shift toward remote participation.

of youth in special education ages 17 to 18 reported going to an IEP meeting (74 and 81 percent, respectively). Similarly, about 9 in 10 of their parents in both time periods reported going to an IEP meeting (89 and 91 percent, respectively).[24] The declining participation in transition planning might reflect the policy change in IDEA that delayed the age when youth must start this planning process from 14 to 16 years old; by condensing the window of time when these issues are supposed to be discussed, the policy change might have reduced the likelihood that parents and youth have memorable discussions with school staff. Alternatively, it may reflect a declining emphasis on transition planning within the context of all IEP meetings, or a combination of these and/or other factors.[25]

Table 31. Percentages of youth with an IEP ages 15 to 18 and parents who met with school staff to discuss transition plans, by disability group and year

	Youth who met with school staff to discuss transition plans		Youth whose parent met with school staff to discuss transition plans	
Disability group	2012	2003	2012	2003
Youth ages 15 to 18	**70**	**79*✓**	**60**	**79*✓**
Autism	63	75	65	78*✓
Deaf-blindness	51!	83	78	80
Emotional disturbance	71	69	66	79*✓
Hearing impairment	71	88*✓	58	82*✓
Intellectual disability	66	64	65	78*✓
Multiple disabilities	52	70	64	82*✓
Orthopedic impairment	63	88*✓	61	85*✓
Other health impairment	75	79	56	85*✓
Specific learning disability	72	83*✓	56	78*✓
Speech or language impairment	66	82	54	72*✓
Traumatic brain injury	55	81*✓	51	80*✓
Visual impairment	69	82	67	81

* = $p < .05$ for comparison with 2012 estimate; ✓ = comparison is statistically significant and at least 5 percentage points in magnitude; ! = estimate is unstable because the standard error represents 30 to 50 percent of the estimate.

Note: Youth survey respondents and parent survey respondents, respectively, were asked whether they (or another adult in the household in the case of parents) have met with teachers to develop a transition plan (that is, goals for what youth will do after high school and a plan for how to achieve them).

Source: National Longitudinal Transition Study 2012; National Longitudinal Transition Study 2. The universe is youth whose parent reported that they received special education services in the past year and are 17 or 18 years old. More information is provided in appendix F, tables F-1 and F-2.

[24] The consistency in youth and parent attendance at IEP meetings between 2003 and 2012 is also apparent when calculated among youth who are 15 to 18 years old and 16 to 18 years old.

[25] For parents, their apparent downward trend in transition-planning meeting attendance between 2003 and 2012 also may partly reflect the difference in the way the NLTS2 and NLTS 2012 data were collected. The NLTS2 provided parents with two opportunities to report whether they ever attended a transition-planning meeting, but the NLTS 2012 provided only one opportunity to do so. In particular, the NLTS2 included the question in both the 2001 and the 2003 surveys, and the tabulations above combined these two variables to determine whether parents ever attended such a meeting. However, even using the 2003 data alone (which referenced attendance in the past two years), parent-reported attendance at transition-planning meetings was higher by a statistically significant amount in 2003 than in 2012 (69 versus 60 percent). Youth-reported data did not require any aggregation of responses across NLTS2 waves.

Table 32. Percentages of youth with an IEP ages 17 to 18 and parents who attended an IEP meeting in the past two years, by disability group and year

	Youth who attended an IEP meeting during the current or prior school year		Youth whose parent attended an IEP meeting during the current or prior school year	
Disability group	2012	2003	2012	2003
Youth ages 17 to 18	**81**	**74**	**91**	**89**
Autism	76	90*✓	94	97
Deaf-blindness	75	90	95	94
Emotional disturbance	80	80	92	90
Hearing impairment	79	93	85	92
Intellectual disability	82	73	87	82
Multiple disabilities	77	80	92	92
Orthopedic impairment	80	89	95	94
Other health impairment	81	85	90	95*✓
Specific learning disability	82	70	92	89
Speech or language impairment	85	80	88	89
Traumatic brain injury	71	78	82	90
Visual impairment	91	84	95	87

* = $p < .05$ for comparison with 2012 estimate; ✓= comparison is statistically significant and at least 5 percentage points in magnitude.

Note: Youth survey respondents and parent survey respondents, respectively, were asked whether they attended an IEP meeting during the current or prior school year.

Source: National Longitudinal Transition Study 2012; National Longitudinal Transition Study 2. The universe is youth whose parent reported that they received special education services in the past year and are 17 or 18 years old. More information is provided in appendix F, tables F-3 and F-4.

- **Youth with an IEP appear less likely to provide input into their IEP and transition plans than a decade ago** (table 33; see table F-5 for more detail). In addition to their lower self-reported rates of attending transition-planning meetings, parents who attended an IEP or transition-planning meeting reported that youth with an IEP became 8 percentage points less likely to provide input or take a leadership role (from 69 percent in 2003 to 61 percent in 2012). This decline is noteworthy given increased policy interest in IDEA 2004 in helping students define and pursue their own postsecondary goals.

Table 33. Percentages of youth with an IEP ages 15 to 18 who provided at least some input in IEP and transition planning, by disability group and year

Disability group	2012	2003
Youth ages 15 to 18	**61**	**69*✓**
Autism	41	32
Deaf-blindness	41!	55
Emotional disturbance	65	68
Hearing impairment	73	73
Intellectual disability	44	44
Multiple disabilities	37	33
Orthopedic impairment	66	61
Other health impairment	66	72
Specific learning disability	67	77
Speech or language impairment	67	65
Traumatic brain injury	67	58
Visual impairment	79	71

* = $p < .05$ for comparison with 2012 estimate; ✓= comparison is statistically significant and at least 5 percentage points in magnitude; ! = estimate is unstable because the standard error represents 30 to 50 percent of the estimate.

Note: Parent survey respondents were asked to describe the youth's role in his/her IEP and transition planning. The response options were as follows: took a leadership role, provided some input, was present but participated very little, or did not participate at all. At least some input is defined as providing some input or taking a leadership role.

Source: National Longitudinal Transition Study 2012; National Longitudinal Transition Study 2. The universe is youth whose parent reported that they received special education services in the past year and whose parent or another adult in the household attended an IEP in the past two years or ever attended a transition-planning meeting, and are 17 or 18 years old. More information is provided in appendix F, table F-5.

Paid employment during high school among youth with an IEP has declined, but participation in school-sponsored work activities has remained stable

Helping youth transition to employment has been and remains a key goal of IDEA since its inception in 1975. In addition to providing academic, career, and technical skill-building opportunities in the classroom, schools can facilitate youths' work experience. Studies suggest that working during high school may help youth receiving special education services increase their chances of being employed after they graduate (Baer et al., 2003; Carter et al., 2012; McDonnall & O'Mally, 2012; Simonsen & Neubert, 2013; Wagner et al., 2014).[26] Early work experiences may benefit youth in several ways, such as by exposing them to careers, helping them develop useful skills, and enabling them to develop a résumé (Mortimer, 2005). For this reason, some schools have sought to help youth with an IEP obtain work experience during the school year or summer through jobs, cooperative programs (co-ops), internships, school-based enterprises, and supported work.

Policymakers have increasingly emphasized the importance of helping youth with disabilities obtain jobs paying at least minimum wage in settings that include workers without disabilities (O'Day & Stapleton, 2009; Wehman, 2006; National Collaborative on Workforce and Disability, 2011). More recently, the Workforce Innovation and Opportunity Act of 2014 required vocational rehabilitation agencies to help schools place youth with disabilities in these "competitive integrated jobs." Although this Act was passed after NLTS 2012 surveys were conducted, it reflects the steady growth of interest in helping youth gain entry to good jobs. Changes in paid employment of youth may reflect not only the effects of these policies but also other factors, such as the strength of the labor market (Hoynes, Miller, & Schaller, 2012).

[26] Like other studies cited earlier, those examining the effects of high school work may not be able to adequately isolate the effects of working from differences in the characteristics of those who do and do not choose to work.

- **The proportion of youth with an IEP who have a paid job that is not sponsored by school declined by 8 percentage points during the past decade, with the largest declines among those with hearing impairments or other health impairments** (table 34; see table F-6 for more detail). The proportion of youth with an IEP overall who said they had this kind of job declined from 27 percent in 2003 to 19 percent in 2012. The measure of employment in this volume pertains to having a job at the time of the survey.[27] Youth with hearing impairments or other health impairments, who had among the highest employment rates in 2003, experienced the largest reductions (from 35 to 14 percent and 42 to 23 percent, respectively). Some of these reductions in paid employment might reflect the relative weakness of the labor market in 2012: employment rates for all youth (including those without an IEP) also declined by 7 percentage points between 2003 and 2012.[28]

Table 34. Percentages of youth with an IEP ages 15 to 18 who currently have a paid job not sponsored by school, by disability group and year

Disability group	2012	2003
Youth ages 15 to 18	**19**	**27*✓**
Autism	6	7!
Deaf-blindness	‡	‡
Emotional disturbance	19	19
Hearing impairment	14	35*✓
Intellectual disability	11	16
Multiple disabilities	11	14!
Orthopedic impairment	6!	‡
Other health impairment	23	42*✓
Specific learning disability	23	29
Speech or language impairment	19	29
Traumatic brain injury	19	37
Visual impairment	12	22

* = $p < .05$ for comparison with 2012 estimate; ✓= comparison is statistically significant and at least 5 percentage points in magnitude; ! = estimate is unstable because the standard error represents 30 to 50 percent of the estimate; ‡ = reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Youth survey respondents were asked if they currently have a paid job.

Source: National Longitudinal Transition Study 2012; National Longitudinal Transition Study 2. The universe is youth who are enrolled in school in a school setting. More information is provided in appendix F, table F-6.

[27] By contrast, the employment measure in Volumes 1 and 2 relates to having a job in the last year. The employment measure in this volume is different in order to the make the measures comparable across the NLTS studies.

[28] Employment rates for youth ages 16 to 24 fell from 2003 to 2012, from 67.3 to 60.5 percent (U.S. Department of Labor, Bureau of Labor Statistics, 2014).

- **Participation in school-sponsored work activities in the past year was steady over the decade** (table 35; see tables F-7 to F-9 for more detail). These activities could include paid or unpaid jobs (for example, cooperative education or supported work, internships, or work in school-based enterprises like school stores or banks), as long as they were arranged with the help of school staff. The proportion of youth with an IEP overall who reported having paid or unpaid school-sponsored work activities in the last year was similar in 2003 and in 2012 (14 and 13 percent, respectively). Most school-arranged activities were unpaid, accounting for about 60 percent of all school-sponsored work experience in both years. Although there was no overall growth in participation in school-sponsored work, participation increased in these activities among youth with autism (11 versus 21 percent) and increased in unpaid school-sponsored work activities among youth with intellectual disability (5 versus 16 percent).

Table 35. Percentages of youth with an IEP ages 15 to 18 who have school-sponsored work activities, paid school-sponsored work activities, or unpaid sponsored-work activities in the past year, by disability group and year

	Youth who have school-sponsored work activities		Youth who have paid school-sponsored work activities		Youth who have unpaid school-sponsored work activities	
Disability group	2012	2003	2012	2003	2012	2003
Youth ages 15 to 18	**13**	**14**	**4**	**7**	**8**	**8**
Autism	21	11!*✓	6	5!	15	‡
Deaf-blindness	‡	45!	‡	‡	‡	31!
Emotional disturbance	14	16!	8	9!	6	7!
Hearing impairment	15	11!	7	‡	8	8!
Intellectual disability	23	16	7	11!	16	5!*✓
Multiple disabilities	21	17!	8	7!	13	10!
Orthopedic impairment	12	‡	‡	‡	8	4!
Other health impairment	10	8	3	3!	7	5
Specific learning disability	10	15	3	6!	6	9
Speech or language impairment	7	7!	3!	3!	4	4!
Traumatic brain injury	18	27!	6!	‡	12!	14!
Visual impairment	12	16	5!	10	7!	6!

* = $p < .05$ for comparison with 2012 estimate; ✓= comparison is statistically significant and at least 5 percentage points in magnitude; ! = estimate is unstable because the standard error represents 30 to 50 percent of the estimate; ‡ = reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Youth survey respondents were asked whether they had a school-sponsored job in the past 12 months, had a school-sponsored paid job in the past 12 months, and had a school-sponsored unpaid job in the past 12 months.

Source: National Longitudinal Transition Study 2012; National Longitudinal Transition Study 2. The universe is youth who are enrolled in school in a school setting, according to both youth and parents. More information is provided in appendix F, tables F-7, F-8, and F-9.

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Appendix A. Technical notes and methodology for volume 3: Comparisons over time

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Appendix A provides information on the National Longitudinal Transition Study (NLTS) 2012, the NLTS2, and the NLTS, as well as on the analytic procedures used in this volume. The appendix draws on several other technical documents that contain information on the NLTS series, namely the NLTS 2012 design documentation (Burghardt et al., 2017) and the technical appendices for the NLTS2 and NLTS study reports (for example, Javitz & Wagner, 1990; Wagner, Cameto, & Newman, 2003; Wagner, Newman, & Cameto, 2004; Wagner et al., 2005). The appendix covers 10 topics: (1) the purpose of the NLTS series; (2) the district and youth sample design; (3) the content of the parent and youth survey instruments; (4) data collection methods, procedures, and response rates; (5) the population of interest and analytic sample used for this volume; (6) development of weights and adjustments to those weights for this volume; (7) unit nonresponse bias analysis; (8) imputation and the handling of missing data; (9) statistical procedures and variance estimation; and (10) the analytic variables used in the volume.

A.1. Purpose of the NLTS series

The U.S. Department of Education has sponsored three studies in the NLTS series to examine youth with disabilities receiving services under the Individuals with Disabilities Education Act (IDEA), a longstanding federal law last updated in 2004. Under IDEA, youth with disabilities can be eligible to receive special education and related services through an individualized education program (IEP). All three studies have used survey and administrative data to describe the backgrounds of youth with an IEP and their functional abilities, activities in school and with friends, academic supports received from schools and parents, and preparation for life after high school. The NLTS 2012, the most recent study, focused on youth with and without an IEP who were ages 13 to 21 in 2012.[1] The NLTS2 focused on youth with an IEP who were ages 13 to 16 in 2001. The NLTS focused on youth with an IEP who were ages 13 to 21 in 1985. The research questions the studies were designed to address are discussed below.

- **The NLTS 2012 was designed to address three sets of questions that involve comparisons of various groups of youth, including those with and without an IEP.** The first set of questions pertains to the nature and extent of *differences between youth with an IEP and other youth*. The NLTS 2012 is the first NLTS to permit direct comparisons of youth with and without an IEP, having included representative samples of both groups. Among the youth without an IEP is a representative set of students who receive accommodations through a plan developed under Section 504 of the Rehabilitation Act, another federal law pertaining to the rights and needs of youth with disabilities, as well as a representative set of students with neither an IEP nor a Section 504 plan. The second set of questions focuses on the extent of *differences among the disability groups recognized by IDEA*, which are autism, deaf-blindness, emotional disturbance, hearing impairment,[2] intellectual disability, multiple disabilities, orthopedic impairment, other health impairment, specific learning disability, speech or language impairment, traumatic brain injury, and visual impairment. The third set of questions concerns *differences among youth with an IEP across decades*. The NLTS 2012, when combined with the two earlier surveys, provides information on changes over three decades in the characteristics and experiences of youth in special education.

[1] In this volume, years refer to the end year of a school year. For example, 2012 refers to the 2011–2012 school year.

[2] Because youth with deafness and hearing impairments are small groups, they have been combined into one group.

- **The NLTS2 and the NLTS were designed to address questions that focus on comparisons among sets of youth with an IEP, but not youth without an IEP.** Both studies examined youth with an IEP as a whole and the extent of *differences among the disability groups recognized by IDEA*. The NLTS2 also addressed questions related to *differences between youth with an IEP and those in the previous decade* who were surveyed by the NLTS.

Three report volumes contain findings from the analysis of the NLTS 2012 data. Volume 1 focuses on comparisons of youth with an IEP and youth without an IEP (Lipscomb et al., 2017a). Volume 2 focuses on comparisons of youth with an IEP across disability groups (Lipscomb et al., 2017b). The present volume, Volume 3, focuses on comparisons of youth with an IEP across time.

The reports of findings from the NLTS2 and the NLTS are available at https://nlts2.sri.com/products.html.

A.2. District and youth sample design

All three studies in the NLTS series used two-stage national probability samples to enable precise and nationally representative estimates of the backgrounds and experiences of groups of secondary students. The first stage consisted of selecting a sample of school districts and a supplementary sample of special schools that serve only students with disabilities (this appendix refers to both the school districts and special schools as *districts*). The second stage consisted of selecting students from the districts that agreed to participate in the study. Table A-1 shows the counts of sampled and participating districts, and of sampled youth, by disability group.

Table A-1. District recruitment and youth sample sizes, by study

Sample group	NLTS 2012	NLTS2	NLTS
First-stage sample (districts)			
Districts sampled	572	3,712	712
Districts participating	432	538	325
Participation rate (%)	76	15	46
Second-stage sample (youth)			
All youth	21,959	11,276	10,369
Youth with an IEP	17,476	11,276	10,369
Youth without an IEP	4,483	0	0
504 plan but no IEP	1,168	0	0
Neither 504 plan nor IEP	3,315	0	0

NLTS is National Longitudinal Transition Study; IEP is individualized education program.

Source: Sample sizes for the NLTS 2012 come from Burghardt et al. (2017). First-stage sample sizes for the NLTS2 and the NLTS come from exhibit A-1 of Wagner, Newman, & Cameto (2004). Second-stage sample sizes for the NLTS2 and the NLTS come from exhibit A-2 of Wagner, Cameto, & Newman (2003).

More details on the school district and youth samples reported in table A-1 are provided below for each study.

- **NLTS 2012.** The first stage comprised a sample of 572 school districts, stratified by size and Census region. Districts included local education agencies, charter schools that operate independently, and state-sponsored special schools that serve deaf and/or blind youth. A total of 432 districts participated in the study (76 percent). From lists that participating districts provided, the study selected a stratified random sample of 21,959 youth from among each of the 12 IDEA disability groups, the youth with a 504 plan but no IEP, and

the youth with neither a 504 plan nor an IEP.[3] The sample included 17,476 youth with an IEP, 1,168 youth with a 504 plan but no IEP, and 3,315 youth with neither a 504 plan nor an IEP.[4]

- **NLTS2 and NLTS.** The first stage comprised samples of 3,712 and 712 school districts for the NLTS2 and NLTS, respectively, stratified by Census region, size, and the percentage of students living in poverty. Districts included local education agencies and state-sponsored special schools. A total of 538 (15 percent) sampled NLTS2 districts and 325 (46 percent) sampled NLTS districts participated in the study. From lists that participating districts provided, the studies selected random samples of youth with an IEP (11,276 for NLTS2 and 10,369 for NLTS) from each disability group.

A.3. Content of parent and youth survey instruments

Across the three studies in the NLTS series, the parent and youth survey instruments covered mostly similar topics about youth with an IEP enrolled in secondary school. The following list summarizes the major topics from the NLTS 2012 surveys.

The parent survey. The parent survey covered the following topics:

- **Disabilities and abilities,** including whether youth have a disability and, if so, what kind. It also covered whether they have had an IEP or a 504 plan, and their functional abilities.
- **School enrollment and service receipt,** including youth secondary school enrollment and graduation status, whether they were ever suspended or expelled, receipt of special education and related services, and other supports received through the school.
- **Parents' involvement in their children's education,** including whether parents attend school events, meet with teachers, help with homework, and participate in IEP and transition-planning meetings.
- **Parents' expectations for their children's futures,** including how much education they think youth will obtain, challenges in furthering education and employment, and expected living arrangements and financial independence.
- **Background characteristics and socioeconomic status,** including household size; the primary language used at home; youths' race and ethnicity; parents' income, education, and marital status; and household receipt of federal financial assistance.

The youth survey. The youth survey covered the following topics:

- **Perceptions about school,** including coursework, relationships with staff, and experiences with bullying.
- **Receipt of academic supports through school,** including supplementary academic instruction outside of regular school hours.

[3] The total sample of 21,959 youth was released over two years during 2012 and 2013. More detail on data collection methods, procedures, and results is provided in section A.4.

[4] The number of districts sampled for the NLTS 2012 balanced the need to obtain a nationally representative sample with the additional costs of recruiting a larger number of districts. Although the NLTS 2012 sampled fewer districts than the NLTS2, it had a higher district-level response and resulted in a similar number of districts that participated in the study.

- **Participation in IEP and transition-planning meetings,** including whether youth attended these meetings and their role in defining their educational goals.
- **Extracurricular and social activities,** including participation in school-sponsored sports and clubs, other organized activities outside of school, and interactions with friends.
- **Employment experiences,** including paid employment and school-sponsored work activities.
- **Expectations for the future,** including those for postsecondary education and independent living.
- **Indicators of self-determination,** including indicators of personal autonomy and self-direction.

Not all of the survey items were comparable enough across all three studies in the NLTS series to support a valid analysis of trends, even if they pertained to the same topic. For instance, some items had substantively different wording in the survey question itself or the response categories, or were asked of different types of survey respondents (that is, parents versus youth). The latter portions of this appendix provide more detail on criteria for assessing the comparability of survey items and on the measures examined in the analysis (section A.10).

A.4. Data collection methods, procedures, and response rates

This section describes key features of the data collection that are relevant to this volume. Data collection for the three NLTS surveys occurred during distinct parts of the year. The NLTS 2012 included only a single round of survey collection, although the NLTS2 and the NLTS included multiple waves of data collection. This section focuses on the waves of those two earlier studies that are used in the analysis: Wave 2 of NLTS2 and Wave 1 of the NLTS. Source material for this section comes from Burghardt et al. (2017) and Wagner et al. (2005). Section A.5 provides more detail on the population of interest and analytic sample for each volume.

- **NLTS 2012.** Data collection was conducted from February through October 2012 and from January through August 2013. The study revised the data collection strategies and continued data collection in 2013 to address low response rates during 2012. Survey administration in 2012 was by computer-assisted telephone interviewing. In 2013, the study introduced a web survey option and field interviewers. The study offered youth several accommodations to help them respond to the survey, including the use of any assistive technology the youth normally uses (for example, optical devices to enlarge print, hearing aids, sign language, or lip reading), the option to take the survey in English or Spanish, and the option to have a parent or other household adult translate the survey for youth who do not speak English or Spanish, or to act as a sign language interpreter. In addition, parent survey respondents received a portion of their cash incentive payment in advance. During both years, the study needed to contact parents first for youth who were younger than 18. If a parent consented to the study, the parent was surveyed first and subsequently interviewers attempted to survey the youth.

- **NLTS2.** The parent and youth surveys for Wave 2 were completed during spring, summer, and fall 2003, when youth were ages 15 to 19. Parents were interviewed first, using computer-assisted telephone interviewing. Youth were interviewed with their parent's consent by either computer-assisted telephone interviewing or a mailed self-administered questionnaire. All waves of the NLTS2 were available in either English or Spanish. For 47 percent of all youth survey responses in Wave 2,[5] parents acted as a proxy if they

[5] The NLTS2 study reports refer to a Parent Part 2 interview and a Youth Part 2 interview rather than a youth survey

declined to have their children asked questions related to risk behaviors, their children could not answer questions by telephone or written questionnaire, or their children did not respond (table A-2). Wave 1 of data collection occurred in 2001 and did not include a youth survey instrument. Waves 3 through 5 of data collection occurred in 2005, 2007, and 2009, respectively, to examine students' post-high school outcomes.

- **NLTS.** Wave 1 consisted of a parent survey that was completed during summer and fall 1987, when youth were ages 15 to 23, using a combination of computer-assisted telephone interviewing and mailed self-administered questionnaires. Wave 2 occurred in 1990 and included both a parent and a youth survey. Both waves of the NLTS were available in either English or Spanish. Because this volume only uses NLTS data from Wave 1, youth survey proxy respondents are not applicable and not shown in table A-2.

Table A-2. Youth survey proxy responses for NLTS 2012 and NLTS2 Wave 2

Disability group	NLTS 2012 youth survey proxy (%)	NLTS2 Wave 2 youth survey proxy (%)
All youth	16	47
IEP	19	47
No IEP	6	—
504 plan but no IEP	4	—
Neither 504 plan nor IEP	6	—

— = not applicable.

NLTS is National Longitudinal Transition Study; IEP is individualized education program.

Note: Youth survey proxies are reported as a percentage of youth survey responses.

Source: National Longitudinal Transition Study 2012; National Longitudinal Transition Study 2.

The number of responses and the response rates varied across the studies (table A-3). The following response rates are calculated as a percentage of students sampled in the participating districts:

- **NLTS 2012.** Across the two years of data collection, 12,988 parent surveys were completed, representing a 59 percent unweighted response rate. A total of 11,128 youth surveys were completed either by youth directly or parent proxy, representing a 51 percent unweighted response rate of the full youth sample.
- **NLTS2.** In Wave 2, 6,714 parent interviews were completed, representing 60 percent of the original sample. A total of 6,322 youth interviews were completed in Wave 2 either by youth directly or parent proxy, representing 56 percent of the original sample.
- **NLTS.** In Wave 1, 6,896 parent interviews were completed, representing 67 percent of the sample.

in which parents acted as proxy respondents in some cases.

Table A-3. Parent and youth survey respondent samples and response rates for NLTS 2012, NLTS2 Wave 2, and NLTS Wave 1

	NLTS 2012		NLTS2 Wave 2		NLTS Wave 1	
Disability group	Respondents	Response rate	Respondents	Response rate	Respondents	Response rate
Parent survey						
All youth	12,988	59	6,714	60	6,896	67
IEP	10,459	60	6,714	60	6,896	67
No IEP	2,529	56	0	–	0	–
504 plan but no IEP	664	57	0	–	0	–
Neither 504 plan nor IEP	1,865	56	0	–	0	–
Youth survey						
All youth	11,128	51	6,322	56	0	–
IEP	8,960	51	6,322	56	0	–
No IEP	2,168	48	0	–	0	–
504 plan but no IEP	576	49	0	–	0	–
Neither 504 plan nor IEP	1,592	48	0	–	0	–

— = not applicable.

NLTS is National Longitudinal Transition Study; IEP is individualized education program.

Source: Authors' calculations using the restricted-used data files for the NLTS 2012, NLTS2 Wave 2, and the NLTS Wave 1. The sample frame counts for the NLTS 2012 come from Burghardt et al. (2017), and the counts for the NLTS2 and the NLTS come from exhibit A-2 of Wagner, Cameto & Newman (2003).

A.5. The population of interest and analytic sample used for this volume

The population of interest for this volume consists of youth with an IEP who were (1) enrolled in secondary school during the school year in which they and/or their parents were interviewed, and (2) ages 15 to 18 or ages 19 to 21 at that time. The study team selected this population in consultation with the Institute of Education Sciences (IES) and the NLTS 2012 Technical Working Group (TWG) to focus the analysis of trends on students near the point of leaving high school, and in consideration of the ages of students in the two previous studies. In particular, NLTS2 sample members were ages 15 to 19 when they and their parents were interviewed for Wave 2 of that study in 2003 (see table A-4). NLTS sample members were ages 15 to 23 when their parents were interviewed for Wave 1 in 1987. As a result, this volume can analyze trends for 15- to 18-year-olds across all three studies, and for 19- to 21-year-olds across the NLTS 2012 and the NLTS. These age ranges also correspond to those used in Volumes 1 and 2 of the findings from the NLTS 2012.

Table A-4. Age and survey completion year of youth in this report

Study	Population of youth with an individualized education program when sampled	Age and survey completion year of the youth analyzed in this volume
NLTS 2012	Ages 13 to 21 in the 2011–2012 school year	Ages 15 to 18 and 19 to 21 in 2012 or 2013
NLTS2	Ages 13 to 16 in the 2000–2001 school year	Ages 15 to 18 in 2003
NLTS	Ages 13 to 21 in the 1985–1986 school year	Ages 15 to 18 and 19 to 21 in 1987

Source: National Longitudinal Transition Study 2012; National Longitudinal Transition Study 2; National Longitudinal Transition Study.

The study team made one additional restriction to the NLTS 2012 analytic sample to improve comparability of measures that are correlated with age. To match the age ranges of youth in the NLTS and NLTS2, the 15-year

old youth from the NLTS 2012 included in this volume are only those who were at least 15 years and 5 months in age. The amount of time that elapsed between sample selection and data collection for the NLTS2 and NLTS meant that the respondent sample of 15-year-olds in NLTS2 Wave 2 and NLTS Wave 1 were older (that is, concentrated more among those closer to their 16th birthday). For example, when the NLTS2 Wave 2 data was collected in spring 2003, the 15-year-olds tended to be older within that age. The NLTS 2012 full sample, in contrast, included the full range of 15-year-olds when data were collected in 2012 and 2013 because the original sample focused on 13- to 21-year-olds. Thus, it was necessary to exclude the youngest NLTS 2012 15 year olds to maintain comparability with the other studies in the NLTS series.

This volume also examines trends for groups of youth with an IEP defined by their primary disability reported by school districts in accordance with IDEA. Before 1990, IDEA did not recognize autism and traumatic brain injury as distinct categories of disabilities. The youth with these disabilities in the NLTS were assigned to other categories based on the descriptions of the primary disability provided by parents, or to other health impairments if no such description was provided (Wagner et al., 2003). The study team for this volume, in consultation with IES and the NLTS 2012 TWG, did not combine any disability groups to address the differences in category definitions over time, judging the set of categories at each time point to be the most policy-relevant groups for a descriptive analysis of trends in their characteristics and experiences. Finally, this volume does not provide information for 19- to 21-year-olds disaggregated by disability due to small sample sizes in some of the disability groups.

The final sample sizes for the analysis in this volume were 6,151 respondents to the NLTS 2012 parent survey and 5,177 respondents to the NLTS 2012 youth survey; 5,457 respondents to the NLTS2 parent survey and 2,773 respondents to the NLTS2 youth survey; and 5,345 respondents to the NLTS parent survey.

A.6. Development of weights and weight adjustments for this volume

The analysis weights in the three studies were created so that sample estimates reflected the populations of interest, specifically the population of students with an IEP by age during the relevant school year. The study team used the weight variables supplied in each study's restricted-use data file (RUF).[6] The NLTS 2012 weights were developed in three stages (Burghardt et al., 2017). First, the team calculated the probability of selection of each student, based on the sample design. Second, the weights were adjusted to account for nonresponse separately for parents and youth. Third, the weights were post-stratified so that the totals matched those for specific demographic and age groups. The NLTS2 and NLTS weights were calculated by first adjusting the initial student sampling weights by disability category based on the geography of and poverty rate in each size stratum (Wagner et al., 2005; Javitz & Wagner, 1990).

The weights supplied in each RUF were then adjusted for the purposes of conducting the trends analysis so that the weighted counts of students by disability group were equal to the corresponding totals in the student population. Post-stratification was conducted in consultation with IES and the NLTS 2012 TWG. The details of the post-stratification process for each study are described below.

[6] The weight variables for the NLTS 2012 are called *p_weight_enrolled* and *y_weight_enrolled*. The weight variables for the NLTS2 Wave 2 are called *np2Wt* and *np2YouthWt*. The weight variable for the NLTS is called *W1_Base_Weight*.

- **NLTS 2012.** Three adjustments to the weights were needed for the analyses in this volume. First, youth outside the 15 to 21 age range were assigned a missing weight value, including the younger 15-year-olds who were excluded from the analytic sample as described in section A.5. Second, the study constructed a consistent definition of being enrolled in school across the three NLTS data sources, and assigned a missing weight value to anyone not meeting that definition.[7] Third, the remaining sample was post-stratified to represent the full population of students with an IEP by age. These changes had different effects on the weights for youth at different ages. For 15-year-olds, the weights among the remaining youth who were enrolled in school based on the modified definition were increased to represent the full population of 15-year-olds. The weights for youth ages 16 and 17 who were enrolled in school based on the modified definition were also increased to represent the full population of youth at each age. For the 19- to 21-year-olds, the original NLTS 2012 analysis weights were based on a more complex post-stratification process, including grouping all youth who were at least 19 years old together and including covariates such as gender and race (Burghardt et al., 2017). In this volume, the weights were adjusted so that youth ages 19, 20, and 21 represented the full population of youth with an IEP age each age.
- **NLTS2 and NLTS.** The weights for the analysis samples were adjusted to match enrolled population totals by age in the school year in which data were collected. Because the NLTS2 data collection was fielded in spring 2003, the weights were post-stratified to the 2002–2003 school year. As in the NLTS 2012, the weights for the 15-year-olds in the NLTS2 were increased so they represented the full population of 15-year-olds. The NLTS data collection occurred in summer and fall 1987, but the weights had been post-stratified to match the 1985–1986 school year, when sampling occurred. The study team instead post-stratified them to match the 1987–1988 school year in which data collection took place. The post-stratification targets used in this volume for each study included some youth with an IEP from U.S. entities beyond the 50 states and Washington, DC (namely, the Bureau of Indian Education schools for NLTS2 and U.S. territories for the NLTS), but these entities constitute less than 1 percent of all youth with an IEP.

Tables A-5 and A-6 show the post-stratification adjustment factors for respondents in each age and study. The adjustment factor is the population size divided by the sum of the unadjusted analysis weights, and ranges from 0.38 to 3.04 for the parent survey and 0.47 to 2.98 for the youth survey.

[7] The definition of being enrolled in school in Volume 3 is based on parent survey responses only because the NLTS did not include a youth survey in 1987. In contrast, youth in the Volumes 1 and 2 reports could be labeled as enrolled in school based on responses to either the NLTS 2012 parent or youth survey.

Table A-5. Sample sizes and adjustment factors for the parent survey, by study and age of youth

Youth age	Population size	Unadjusted sample size	Adjusted sample size	Sum of unadjusted analysis weights	Adjustment factor for analysis weights	Sum of adjusted analysis weights
NLTS 2012 15 to 18 years old in 2012						
15 years old	445,915	1,630	990	279,211	1.60	445,915
16 years old	441,951	1,520	1,520	440,701	1.00	441,951
17 years old	418,363	1,480	1,480	419,613	1.00	418,363
18 years old	234,366	1,200	1,200	234,366	1.00	234,366
NLTS 2012 19 to 21 years old in 2012						
19 years old	75,371	550	550	79,329	0.95	75,371
20 years old	37,621	260	260	30,304	1.24	37,621
21 years old	18,493	150	150	17,505	1.06	18,493
NLTS2 15 to 18 years old in 2003						
15 years old	479,678	630	630	157,928	3.04	479,678
16 years old	438,322	1,700	1,700	478,316	0.92	438,322
17 years old	373,807	1,680	1,680	450,527	0.83	373,807
18 years old	196,142	1,450	1,450	456,958	0.43	196,142
NLTS 15 to 18 years old in 1988						
15 years old	287,784	810	810	166,660	1.73	287,784
16 years old	268,633	1,000	1,000	209,104	1.28	268,633
17 years old	223,930	1,040	1,040	222,654	1.01	223,930
18 years old	126,553	1,090	1,090	176,099	0.72	126,553
NLTS 19 to 21 years old in 1988						
19 years old	43,484	740	740	114,583	0.38	43,484
20 years old	18,240	370	370	44,932	0.41	18,240
21 years old	9,558	300	300	20,185	0.47	9,558

Note: Unadjusted and adjusted sample sizes are rounded to the nearest 10. The sum of the unadjusted analysis weights does not equal the population size for NLTS 2012 due to a modified definition of enrolled in school for comparability over time, the adjustment to the sample size for 15-year-olds, and differences in the post-stratification process used in this volume versus the NLTS 2012 restricted-use data file.

Source: Authors' calculations using the National Longitudinal Transition Study 2012, National Longitudinal Transition Study 2, and the National Longitudinal Transition Study data.

Table A-6. Sample sizes and adjustment factors for the youth survey, by study and age of youth

Youth age	Population size	Unadjusted sample size	Adjusted sample size	Sum of unadjusted analysis weights	Adjustment factor for analysis weights	Sum of adjusted analysis weights
NLTS 2012 15 to 18 years old in 2012						
15 years old	445,915	1,410	840	269,902	1.65	445,915
16 years old	441,951	1,310	1,310	440,693	1.00	441,951
17 years old	418,363	1,250	1,250	419,621	1.00	418,363
18 years old	234,366	1,000	1,000	234,366	1.00	234,366
NLTS 2012 19 to 21 years old in 2012						
19 years old	75,371	450	450	79,353	0.95	75,371
20 years old	37,621	210	210	29,984	1.25	37,621
21 years old	18,493	120	120	17,338	1.07	18,493
NLTS2 15 to 18 years old in 2003						
15 years old	479,678	610	610	160,811	2.98	479,678
16 years old	438,322	1,600	1,600	416,807	1.05	438,322
17 years old	373,807	1,600	1,600	466,106	0.80	373,807
18 years old	196,142	1,360	1,360	420,216	0.47	196,142

Note: Unadjusted and adjusted sample sizes are rounded to the nearest 10. The sum of the unadjusted analysis weights does not equal the population size for NLTS 2012 due to a modified definition of enrolled in school for comparability over time, the adjustment to the sample size for 15-year-olds, and differences in the post-stratification process used in this volume versus the NLTS 2012 restricted-use data file.

Source: Authors' calculations using the National Longitudinal Transition Study 2012 and National Longitudinal Transition Study 2 data.

A.7. Unit nonresponse bias analysis

Because low response rates can lead to a bias in results if survey respondents and nonrespondents have different characteristics, all three studies in the NLTS series conducted analyses to examine the potential for nonresponse bias in the surveys. Together, the results suggest that nonresponse adjustments to the weights succeeded in limiting the potential for bias. However, it remains possible that the nonresponse-adjusted weights do not fully account for all differences between respondents and nonrespondents. Thus, readers should draw conclusions with caution.

More details on the unit nonresponse analyses conducted for each study are available in Burghardt et al. (2017) and Javitz & Wagner (1990, 2005).

A.8. Imputation and the handling of missing data

For the analysis in this volume, values in all three studies in the NLTS series were imputed for a binary variable that indicates whether the youth is from a low-income household. This constructed variable is defined as household income below 185 percent of the federal poverty level, which is the eligibility threshold for schools' free or reduced-price lunch programs. The study used available income and other data needed to calculate whether household income was within 185 percent of the federal poverty level. Household income is calculated using parent-reported income or the midpoint of parent-reported income ranges. The federal poverty level for the household is based on parent reports of the total number of adults and children in the household, as well as

on the year for which income is reported and the state of residence. The study imputed values in each dataset when one of these key variables was missing. Specifically, the study used a hot deck imputation procedure to impute values for the variable, using other variables that were most highly correlated with whether the household's income was above or below 185 percent of the federal poverty level, as determined from logistic regression models. Just over 7 percent of parent survey respondents for the NLTS 2012, 17 percent for the NLTS2, and 12 percent for the NLTS have imputed values for this variable.

A.9. Statistical procedures and variance estimation

A.9.1. Statistical procedures

The volume presents comparisons of averages between groups of students from different studies that have been tested for statistically significant differences (set at a probability of 0.05) to assess whether they are larger than might be expected due to sampling variation. All of the comparisons in this volume are between mutually exclusive groups. F-tests are computed using the following formula:

$$F = \frac{(\mu_1 - \mu_0)^2}{\text{var}(\mu_1) + \text{var}(\mu_0)}$$

In the formula, μ_1 and μ_0 are the estimates of the means for the two groups being compared. For example, μ_1 could be the mean for youth with an IEP overall in 2012 and μ_0 the mean for youth with an IEP overall in 2003. The test statistic is compared to an F distribution, with degrees of freedom equal to 1 and the difference between the number of primary sampling units and strata. Whether the F-test statistic is considered statistically significant is determined by comparing it with published tables of critical values. The report did not make a statistical adjustment for multiple comparisons.

This statistical procedure in this volume differs from the comparisons in Volumes 1 and 2, many of which are between overlapping groups in which one group is a subset of a larger reference group. In contrast to the F-statistic used in Volumes 1 and 2, the F-statistic used in this volume does not include a covariance term because the variance of the mean for a group in a given time period does not depend on the analytic sample from another time period. As a result, the two means are independent, and the covariance term is equal to 0.

The report focuses on differences that are both (a) statistically significant (not due to chance) and (b) at least 5 percentage points to call attention to the variation that is substantive and policy relevant. The study team selected this level in consultation with IES and content experts, judging differences of less magnitude not large enough to inform policy, practice, or the targeting of technical assistance. The 5 percentage point level was not empirically derived or based on an external standard.

A.9.2. Variance estimation

The sample design for all three studies in the NLTS series included multiple stages of sampling and stratification with different selection rates of youth across disability groups. Many standard software packages calculate

estimates under the assumption of a simple random sample design as in traditional mathematical statistics and do not account for the clustering of students within schools. Assuming that the studies used simple random sample designs is not correct and can lead to estimated variances and confidence intervals that are too small. Underestimating the width of confidence intervals can incorrectly lead to conclusions that the trend for a group is upward or downward by a statistically significant margin when it is not. To support the variance estimation, the study developed variance estimation parameters that permit the computation of variance estimates through a Taylor series approximation using only the analytic weight. Analyses supporting this report used statistical software with the capabilities of accounting for the complex design.

A.10. Analytic variables

This volume uses information collected through parent and youth surveys for the three studies in the NLTS series, and from administrative sources, to address five broad questions of interest to policymakers, educators, and other stakeholders (listed below). The volume describes only the survey measures most relevant to addressing these questions that can be compared across the studies.

- How have the background characteristics of youth and the schools they attend changed?
- Are the challenges youth face with health, functional abilities, and independent living different than in the past?
- Are youth engaging in school in different ways or to different degrees?
- Have the academic and special education supports that youth receive changed?
- How have youth changed the way they prepare for life after high school?

The first subsection (A.10.1) describes the process for identifying comparable measures from across the studies. The next subsection (A.10.2) lists the analytic variables included in this volume. Subsection A.10.3 provides more detail on constructed measures used in the analysis that involve administrative data. Finally, subsection A.10.4 describes a set of key indicators for the analysis. The RUFs for each data file provide more information for researchers, including copies of the parent and youth survey instruments and codebook descriptions of each variable.

A.10.1. Process for identifying comparable measures across studies

This volume presents trends only for measures that can be meaningfully compared across the NLTS 2012, NLTS2, and/or NLTS. The study team used the following four criteria to select measures for the analysis.

1. **The wording of the survey questions must be substantively the same.** Data had to be based on survey questions with the same or similar wording to serve as indicators of the same underlying constructs. If the wording differed slightly across the surveys, the study team determined whether the question was likely to have had the same interpretation by respondents in each study. For example, youth responding to the NLTS2 Wave 2 survey were asked to "Please tell me how much you . . . feel like you were part of the school," whereas those responding to the NLTS 2012 survey were asked to what degree "I felt like I was part of this school." Although the wording of the questions differs, the study team judged them to be substantively the same. The study team considered a survey question that references different amounts of time across the

studies to be not comparable. For instance, NLTS parents were asked whether their children had been in households that received Supplemental Security Income (SSI) benefits in the past 12 months. The question was also posed to parents in NLTS2 and NLTS 2012, but those questions asked whether SSI benefits were received in the past two years, likely leading to higher proportions. Due to this difference in the reference period, this volume examines SSI benefit receipt using only the NLTS 2012 and NLTS2 data.

2. **The wording of the response categories must be qualitatively similar.** The set of available responses to the questions had to align across studies to measure constructs in the same way. For example, the response categories for the question about whether youth feel a part of the school differed between the NLTS 2012 and the NLTS2. In the NLTS 2012, the response options were "agree a lot," "agree a little," "disagree a little," and "disagree a lot." In NLTS2, the response options were "a lot," "pretty much," "a little," and "not at all." The only qualitatively similar response for examining trends is "agree a lot" (NLTS 2012) and "a lot" (NLTS2).

3. **The intended type of survey respondent must be the same.** The analyses for this volume did not examine trends for measures asked of different survey respondents (for example, parent survey respondents in one study and youth survey respondents in another). Comparing responses from a parent survey with responses from a youth survey can be problematic because parents and youth might have different perspectives on the same question. For example, the NLTS 2012 and the NLTS2 asked youth questions about their participation in school activities, whereas the NLTS asked these questions of parents. For these variables, this volume therefore examines trends using data from only the NLTS 2012 and the NLTS2. The analyses did, however, retain youth data provided by parent proxies because the intended type of survey respondent was the same (section A.4 contains more detail on proxy responses).

4. **The measure must exist in the data file.** Several of the measures collected for the NLTS are not included in the available RUF. For instance, activities of daily living are available only as an aggregate measure in NLTS and not as individual items in the data file.

A.10.2. List of analytic variables

Table A-7 provides the full set of analytic variables used in Volume 3, organized by the five questions addressed in the volume. The first three columns of the table describe each variable, indicate how it is referred to in the NLTS 2012 RUF, and list the appendix table in which it is used. The last two columns indicate how the variable was modified relative to its use in Volumes 1 and 2 to be comparable to similar variables in one or both previous studies. Most modifications pertained either to the formulation of the measure's content (for example, examining responses that agree "a lot" instead of agree "a little" or "a lot") or its analytic universe.

Table A-7. NLTS 2012 variables used in Volume 3

Description	Variable name(s) in NLTS 2012 RUF	Appendix table number	Modification of analytic variable relative to Volumes 1 and 2 for comparability with previous studies	Modification of analytic universe relative to Volumes 1 and 2 for comparability with previous studies
What are the background characteristics of youth and the schools they attend?				
Youth in households in which parent or spouse has a paid job	p_h_employed	B-1	None	None
Youth in low-income households	p_h_pov185	B-2	None	None
Youth in households that received SNAP benefits in the past two years	p_h_snap	B-3	None	None
Youth in households that received TANF or state welfare benefits in the past two years	p_h_tanf	B-4	None	None
Youth who received SSI benefits in the past two years	p_y_ssi	B-5	None	None
Youth whose parent is not married or in a marriage-like relationship	p_p_notmarried	B-6	None	
Youth who have private health insurance	p_y_inshealthpriv	B-7	None	Restricted from all youth to those who live with their parents at least some of the time and are younger than 18
Youth who have government-assisted or public health plans	p_y_inshealthother	B-8	None	Restricted from all youth not covered by private health insurance to those who live with their parents at least some of the time and are younger than 18
Youth who have private nor public health insurance	p_y_inshealth	B-9	None	Restricted from all youth to those who live with their parents at least some of the time and are younger than 18
Youth who are male	p_y_male	B-10	None	None
Youth who are Black, not Hispanic or Latino	p_y_raceeth3	B-11	None	None
Youth who are Hispanic or Latino, of any race	p_y_raceeth3	B-12	None	None
Youth who are White, Asian, or other race, not Hispanic or Latino	p_y_raceeth3	B-13	None	None
Youth attending a school for students with disabilities	p_y_school	B-14	None	None
What challenges do youth face relating to health, functional abilities, and independence?				
Youth who have excellent or very good health	p_y_health	C-1	None	None
Youth who use prescription behavioral medicines	p_y_medicine	C-2	None	None
Youth who have any trouble communicating by any means	p_y_communicate	C-3	None	None
Youth who have any trouble understanding what other people say to them	p_y_understand	C-4	None	None
Youth who fix their own breakfast or lunch	p_y_fixmeal	C-5	None	Restricted from all youth to those who live with their parents at least some of the time and are younger than 17
Youth who do laundry	p_y_dolaundry	C-6	None	Restricted from all youth to those who live with their parents at least some of the time and are younger than 17
Youth who straighten up their own room or living area	p_y_cleanroom	C-7	None	Restricted from all youth to those who live with their parents at least some of the time and are younger than 17

Description	Variable name(s) in NLTS 2012 RUF	Appendix table number	Modification of analytic variable relative to Volumes 1 and 2 for comparability with previous studies	Modification of analytic universe relative to Volumes 1 and 2 for comparability with previous studies
Youth who buy things they need at the store	p_y_buything	C-8	None	Restricted from all youth to those who live with their parents at least some of the time and are younger than 17
Youth who get to places outside the home	p_y_getplace	C-9	None	Restricted from all youth to those who live with their parents at least some of the time and are younger than 17
Youth who perform all five activities of daily living well	p_y_fixmeal, p_y_dolaundry, p_y_cleanroom, p_y_buything, p_y_getplace	C-10	Examines youth who perform all five activities "always" or "often" without help, rather than creating a scale of responses	Restricted from all youth to those who live with their parents at least some of the time and are younger than 17
Youth who have an allowance or other money they can decide how to spend	y_y_haveallowance	C-11	None	None
Youth who have a savings or checking account	y_y_haveaccount	C-12	None	None
How engaged are youth in school and with friends?				
Youth who agree a lot that they feel part of the school	y_y_belongatschool	D-1	Examines responses that agree "a lot" instead of agree "a little" or "a lot"	None
Youth who agree that a school adult cares about them	y_y_adultcare	D-2	None	None
Youth who agree that they feel safe in school	y_y_feelsafe	D-3	None	None
Youth who had items stolen from their locker, desk, or other place at school	y_y_robbed	D-4	None	None
Youth who were teased or called names at school	y_y_teased	D-5	None	None
Youth who participated in a school or non-school club or sports team	y_y_schactany, y_y_nonactany	D-6	Combines in-school and out-of-school activities, rather than separate measures	None
Youth who participated in a school club or sports team	y_y_schactany	D-7	None	None
Youth who participated in a non-school club or sports team	y_y_nonactany	D-8	None	None
Youth who participated in a sports team	y_y_schactsports, y_y_nonsports	D-9	Combines in-school and out-of-school activities, rather than separate measures	None
Youth who participated in a club	y_y_schactarts, y_y_schactgov, y_y_schactacademics, y_y_schactvolunteer, y_y_schactcareer, y_y_schactother, y_y_nonactarts, y_y_nonactrel, y_y_nonacademics, y_y_nonactvolunteer, y_y_nonactother	D-10	Combines in-school and out-of-school activities, rather than separate measures	None
Youth who participated in a fine arts club or lesson	y_y_schactarts, y_y_nonactarts	D-11	Combines in-school and out-of-school activities, rather than separate measures	None
Youth who participated in student government	y_y_schactgov	D-12	None	None

Description	Variable name(s) in NLTS 2012 RUF	Appendix table number	Modification of analytic variable relative to Volumes 1 and 2 for comparability with previous studies	Modification of analytic universe relative to Volumes 1 and 2 for comparability with previous studies
Youth who participated in an academic club or lesson	y_y_schactacademics, y_y_nonacademics	D-13	Combines in-school and out-of-school activities, rather than separate measures	None
Youth who participated in a volunteer group	y_y_schactvolunteer, y_y_nonactvolunteer	D-14	Combines in-school and out-of-school activities, rather than separate measures	None
Youth who participated in a vocational or career club	y_y_schactcareer	D-15	None	None
Youth who participated in a religious youth group	y_y_nonactrel	D-16	None	None
Youth who participated in another club or activity	y_y_schactother	D-17	None	None
Youth who have repeated a grade	p_y_heldback	D-18	None	None
Youth who have received an out-of-school suspension	p_y_suspended	D-19	None	None
Youth who have been expelled from school	p_y_expelled	D-20	None	None
Youth who have been arrested in the past two years	p_y_arrested	D-21	None	None
What academic supports do youth receive?				
Youth who received support services at school	p_y_tutor, p_y_accsrv_reader, p_y_accsrv_mental, p_y_accsrv_hear, p_y_accsrv_lang, p_y_accsrv_mob, p_y_accsrv_phys, D31y, p_y_accsrv_transp,	E-1	Combines tutoring, reader/interpreter, psychological/mental health counseling, audiology, speech or language, mobility and orientation, and physical or occupational therapy, life skills, and special transportation services	Restricted from youth who were ever diagnosed with a disability, ever had an IEP, or ever had a 504 plan according to parents to youth who received special education services in the past year according to parents
Youth who received services from a tutor, reader, or interpreter at school	p_y_tutor, p_y_accsrv_reader	E-2	Examines youth who received tutoring or reader/interpreter services, instead of only tutoring	Restricted to youth who received special education services in the past year according to parents
Youth who received psychological or mental health counseling services at school	p_y_accsrv_mental	E-3	None	Restricted to youth who received special education services in the past year according to parents
Youth who received audiology services at school	p_y_accsrv_hear	E-4	None	Restricted to youth who received special education services in the past year according to parents
Youth who received speech or language therapy at school	p_y_accsrv_lang	E-5	None	Restricted to youth who received special education services in the past year according to parents
Youth who received physical or occupational therapy at school	p_y_accsrv_mob, p_y_accsrv_phys, D31y	E-6	Examines youth who received physical, mobility, or life skills services instead of only physical or mobility services	Restricted to youth who received special education services in the past year according to parents
Youth received special transportation services at school	p_y_accsrv_transp	E-7	None	Restricted to youth who received special education services in the past year according to parents
Youth whose parent attended a parent-teacher conference	p_p_schconf	E-8	None	Restricted from all youth to youth who were enrolled in a school setting according to parents (e.g., not homeschooled or in a medical facility only)

Description	Variable name(s) in NLTS 2012 RUF	Appendix table number	Modification of analytic variable relative to Volumes 1 and 2 for comparability with previous studies	Modification of analytic universe relative to Volumes 1 and 2 for comparability with previous studies
Youth whose parent helped with homework at least once a week	p_p_helphomework	E-9, E-10	None	Restricted from all youth to youth who were enrolled in a school setting according to parents (e.g., not homeschooled or in a medical facility only)
Youth whose parent helped with homework and who received tutoring	p_y_tutor, p_y_accsrv_reader, p_p_helphomework	E-11	Combines youth who received tutoring and reader/interpreter services and whose parent helped with homework, rather than each measure separately	Restricted to youth who live with their parents at least some of the time, were not homeschooled, who did not live in a residential school, and who received special education services in the past year according to parents
Youth whose parent helped with homework or who received tutoring	p_y_tutor, p_y_accsrv_reader, p_p_helphomework	E-12	Combines youth who received tutoring or reader/interpreter services and whose parent helped with homework, rather than each measure separately	Restricted to youth who live with their parents at least some of the time, were not homeschooled, who did not live in a residential school, and who received special education services in the past year according to parents
Youth whose parent talks with them regularly about school experiences	p_p_talksch	E-13	None	Restricted to youth who live with their parents at least some of the time and were enrolled in a school in a school setting (e.g., not homeschooled, in a medical facility, a post-high school program, or a correctional or juvenile justice facility only)
Youth whose parent attended a general school meeting	p_p_schmeet	E-14	None	Restricted to youth who were enrolled in a school in a school setting (e.g., not homeschooled, in a medical facility, a post-high school program, or a correctional or juvenile justice facility only)
Youth whose parent volunteered at school	p_p_schvolunteer	E-15	None	Restricted to youth who were enrolled in a school in a school setting (e.g., not homeschooled, in a medical facility, a post-high school program, or a correctional or juvenile justice facility only)
How are youth preparing for life after high school?				
Youth who have met with school staff to develop a transition plan	y_y_tpmeet	F-1	None	Restricted to youth who received special education services in the past year according to parents
Youth whose parent has met with school staff to develop a transition plan	p_p_tpmeet	F-2	None	Restricted to youth who received special education services in the past year according to parents

Description	Variable name(s) in NLTS 2012 RUF	Appendix table number	Modification of analytic variable relative to Volumes 1 and 2 for comparability with previous studies	Modification of analytic universe relative to Volumes 1 and 2 for comparability with previous studies
Youth who attended an IEP meeting in the past two years	y_y_iepmeet17	F-3	None	Restricted to youth who received special education services in the past year according to parents
Youth whose parent attended an IEP meeting in the past two years	p_p_iepmeet17	F-4	None	Restricted to youth who received special education services in the past year according to parents
Youth who provided at least some input in IEP and transition planning	p_y_goalsomeinput	F-5	None	Restricted to youth who received special education services in the past year according to parents
Youth who had a nonschool paid job at the time of the survey	N7	F-6	Examines youth who had a nonschool paid job at the time of the survey instead of in the past 12 months	Restricted to youth who were enrolled in a school in a school setting (e.g., not homeschooled, in a medical facility, a post-high school program, or a correctional or juvenile justice facility only)
Youth who had a school-sponsored job	N1	F-7	None	Restricted to youth who were enrolled in a school in a school setting (e.g., not homeschooled, in a medical facility, a post-high school program, or a correctional or juvenile justice facility only)
Youth who had a paid school-sponsored job	N1, N1b	F-8	Variable not examined in Volumes 1 and 2	Not applicable
Youth who had an unpaid school-sponsored job	N1, N1b	F-9	Variable not examined in Volumes 1 and 2	Not applicable

NLTS is National Longitudinal Transition Study; RUF is restricted-use data file; SNAP is Supplemental Nutrition Assistance Program; TANF is Temporary Assistance for Needy Families; IEP is individualized education program.

Source: National Longitudinal Transition Study 2012.

A.10.3. Constructed measures that involve administrative data

This section describes constructed measures the study developed based on administrative data provided by school districts as part of the sample frame. Brief descriptions of all analytic variables are available in the note and source fields beneath each table or figure. In addition, detailed descriptions of each variable are provided to users of the NLTS 2012 data in the NLTS 2012 Users Guide (Bloomenthal et al., 2017). The study team examined comparable variables from the NLTS and/or NLTS2.

- **Youth disability group (*d_y_disability*).** This variable indicates the youth's primary disability group as reported by school districts, and is used to form the groups in the analysis. The categories are autism, deaf-blindness, emotional disturbance, hearing impairment, intellectual disability, multiple disabilities, orthopedic impairment, other health impairment, specific learning disability, speech or language impairment, traumatic brain injury, visual impairment, IEP but unspecified disability, 504 plan but no IEP, and neither 504 plan nor IEP.
- **Youth age (*p_y_age*).** This variable indicates the youth's age in years at the time the parent survey respondent completed the parent survey. School districts provided the birth date information used in the study, which parents either confirmed or corrected in the survey.
- **Youth gender (*p_y_gender*).** This variable indicates whether the youth is male or female. The variable relies on district-reported data when parent-reported data are missing.
- **Youth race and ethnicity (*p_y_raceeth3*).** This variable indicates whether the youth is Black (not Hispanic); Hispanic; or White, Asian, or other race (not Hispanic). Black includes African American. Hispanic includes Latino. Other race includes American Indian or Alaska Native, and Native Hawaiian or other Pacific Islander. The variable relies on district-reported data when parent-reported data are missing.
- **Youth limited English proficiency status (*d_y_lep*).** This variable indicates whether the youth is limited English proficient or not, as reported by the school district.

A.10.4. Key indicators linked to post-high school success

The most important findings pertain to key experiences, services, and expectations selected by the study team that are predictors of youths' post-high school outcomes. Several of these indicators also represent supports or activities that IDEA encourages schools to offer to youth with an IEP to improve their outcomes. Table A-8 identifies these key indicators and some of the reasons they are important to policymakers, educators, and other stakeholders. This volume's executive summary focuses on this subset of the large number of measures available from this study.

Table A-8. Key indicators linked to post-high school success

Chapter	Measure	Survey	Why measure is important to policymakers and educators
3	Performing five activities of daily living always or often without help	Parent	The ability to complete daily activities at home and in the community may be a signal of preparedness to live independently in the future. Promoting functional independence is also an intent of transition services provided by schools under IDEA 2004. Prior studies on youth with an IEP found an association between performance on activities of daily living and higher rates of post-high school employment and self-reported higher quality of life (Carter, Austin, & Trainor, 2012; Roessler, Brolin, & Johnson, 1990).
4	Participating in at least one school-sponsored extracurricular activity in the past year	Youth	Participating in organized extracurricular activities is thought to help students connect with school and friends, and build teamwork and leadership skills. Prior studies of youth overall found a correlation between participation in these activities and academic performance, better educational attainment, and labor market success (Barron et al., 2000; Kuhn & Weinberger, 2005; Lipscomb, 2007; Stevenson, 2010).
4	Ever having been suspended from school	Parent	Suspensions cause students to miss instruction and opportunities to be engaged in school, and are associated with a variety of negative outcomes including low academic achievement, dropping out of high school, and adult incarceration (Christle, Jolivette, & Nelson, 2005; Sullivan et al., 2014; Zablocki & Krezmien, 2013). Concern about high rates of disciplinary actions among students with disabilities is reflected in the IDEA 2004 performance indicator that requires states to monitor how often youth with an IEP are suspended and expelled.
5	Received services from a tutor, reader, or interpreter at school	Parent	Both IDEA 1997 and 2004 increased the emphasis on improving the academic achievement of youth in special education because academic performance is widely considered to be positively related to outcomes later in life. Schools can support these students using the support services funded by IDEA, such as tutoring, as well as psychological services, speech and language therapy, physical and occupational therapy, and others. With passage of the No Child Left Behind Act, schools are increasingly expected to improve the academic proficiency youth with an IEP as a targeted subgroup. One way in which the act supported youth in low-performing schools was by promoting tutoring services (Warkentien & Grady, 2009).
5	Receiving parental help with homework at least weekly during the school year	Parent	Updates to IDEA since 1997 have emphasized the need to get parents involved in the educational development of their children. Parental homework help is positively correlated with achievement-related outcomes for high school students (Patall, Cooper, & Robinson, 2008). Among youth in special education specifically, parental involvement in education at home is a predictor of postsecondary enrollment in career and technical education programs as well as in two-year and four-year colleges (Wagner, Newman, & Javitz, 2014).
6	Youth attended a transition-planning meeting	Parent	Since IDEA began mandating transition services in 1990, practitioners and policymakers have placed greater emphasis on youth being active participants during IEP meetings and discussions about their transition plans (Johnson, 2012; Martin & Marshall, 1995; Wehmeyer, Agran, & Hughes, 1998). This emphasis on promoting self-determination reflects prior findings that student participation in transition planning significantly predicted youth with disabilities who enroll in postsecondary education and become employed after high school (Benz, Lindstrom, & Yovanoff, 2000; Halpern, Yovanoff, Doren, & Benz, 1995).

Chapter	Measure	Survey	Why measure is important to policymakers and educators
6	Having a paid job in the past year, including school-sponsored and nonschool jobs	Youth	A common finding in the research literature is that paid employment during high school is a strong predictor of, though not necessarily causally related to, post-high school employment and education for youth with an IEP (Mazzotti et al. 2016; Test et al. 2009). Although these findings may reflect, in part, the fact that youth who are already more independent during high school are more capable of working, high school employment experiences may also help students with disabilities to develop competencies that are useful for their longer term success (Cobb et al., 2013). For this reason, placing students in paid jobs is a key component of several work-based learning programs and other initiatives designed to improve employment outcomes for youth with disabilities (Baer et al., 2003; Fraker, 2013; Luecking & Fabian, 2000).

ED is U.S. Department of Education; IDEA 2004 is 2004 authorization of the Individuals with Disabilities Education Act; IEP is individualized education program.

Source: National Longitudinal Transition Study 2012.

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Appendix B. Detailed tables for chapter 2 of volume 3: Comparisons over time

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Table B-1. Percentages of youth with an IEP who live in households in which no parent has a paid job, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	2012 (standard error)	2003 (standard error)	2012 (sample size)	2003 (sample size)
Youth ages 15 to 18							
IEP	2012-2003	19.7	15.3	0.98	1.89	5,130	5,220
AUT	2012-2003	16.6	8.9	1.8	1.39	530	640
DB	ns	‡	14.5!	‡	4.69	‡	90
ED	ns	26.5	25	1.97	4.93	640	360
HI	ns	17.3	12.4	2.66	3.11	290	460
ID	ns	32	28.4	2.2	2.89	630	470
MD	2012-2003	27.5	17.3	3.89	2.75	440	510
OI	ns	17.6	12.1	2.66	1.77	230	550
OHI	2012-2003	18.7	9.1	1.75	1.63	690	550
SLD	ns	17	12	1.52	2.33	840	470
SLI	ns	15	15.4	2	3.03	430	510
TBI	ns	16.6	12.5	3.66	2.91	150	210
VI	ns	10.2	10.7	2.86	1.72	140	400
Youth ages 19 to 21							
IEP	†	24.1	—	1.87	—	930	—

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003 indicates a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents, excluding proxies, were asked to indicate their employment status at the time of the survey and that of their spouse, if they have one. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variables H6 and H8 from National Longitudinal Transition Study 2012 and variables np2H10a and np2H8a from National Longitudinal Transition Study-2. The universe is youth who lived with their parents at least some of the time.

Table B-2. Percentages of youth with an IEP who live in low-income households, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	1987 (average)	2012 (standard error)	2003 (standard error)	1987 (standard error)	2012 (sample size)	2003 (sample size)	1987 (sample size)
Youth ages 15 to 18										
IEP	2003-1987	56.1	50.3	59.3	1.57	3.05	1.6	5,140	5,300	3,740
AUT	ns	34.9	30.8	—	2.37	3.03	—	530	640	—
DB	ns	36.8!	51.6	44.4	12.65	6.75	13.07	60	100	20
ED	2012-2003	60.7	49.8	58.3	2.38	4.67	2.96	640	370	330
HI	2012-2003; 2003-1987	57.8	42.6	54	3.41	4.45	2.64	290	480	820
ID	2012-2003	71.6	62.1	69.1	2.24	3.23	2.3	630	480	430
MD	2003-1987	51.2	45.4	62.2	4.28	4.63	4.71	440	520	270
OI	2003-1987	49.5	40.9	56.8	3.44	3.17	3.35	230	560	380
OHI	2012-2003; 2012-1987; 2003-1987	46.4	36.7	62.2	2.51	2.34	3.3	690	550	260
SLD	ns	58	50.3	56.8	2.28	4	2.48	850	470	510
SLI	2003-1987	51.4	45.1	57.8	3.29	5.43	3.38	430	510	280
TBI	ns	49	39.9	—	5.82	3.99	—	150	210	—
VI	ns	48.8	47.9	56.9	5.08	3.99	3.56	140	410	440
Youth ages 19 to 21										
IEP	ns	58.2	—	54.5	2.44	—	2.52	940	—	1,220

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003, 2012-1987, 2003-1987 indicate a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents were asked to indicate their income and household size in the previous year. Data for a small number of observations was imputed when not available from the parent survey. Low household income is household income below 185 percent of the federal poverty level, which was $22,350 in 2012, $18,100 in 2003, $11,000 in 1987 for a family of four living in the continental United States in 2012. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variables H13 and H13a from National Longitudinal Transition Study 2012, variables np2H14[a-e] from National Longitudinal Transition Study-2, and variables Pw1_G01, Pw1_G02, and Pw1_G12 from National Longitudinal Transition Study. The universe is youth who lived with their parents at least some of the time.

Table B-3. Percentages of youth with an IEP who live in households that received SNAP benefits in the past two years, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	2012 (standard error)	2003 (standard error)	2012 (sample size)	2003 (sample size)
Youth ages 15 to 18							
IEP	2012-2003	33.2	15.9	1.37	2.1	5,130	5,220
AUT	2012-2003	16.8	5.8	1.79	1.11	530	640
DB	ns	13.8!	13.0!	5.39	4.58	60	100
ED	2012-2003	44.3	23.6	2.31	4.41	640	360
HI	2012-2003	28.7	12.5	3.05	3.28	290	470
ID	2012-2003	44.5	20.9	2.48	2.61	630	470
MD	2012-2003	34.7	13.2	4.38	2.6	440	520
OI	2012-2003	25.8	9.4	2.98	1.75	230	550
OHI	2012-2003	28	12.6	2.15	2.18	690	550
SLD	2012-2003	33	14.3	2.14	2.73	840	460
SLI	2012-2003	26.8	17.8	2.44	3.01	430	510
TBI	2012-2003	29	10.5	5.87	2.18	150	210
VI	2012-2003	27.1	8.3	4.56	1.66	140	400
Youth ages 19 to 21							
IEP	†	29.7	—	2.21	—	930	—

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003 indicates a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents were asked whether anyone in their household had received Supplemental Nutrition Assistance Program (SNAP) benefits in the past two years. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variable H10 from National Longitudinal Transition Study 2012 and variable np2H12a from National Longitudinal Transition Study-2. The universe is youth who lived with their parents at least some of the time.

Table B-4. Percentages of youth with an IEP who live in households that received TANF or state welfare benefits in the past two years, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	2012 (standard error)	2003 (standard error)	2012 (sample size)	2003 (sample size)
Youth ages 15 to 18							
IEP	ns	9.9	7.8	0.8	1.2	5,120	5,210
AUT	ns	5	4.9	1.14	1.2	530	640
DB	ns	‡	9.2!	‡	4.35	‡	100
ED	ns	14.4	13	1.67	3.2	640	360
HI	ns	9.5	7.3	1.83	1.96	290	470
ID	ns	13.5	10.6	1.87	1.74	630	470
MD	ns	10.5	6.6	2.08	1.39	440	510
OI	ns	5.8	5.8	1.5	1.02	230	550
OHI	ns	8.4	7.7	1.3	2	690	550
SLD	ns	8.5	6.4	1.02	1.43	840	460
SLI	ns	6.8	10.6	1.52	2.37	430	510
TBI	ns	6.3!	5.6	2.24	1.45	150	210
VI	ns	7.2!	3.2	2.57	0.88	140	400
Youth ages 19 to 21							
IEP	†	11	—	1.38	—	930	—

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003 indicates a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents were asked whether anyone in their household had received Temporary Assistance for Needy Families (TANF) or state welfare benefits in the past two years. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variable H9 from National Longitudinal Transition Study 2012 and variable np2H11a from National Longitudinal Transition Study-2. The universe is youth who lived with their parents at least some of the time.

Table B-5. Percentages of youth with an IEP who received SSI benefits in the past two years, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	2012 (standard error)	2003 (standard error)	2012 (sample size)	2003 (sample size)
Youth ages 15 to 18							
IEP	2012-2003	21.1	15.6	1.01	1.51	5,110	5,200
AUT	ns	27.7	25.9	2.16	2.77	530	630
DB	ns	48	41.9	10.62	6.43	60	90
ED	ns	29	23.5	2.09	3.73	640	350
HI	ns	30.7	24.5	3.17	3.28	290	460
ID	ns	47.7	40.3	2.55	3.32	630	470
MD	ns	41.2	38.5	3.53	4.22	430	510
OI	ns	38.2	35.3	5.28	3.16	230	550
OHI	2012-2003	16.7	10.5	1.62	1.28	690	550
SLD	ns	13.9	9.4	1.5	2.12	840	470
SLI	ns	11.1	7.7!	1.72	3.07	430	510
TBI	ns	29.7	22.8	5.32	3.76	150	210
VI	ns	33.2	32.7	4.67	3.61	140	400
Youth ages 19 to 21							
IEP	†	51.5	—	2.21	—	930	—

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003 indicates a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents were asked whether anyone in the household received money for the youth from the Supplemental Security Income (SSI) program in the past two years. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variable H11 from National Longitudinal Transition Study 2012 and variable np2H13a from National Longitudinal Transition Study-2. The universe is youth who lived with their parents at least some of the time.

Table B-6. Percentages of youth with an IEP whose parent is not married or in a marriage-like relationship, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	1987 (average)	2012 (standard error)	2003 (standard error)	1987 (standard error)	2012 (sample size)	2003 (sample size)	1987 (sample size)
Youth ages 15 to 18										
IEP	ns	37.2	31.1	34.7	1.34	3.37	1.64	5,130	5,150	3,720
AUT	ns	28.3	22.5	—	2.22	2.44	—	530	630	—
DB	ns	31.7	35.3	‡	8.81	6.67	‡	60	90	‡
ED	ns	47.8	42.8	41.2	2.28	4.39	3.12	640	360	330
HI	ns	36.9	30	35.3	3.61	4.85	2.4	290	460	820
ID	2012-2003	43.3	35.6	36.6	2.45	2.75	2.7	630	460	430
MD	2012-2003	41	26	34.9	4.02	2.84	4.68	440	510	270
OI	ns	33.2	29.3	36.5	3.25	3.38	3.29	230	550	380
OHI	2012-2003; 2003-1987	37.7	24.8	42.4	2.23	2.43	3.74	690	540	260
SLD	ns	35.3	29.2	32.2	2.03	4.51	2.52	840	450	510
SLI	2012-1987; 2003-1987	32	29.9	42.6	2.56	4.05	3.52	430	500	280
TBI	2012-2003	39	25.7	—	4.59	3.25	—	150	210	—
VI	ns	25.2	29.9	33.8	4.21	3.58	3.44	140	400	430
Youth ages 19 to 21										
IEP	ns	40.9	—	38.6	2.46	—	2.58	930	—	1,210

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003, 2012-1987, 2003-1987 indicate a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents were asked if they are married, in a marriage-like relationship, separated, divorced, widowed, or single (and never married). Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variable H1 from National Longitudinal Transition Study 2012, variable np2H5b from National Longitudinal Transition Study-2, and variable Pw1_G01 from National Longitudinal Transition Study. The universe is youth who lived with their parents at least some of the time.

Table B-7. Percentages of youth with an IEP who have private health insurance, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	2012 (standard error)	2003 (standard error)	2012 (sample size)	2003 (sample size)
Youth ages 15 to 17							
IEP	2012-2003	50.7	67	1.59	2.74	3,940	3,870
AUT	ns	70.6	76.7	2.67	2.94	390	480
DB	ns	57.8	56	11.77	7.91	40	80
ED	2012-2003	41.9	62	2.79	5.25	500	270
HI	2012-2003	45.4	62.5	4.07	4.93	230	350
ID	2012-2003	30.3	48.9	2.51	3.63	480	350
MD	ns	50.1	59.3	4.39	4.41	310	360
OI	ns	51.8	60.6	5.76	3.71	180	400
OHI	2012-2003	55.8	73.8	2.47	2.77	560	400
SLD	2012-2003	51.6	70.6	2.33	3.57	650	340
SLI	2012-2003	57.6	70.7	2.85	4.66	360	420
TBI	2012-2003	54.4	71.7	5.81	4.88	110	150
VI	ns	52.7	62.8	5.73	4.4	100	290
Youth ages 19 to 21							
IEP	†	—	—	—	—	—	—

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003 indicates a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents were asked whether the youth is currently enrolled in health insurance through an employer or union, or that they buy directly. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variable G8 from National Longitudinal Transition Study 2012 and variable np2C1 from National Longitudinal Transition Study-2. The universe is youth who lived with parents at least some of the time, who did not live alone, with a spouse or roommate, or in military housing, and are younger than 18.

Table B-8. Percentages of youth with an IEP who have government-assisted or public health plans, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	2012 (standard error)	2003 (standard error)	2012 (sample size)	2003 (sample size)
Youth ages 15 to 17							
IEP	ns	84.7	75.7	1.49	4.49	1,960	1,410
AUT	ns	92.9	90.8	2.55	3.31	110	140
DB	ns	65.4	91.1	17.09	4.52	20	30
ED	ns	90.1	78.9	1.89	8.08	290	120
HI	ns	86.4	84	3.15	4.89	130	130
ID	2012-2003	91.8	79.5	1.63	4.24	320	170
MD	ns	93.7	87.8	2.02	3.74	150	160
OI	ns	88.7	83.3	4.46	7.06	90	150
OHI	ns	88.9	83.9	2.19	4.01	250	110
SLD	ns	79.6	71.9	2.75	6.72	320	100
SLI	ns	78.1	77.9	3.48	7.23	160	140
TBI	ns	91.6	89.7	4.83	4.1	60	50
VI	ns	84.7	86	6.14	4.73	50	110
Youth ages 19 to 21							
IEP	†	—	—	—	—	—	—

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003 indicates a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents were asked whether the youth is covered by other health insurance program, including a government-assisted or public health insurance plan such as Medicare or Medicaid. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variable G9 from National Longitudinal Transition Study 2012 and variable np2C2 from National Longitudinal Transition Study-2. The universe is youth who lived with parents at least some of the time, who did not live alone, with a spouse or roommate, or in military housing, are younger than 18, and do not have private health insurance.

Table B-9. Percentages of youth with an IEP who have neither private nor public health insurance, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	2012 (standard error)	2003 (standard error)	2012 (sample size)	2003 (sample size)
Youth ages 15 to 17							
IEP	ns	7.5	8	0.78	1.5	3,930	3,870
AUT	ns	2.1!	2.1!	0.75	0.73	390	480
DB	ns	‡	3.9!	‡	1.84	‡	80
ED	ns	5.7	7.9!	1.1	2.96	500	270
HI	ns	7.4	6	1.78	1.79	230	350
ID	ns	5.7	10.4	1.14	2.43	480	350
MD	ns	3.1!	5	1.07	1.45	310	360
OI	ns	5.4!	6.6!	2.28	2.99	180	400
OHI	ns	4.9	4.2	0.97	1.1	560	400
SLD	ns	9.8	8.3	1.43	2.17	640	340
SLI	ns	9.3	6.5!	1.59	2.03	360	420
TBI	ns	‡	2.9!	‡	1.24	‡	150
VI	ns	7.2!	5.2!	3.06	1.87	100	290
Youth ages 19 to 21							
IEP	†	—	—	—	—	—	—

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003 indicates a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents were asked if the youth is covered by health insurance either through a private or public plan. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variables G8 and G9 from National Longitudinal Transition Study 2012 and variables np2C1 and np2C2 from National Longitudinal Transition Study-2. The universe is youth who lived with parents at least some of the time, who did not live alone, with a spouse or roommate, or in military housing, and are younger than 18.

Table B-10. Percentages of youth with an IEP who are male, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	1987 (average)	2012 (standard error)	2003 (standard error)	1987 (standard error)	2012 (sample size)	2003 (sample size)	1987 (sample size)
Youth ages 15 to 18										
IEP	ns	67.2	67.8	68.6	1.05	1.93	1.52	5,190	5,460	3,940
AUT	ns	84.2	85	—	1.67	1.8	—	540	660	—
DB	ns	68.7	59.9	61.4	5.94	6.4	11.16	70	100	20
ED	ns	74.4	74	76.1	2.13	2.98	2.55	650	400	370
HI	ns	54.3	46.7	52.4	3.46	3.42	2.57	290	490	870
ID	ns	58.6	59.1	58.1	2.22	2.67	2.62	640	490	440
MD	ns	65.1	62.5	68	2.82	3.03	4.25	450	540	310
OI	ns	62	55.3	53.8	3.46	3.23	3.39	240	570	390
OHI	2012-1987; 2003-1987	72.7	72.3	53.6	1.87	3.47	3.61	700	570	270
SLD	2012-1987	65	69.6	72.4	1.88	2.91	2.32	850	480	520
SLI	2012-1987	66	58.1	56.9	2.63	3.61	3.47	430	520	290
TBI	ns	65.8	67.5	—	4.74	4.05	—	150	220	—
VI	ns	51.6	54	56.9	5.2	3.87	3.56	140	420	460
Youth ages 19 to 21										
IEP	ns	64.7	—	65.9	1.82	—	2.28	960	—	1,400

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003, 2012-1987, 2003-1987 indicate a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents were asked to confirm or correct school district information about youth's gender. Sample information was used when parent-reported data were not available. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variable A11 from National Longitudinal Transition Study 2012, variable np2A1 from National Longitudinal Transition Study-2, and variable Pw1_A01 from National Longitudinal Transition Study. The universe is all youth.

Table B-11. Percentages of youth with an IEP who are Black, not Hispanic or Latino, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	1987 (average)	2012 (standard error)	2003 (standard error)	1987 (standard error)	2012 (sample size)	2003 (sample size)	1987 (sample size)
Youth ages 15 to 18										
IEP	2012-1987; 2003-1987	19.6	18	24	1.57	2.52	1.39	5,190	5,440	3,940
AUT	2012-2003	11.5	19.3	—	1.95	2.47	—	540	660	—
DB	ns	14.7!	14.6	13.6!	6.96	4.21	5.89	60	100	20
ED	ns	24.6	17.8	22.1	3.34	5.03	2.6	650	400	370
HI	2012-1987	12.6	17.2	21.3	2.46	3.48	1.77	290	490	860
ID	ns	27.8	32.1	31.6	3.11	3.47	2.5	630	490	440
MD	ns	17.8	14.9	22	3.14	3.32	3.25	450	540	310
OI	2003-1987	13.1	11.5	19.7	2.89	2.01	2.26	240	570	390
OHI	2012-2003; 2003-1987	18.6	8.7	18.7	2.03	1.53	2.78	700	570	270
SLD	ns	19.6	16.5	21.9	1.9	3.13	2.16	850	480	520
SLI	2012-1987; 2003-1987	16	15.5	29.4	2.48	2.69	3.14	430	520	290
TBI	ns	14.9!	12.6	—	4.87	2.17	—	150	220	—
VI	2012-1987; 2003-1987	12.7	15.1	23.7	3.4	2.55	2.54	140	420	460
Youth ages 19 to 21										
IEP	ns	23.6	—	26.8	2.54	—	2.21	960	—	1,400

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003, 2012-1987, 2003-1987 indicate a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents were asked to indicate youth's race and ethnicity. Sample information was used when parent-reported data is not available. Black includes African American. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variable G3 from National Longitudinal Transition Study 2012, variables np2A3b and np2A3a from National Longitudinal Transition Study-2, and variable Pw1_A09 from National Longitudinal Transition Study. The universe is all youth.

Table B-12. Percentages of youth with an IEP who are Hispanic or Latino, of any race, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	1987 (average)	2012 (standard error)	2003 (standard error)	1987 (standard error)	2012 (sample size)	2003 (sample size)	1987 (sample size)
Youth ages 15 to 18										
IEP	2012-1987; 2003-1987	22.7	19.6	8.7	1.69	3.09	0.97	5,190	5,440	3,940
AUT	ns	15.4	9.9	—	2.19	1.79	—	540	660	—
DB	ns	18.2!	19.2!	15.1!	7.45	6.47	7.04	60	100	20
ED	2012-1987; 2003-1987	19.3	16.5	6	2.29	2.81	1.47	650	400	370
HI	2012-1987; 2003-1987	31.3	26.8	14.1	3.86	3.92	1.54	290	490	860
ID	2012-2003; 2012-1987	18.6	10.6	6.2	2.34	2.02	1.3	630	490	440
MD	ns	18.4	13.1	13.4	2.69	2.87	3.54	450	540	310
OI	2012-1987	25.9	17.5	14.5	3.65	2.77	1.89	240	570	390
OHI	2012-1987; 2003-1987	16.1	11.7	25.6	1.84	2.2	3.08	700	570	270
SLD	2012-1987; 2003-1987	26.1	22.6	8.8	2.27	3.94	1.58	850	480	520
SLI	2012-1987	25.6	20.8!	15.5	3.47	6.39	2.38	430	520	290
TBI	ns	19.7	13.8	—	4.17	3.25	—	150	220	—
VI	2012-1987; 2003-1987	22.1	19	8.7	4.33	3.24	1.47	140	420	460
Youth ages 19 to 21										
IEP	2012-1987	22.9	—	7	2.34	—	1.37	960	—	1,400

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003, 2012-1987, 2003-1987 indicate a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents were asked to indicate youth's race and ethnicity. Sample information was used when parent-reported data is not available. Hispanic includes Latino. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variable G3 from National Longitudinal Transition Study 2012, variables np2A3b and np2A3a from National Longitudinal Transition Study-2, and variable Pw1_A09 from National Longitudinal Transition Study. The universe is all youth.

Table B-13. Percentages of youth with an IEP who are white, Asian, or other race, not Hispanic or Latino, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	1987 (average)	2012 (standard error)	2003 (standard error)	1987 (standard error)	2012 (sample size)	2003 (sample size)	1987 (sample size)
Youth ages 15 to 18										
IEP	2012-1987	57.7	62.4	67.3	2.06	4.73	1.52	5,190	5,440	3,940
AUT	ns	73	70.8	—	2.71	3.26	—	540	660	—
DB	ns	67.1	66.2	71.2	7.71	7.38	9.2	60	100	20
ED	2012-1987	56.1	65.6	71.9	3.58	6.73	2.78	650	400	370
HI	ns	56.2	56	64.6	4.11	5.65	2.21	290	490	860
ID	2012-1987	53.6	57.2	62.2	3.35	3.76	2.58	630	490	440
MD	ns	63.8	72	64.6	4.7	5.4	4.27	450	540	310
OI	ns	61	70.9	65.8	4.07	3.56	2.85	240	570	390
OHI	2012-2003; 2012-1987; 2003-1987	65.3	79.7	55.7	2.45	2.49	3.52	700	570	270
SLD	2012-1987	54.2	60.9	69.2	2.7	5.57	2.4	850	480	520
SLI	ns	58.5	63.8	55.1	4.24	7.37	3.39	430	520	290
TBI	ns	65.4	73.6	—	5.28	3.77	—	150	220	—
VI	ns	65.2	65.8	67.7	5.04	3.88	2.91	140	420	460
Youth ages 19 to 21										
IEP	2012-1987	53.4	—	66.3	2.85	—	2.35	960	—	1,400

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003, 2012-1987, 2003-1987 indicate a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents were asked to indicate youth's race and ethnicity. Sample information was used when parent-reported data is not available. Other race includes American Indian or Alaska Native, and Native Hawaiian or other Pacific Islander. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variable G3 from National Longitudinal Transition Study 2012, variables np2A3b and np2A3a from National Longitudinal Transition Study-2, and variable Pw1_A09 from National Longitudinal Transition Study. The universe is all youth.

Table B-14. Percentages of youth with an IEP attending a school that serves only students with disabilities, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	2012 (standard error)	2003 (standard error)	2012 (sample size)	2003 (sample size)
Youth ages 15 to 18							
IEP	ns	3.7	3.9	0.57	1.03	5,180	5,440
AUT	ns	10	13.8	2	3.02	540	660
DB	ns	24.7!	41.3	8.51	6.25	70	100
ED	ns	7.8	10.2	1.41	2.43	650	400
HI	ns	10.4	17	2.17	2.66	290	490
ID	ns	5.4	5.4!	1.19	1.93	640	490
MD	ns	17.3	16.2	2.69	3.06	450	540
OI	ns	3.5!	5.5!	1.53	1.9	240	570
OHI	ns	2.1!	1.4!	0.76	0.54	700	570
SLD	ns	1.0!	‡	0.48	‡	850	‡
SLI	ns	‡	‡	‡	‡	‡	‡
TBI	ns	6.1!	8.9!	2.17	3.53	150	220
VI	2012-2003	7.0!	18.1	2.38	3.41	140	420
Youth ages 19 to 21							
IEP	†	19.5	—	2.32	—	950	—

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003 indicates a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents were asked to describe the school that youth attended that year. Possible responses were regular school for a variety of students, school that serves only students with disabilities, or other type of school. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variable B3 from National Longitudinal Transition Study 2012 and variable np2D1b from National Longitudinal Transition Study-2. The universe is all youth.

Appendix C. Detailed tables for chapter 3 of volume 3: Comparisons over time

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Table C-1. Percentages of youth with an IEP who have very good or excellent general health, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	2012 (standard error)	2003 (standard error)	2012 (sample size)	2003 (sample size)
Youth ages 15 to 18							
IEP	ns	71.1	72.1	1.05	2.02	5,190	5,440
AUT	ns	74.3	76.7	2.15	2.2	540	660
DB	2012-2003	74.5	55.1	8.13	4.93	70	100
ED	ns	68.5	62.6	1.99	3.37	650	400
HI	ns	67.3	73	3.27	4.38	290	490
ID	ns	56.5	60.9	2.21	2.99	640	490
MD	ns	58	57.6	3.11	3.1	450	540
OI	ns	58.3	64.7	3.73	3.18	240	570
OHI	ns	71.5	67.8	2.03	2.62	700	570
SLD	ns	75.2	76.4	1.7	2.85	850	480
SLI	ns	81	77.2	2.07	3.39	430	520
TBI	ns	68.1	62.1	5.19	4.15	150	220
VI	ns	70.3	60.7	4.67	4.08	140	420
Youth ages 19 to 21							
IEP	†	61.5	—	2.41	—	960	—

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003 indicates a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents were asked to rate youth's general health as excellent, very good, good, fair, or poor. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variable D21 from National Longitudinal Transition Study 2012 and variable np2B7a from National Longitudinal Transition Study-2. The universe is all youth.

Table C-2. Percentages of youth with an IEP who use prescription behavioral medicines, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	2012 (standard error)	2003 (standard error)	2012 (sample size)	2003 (sample size)
Youth ages 15 to 18							
IEP	2012-2003	25.7	17.3	1.03	1.55	5,180	5,430
AUT	ns	44.2	43.8	2.48	2.81	540	660
DB	ns	15.9!	18.8	6.88	4.34	70	100
ED	ns	47.1	39.2	2.54	3.92	650	390
HI	ns	13.5	8.4	2.41	1.68	290	490
ID	2012-2003	25.6	18.3	2.25	2.11	630	490
MD	ns	34.2	27.7	2.62	3.13	450	540
OI	ns	21.1	19.3	3.52	3.46	240	570
OHI	ns	46.1	44.2	2.25	3.53	690	560
SLD	ns	14.8	11.2	1.51	2.15	850	480
SLI	ns	10.4	13.4	1.51	2.2	430	520
TBI	ns	38.4	28.5	4.67	4.16	150	220
VI	ns	10.6	17.8	2.79	4.48	140	420
Youth ages 19 to 21							
IEP	†	28.6	—	1.88	—	950	—

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003 indicates a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents were asked whether youth are taking any prescription medicine to control their attention, behavior, activity level, or changes in mood, such as Ritalin or an antidepressant. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variable D23 from National Longitudinal Transition Study 2012 and variable np2B7c from National Longitudinal Transition Study-2. The universe is all youth.

Table C-3. Percentages of youth with an IEP who have any trouble communicating by any means, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	2012 (standard error)	2003 (standard error)	2012 (sample size)	2003 (sample size)
Youth ages 15 to 18							
IEP	ns	26.2	26.5	1.05	1.73	5,190	5,440
AUT	2012-2003	51.7	64	2.47	3.04	540	650
DB	ns	69.7	66.9	8.59	5.59	70	100
ED	ns	17.2	14.9	1.63	2.25	650	400
HI	ns	48.3	55	3.69	3.35	290	490
ID	ns	54.1	52.1	2.56	3.79	640	490
MD	ns	62.1	61.9	3.24	3.44	450	540
OI	ns	39.3	41.6	4.64	3.89	240	570
OHI	2012-2003	19.3	25.7	1.57	2.34	700	570
SLD	ns	18	19.8	1.71	2.64	850	480
SLI	2012-2003	33.4	42.6	3.22	3.14	430	520
TBI	ns	42.9	38.6	4.55	5.36	150	220
VI	2012-2003	11.3	24.6	3.22	3.99	140	420
Youth ages 19 to 21							
IEP	†	47.1	—	2.52	—	960	—

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003 indicates a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents were asked how well youth communicate by any means. Means of communication include sign language, manual communication, lip reading, cued speech, oral speech, and a communication board or book. Trouble refers to parents' responses of a little trouble, a lot of trouble, or no ability, versus a response of no trouble. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variable D17a from National Longitudinal Transition Study 2012 and variable np2B5b from National Longitudinal Transition Study-2. The universe is all youth.

Table C-4. Percentages of youth with an IEP who have any trouble understanding what other people say to them, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	2012 (standard error)	2003 (standard error)	2012 (sample size)	2003 (sample size)
Youth ages 15 to 18							
IEP	2012-2003	41.1	28.7	1.22	2	5,180	5,430
AUT	2012-2003	69.5	78	2.27	2.88	540	650
DB	2012-2003	85	64.7	7.39	6.09	70	100
ED	ns	40.6	34.6	2.34	3.61	650	400
HI	2012-2003	72.4	54.8	2.88	3.11	290	490
ID	2012-2003	67.2	49.3	2.27	3.91	630	490
MD	ns	56.5	60.4	2.61	3.62	450	540
OI	ns	28.1	30.9	3.65	3.52	240	570
OHI	2012-2003	43	30.7	1.98	3.25	700	570
SLD	2012-2003	31.2	21.2	1.9	2.71	850	480
SLI	ns	36.8	32.5	3.22	4.33	430	520
TBI	2012-2003	51.1	31.8	4.77	4.63	150	220
VI	ns	16.2	22.5	3.88	3.33	140	420
Youth ages 19 to 21							
IEP	†	61.2	—	2.18	—	950	—

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003 indicates a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents were asked how well youth understand what other people say to them. Trouble refers to parents' responses of a little trouble, a lot of trouble, or no ability, versus a response of no trouble. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variable D18a from National Longitudinal Transition Study 2012 and variable np2B5e from National Longitudinal Transition Study-2. The universe is all youth.

Table C-5. Percentages of youth with an IEP who fix their own breakfast or lunch, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	2012 (standard error)	2003 (standard error)	2012 (sample size)	2003 (sample size)
Youth ages 15 to 16							
IEP	ns	56.2	52.5	1.68	3.07	2,490	2,230
AUT	ns	43.9	39.8	3.3	3.63	280	270
DB	ns	48.1	41.7	13.24	8.29	30	50
ED	ns	52.5	55	3.17	5.23	310	150
HI	ns	56.9	63	5.11	6.03	130	200
ID	ns	41.5	45	3.59	4.53	300	190
MD	ns	27.9	30.1	4.01	5.28	190	200
OI	ns	24.1	38.7	6.91	5.62	110	220
OHI	ns	53.7	60.6	3.08	4.48	350	220
SLD	2012-2003	64.2	52.6	2.79	4.64	410	210
SLI	ns	59.3	64.2	3.5	4.75	240	280
TBI	ns	53.3	54	6.39	6.8	60	80
VI	ns	46.9	47	7.62	6.01	60	170
Youth ages 19 to 21							
IEP	†	—	—	—	—	—	—

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003 indicates a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents were asked to indicate youth's ability to fix breakfast or lunch. The table focuses on ratings of always or usually, versus sometimes or never. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variable D27a from National Longitudinal Transition Study 2012 and variable np2G3b_a from National Longitudinal Transition Study-2. The universe is youth who lived with parents at least some of the time and are younger than 17.

Table C-6. Percentages of youth with an IEP who do laundry, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	2012 (standard error)	2003 (standard error)	2012 (sample size)	2003 (sample size)
Youth ages 15 to 16							
IEP	ns	33.5	31.4	1.66	2.92	2,470	2,230
AUT	ns	15.2	8.9	2.18	2.53	280	270
DB	ns	38.7!	12.2!	12.04	5.01	30	50
ED	2012-2003	28.2	15.9	3.21	3.14	310	150
HI	ns	38.6	44.8	4.94	5.52	130	200
ID	ns	22.3	19.3	2.94	5.13	290	190
MD	ns	18.3	18.6	3.26	4.58	190	200
OI	ns	12.9!	16.9	5.41	4.7	110	220
OHI	ns	30.2	29.6	2.6	4.06	350	220
SLD	ns	40.1	36.2	2.71	4.44	410	210
SLI	ns	38	37.6	3.17	4.22	240	280
TBI	ns	12.6!	23.6	4.9	6.45	60	80
VI	ns	26.8	18.8	6.29	4.09	60	170
Youth ages 19 to 21							
IEP	†	—	—	—	—	—	—

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003 indicates a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents were asked to indicate youth's ability to do laundry. The table focuses on ratings of always or usually, versus sometimes or never. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variable D27b from National Longitudinal Transition Study 2012 and variable np2G3b_b from National Longitudinal Transition Study-2. The universe is youth who lived with parents at least some of the time and are younger than 17.

Table C-7. Percentages of youth with an IEP who straighten up their own room or living area, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	2012 (standard error)	2003 (standard error)	2012 (sample size)	2003 (sample size)
Youth ages 15 to 16							
IEP	ns	50.4	47.1	1.68	2.97	2,490	2,230
AUT	ns	39.8	37.7	3.24	3.72	280	270
DB	ns	71.3	47.6	13.52	8.55	20	50
ED	ns	37.2	29	3.13	4.86	310	150
HI	ns	59.9	53.4	5.17	5.17	130	200
ID	ns	45	47.6	3.42	4.65	300	190
MD	ns	36	26.2	4.36	4.39	190	200
OI	ns	28.5	27.5	4.28	4.1	110	220
OHI	ns	42.3	34.2	2.96	4.62	360	220
SLD	ns	58.5	50.6	2.83	4.56	410	210
SLI	ns	58.5	56.8	4.02	3.4	240	280
TBI	ns	37.1	36	7.23	6.4	60	80
VI	ns	54.8	38.9	7.26	5.84	70	170
Youth ages 19 to 21							
IEP	†	—	—	—	—	—	—

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003 indicates a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents were asked to indicate youth's ability to straighten up his/her own room or living area. The table focuses on ratings of always or usually, versus sometimes or never. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variable D27c from National Longitudinal Transition Study 2012 and variable np2G3b_c from National Longitudinal Transition Study-2. The universe is youth who lived with parents at least some of the time and are younger than 17.

Table C-8. Percentages of youth with an IEP who buy a few things they need at the store, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	2012 (standard error)	2003 (standard error)	2012 (sample size)	2003 (sample size)
Youth ages 15 to 16							
IEP	ns	43.2	42.5	1.61	2.83	2,480	2,230
AUT	ns	20.8	15.4	2.69	3.36	270	270
DB	ns	20.7!	24.2	8.07	6.87	30	50
ED	ns	40.9	29.9	3.23	5.4	310	150
HI	ns	40.7	53.8	4.64	5.9	130	200
ID	ns	28.1	30.6	3.43	5.29	290	190
MD	ns	26.3	27.2	4.32	4.83	190	200
OI	ns	26.7	31.6	6.89	4.93	100	220
OHI	ns	41.8	37.5	2.81	4.02	350	220
SLD	ns	50.4	46.9	2.65	4.45	410	210
SLI	ns	49.3	50.7	3.63	4.05	240	280
TBI	ns	27.8	25	5.66	4.91	60	80
VI	ns	39.8	30.3	7.44	5.03	60	170
Youth ages 19 to 21							
IEP	†	—	—	—	—	—	—

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003 indicates a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents were asked to indicate youth's ability to buy a few items he/she needs at the store. The table focuses on ratings of always or usually, versus sometimes or never. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variable D27d from National Longitudinal Transition Study 2012 and variable np2G3b_d from National Longitudinal Transition Study-2. The universe is youth who lived with parents at least some of the time and are younger than 17.

Table C-9. Percentages of youth with an IEP who get to places outside the home, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	2012 (standard error)	2003 (standard error)	2012 (sample size)	2003 (sample size)
Youth ages 15 to 16							
IEP	2012-2003	86.6	90.6	1.14	1.39	2,490	2,230
AUT	2012-2003	58.6	47.2	3.47	4.15	280	270
DB	2012-2003	78.8	42.4	11.42	8.63	30	40
ED	ns	91.8	95.2	1.67	1.93	310	150
HI	ns	91.5	90.4	3.14	4.2	140	210
ID	ns	65	71.7	3.32	4.35	300	190
MD	ns	52.1	54.9	4.63	5.95	190	200
OI	ns	60.7	59.8	6.3	5.55	110	220
OHI	ns	90	89.9	1.9	2.82	360	230
SLD	ns	94.1	95.3	1.54	1.92	410	210
SLI	ns	92.3	93.9	1.93	2.38	240	280
TBI	ns	86.9	84.7	4.49	5.23	60	80
VI	ns	61.5	60.4	7.54	6.68	70	160
Youth ages 19 to 21							
IEP	†	—	—	—	—	—	—

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003 indicates a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents were asked to indicate youth's ability to get to places outside the home, like to a school, store, park, or neighbor's house. The table focuses on ratings of very well or pretty well, versus not very well, not at all well, or not allowed. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variable D26c from National Longitudinal Transition Study 2012 and variable np2G3a_e from National Longitudinal Transition Study-2. The universe is youth who lived with parents at least some of the time and are younger than 17.

Table C-10. Percentages of youth with an IEP who perform all five activities of daily living well, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	2012 (standard error)	2003 (standard error)	2012 (sample size)	2003 (sample size)
Youth ages 15 to 16							
IEP	ns	15.8	12	1.3	2.15	2,450	2,190
AUT	ns	4.5	1.8!	1.23	0.75	270	270
DB	ns	‡	‡	‡	‡	‡	‡
ED	2012-2003	11.8	5.5	2.28	1.59	310	150
HI	ns	19.5	18.7	3.77	4.15	130	200
ID	ns	11.1	10.1!	2.25	4.31	290	190
MD	ns	6.3!	3.7!	2.59	1.84	190	200
OI	ns	8.1!	4.1!	3.7	1.75	100	210
OHI	ns	12.5	9.0!	1.97	3.03	350	220
SLD	ns	19.6	12.8	2.21	3.26	400	210
SLI	ns	19.9	22.5	2.97	3.37	240	280
TBI	ns	‡	‡	‡	‡	‡	‡
VI	ns	5.6!	5.5!	2.33	1.69	60	160
Youth ages 19 to 21							
IEP	†	—	—	—	—	—	—

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003 indicates a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents were also asked how well youth accomplished five daily living activities without help: fixed own meals, did laundry, cleaned their rooms, bought things they need at the store, and got to places outside the home. Possible ratings for the first four measures are always, usually, sometimes, or never. Possible ratings for the last measure are very well, pretty well, not very well, not at all well, and not allowed. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variables D26c and D27[a-d] from National Longitudinal Transition Study 2012 and variables np2G3a_e, np2G3b_a, np2G3b_b, np2G3b_c, and np2G3b_d from National Longitudinal Transition Study-2. The universe is youth who lived with parents at least some of the time and are younger than 17.

Table C-11. Percentages of youth with an IEP who have an allowance or other money they can decide how to spend, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	2012 (standard error)	2003 (standard error)	2012 (sample size)	2003 (sample size)
Youth ages 15 to 18							
IEP	2012-2003	62	79.4	1.32	1.85	4,390	2,760
AUT	ns	61.6	72.7	2.49	6.36	470	190
DB	ns	50.4	69.7	8.54	8.86	50	40
ED	ns	61	70.4	2.45	4.39	550	230
HI	2012-2003	61.7	76.2	4.29	5.07	240	210
ID	ns	60.5	68.9	2.55	5.35	550	220
MD	2012-2003	54.1	75.6	2.87	5.44	380	140
OI	2012-2003	58.3	72.5	3.98	4.85	200	340
OHI	2012-2003	63.7	78.1	2.35	5.05	590	380
SLD	2012-2003	62.7	84.1	2.28	2.52	720	320
SLI	ns	63.1	70.1	3.7	4.25	370	320
TBI	2012-2003	64.9	81.6	5.75	5.21	120	120
VI	ns	67.5	75	5.53	4.86	130	260
Youth ages 19 to 21							
IEP	†	56.8	—	2.52	—	780	—

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003 indicates a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Youth survey respondents were asked whether they have an allowance or other money they can decide how to spend, such as money earned from a job. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variable 01a from National Longitudinal Transition Study 2012 and variable np2P16a_J14a from National Longitudinal Transition Study-2. The universe is all youth.

Table C-12. Percentages of youth with an IEP who have a savings or checking account, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	2012 (standard error)	2003 (standard error)	2012 (sample size)	2003 (sample size)
Youth ages 15 to 18							
IEP	ns	45.6	51.9	1.52	3.51	4,350	2,620
AUT	ns	51.2	64.8	2.71	7.5	460	170
DB	ns	36.2	53.3	10.12	11.25	50	40
ED	ns	42.5	42.3	2.43	4.93	550	220
HI	ns	50.4	58.7	4.16	5.91	240	210
ID	ns	36	46	2.46	5.6	550	210
MD	ns	38.7	51	3.41	5.88	380	130
OI	2012-2003	46.1	61.6	3.89	5.78	190	320
OHI	2012-2003	51.2	64.3	2.5	5.86	580	360
SLD	ns	45.8	53.6	2.4	5	710	310
SLI	ns	53.3	48.8	3.83	5.99	370	300
TBI	2012-2003	49.4	70.4	4.9	6.55	120	120
VI	ns	51.5	58.9	5.92	5.25	130	240
Youth ages 19 to 21							
IEP	†	50.9	—	2.82	—	770	—

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003 indicates a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Youth survey respondents were asked whether they have a savings or checking account. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variables 01b and 01c from National Longitudinal Transition Study 2012 and variables np2P16b_J14b_a and np2P16c_J14b_b from National Longitudinal Transition Study-2. The universe is all youth.

Appendix D. Detailed tables for chapter 4 of volume 3: Comparisons over time

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Table D-1. Percentages of youth with an IEP who agree a lot that they feel part of the school, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	2012 (standard error)	2003 (standard error)	2012 (sample size)	2003 (sample size)
Youth ages 15 to 18							
IEP	2012-2003	52.5	30.6	1.29	2.38	3,590	2,620
AUT	2012-2003	53	25.5	3.23	6.72	330	180
DB	ns	65.4	45.1	10.15	9.25	30	40
ED	ns	40.9	31.6	2.52	4.67	500	210
HI	ns	50.9	37.8	4.6	5.5	190	190
ID	2012-2003	58.3	39	2.99	5.62	390	200
MD	2012-2003	67.9	40.6	3.66	7.43	220	130
OI	2012-2003	70.5	46.6	5.26	6.38	140	330
OHI	2012-2003	56.6	30.7	2.5	6.59	530	350
SLD	2012-2003	51.4	28.9	2.19	3.47	680	310
SLI	2012-2003	52.9	23.8	2.92	3.56	340	300
TBI	2012-2003	55.6	22	6.06	5.33	100	120
VI	2012-2003	64.4	44	5.31	5.33	120	250
Youth ages 19 to 21							
IEP	†	54.4	—	3.12	—	460	—

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003 indicates a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Youth survey respondents, excluding proxies, were asked how strongly they agree that they feel part of the school. The response categories were agree a lot, agree a little, disagree a little, and disagree a lot. Positive views are responses of agree a lot. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variable K3c from National Longitudinal Transition Study 2012 and variable np2R1b from National Longitudinal Transition Study-2. The universe is youth who were not homeschooled.

Table D-2. Percentages of youth with an IEP who agree that a school adult cares about them, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	2012 (standard error)	2003 (standard error)	2012 (sample size)	2003 (sample size)
Youth ages 15 to 18							
IEP	2012-2003	90.6	85.7	0.8	1.69	3,580	2,590
AUT	ns	97.1	93.7	0.95	2.32	330	180
DB	ns	84.7	96.8	10.93	2.37	30	40
ED	2012-2003	91.9	82.9	1.38	4.14	500	210
HI	ns	93.2	85.9	2.18	3.79	190	190
ID	ns	88.3	83.1	2.2	3.67	380	200
MD	2012-2003	92.5	75.5	1.95	8.04	220	130
OI	ns	95.4	87.2	1.65	7.45	140	330
OHI	ns	92.4	89.3	1.38	2.17	530	350
SLD	ns	89.3	87.1	1.38	2.32	680	300
SLI	2012-2003	90.9	76.9	1.86	4.59	340	300
TBI	2012-2003	97	85.7	1.54	5.21	100	120
VI	2012-2003	97.1	89.1	1.53	2.95	120	250
Youth ages 19 to 21							
IEP	†	93.9	—	1.28	—	460	—

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003 indicates a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Youth survey respondents, excluding proxies, were asked how strongly they agree that a school adult cares about them. The response categories were agree a lot, agree a little, disagree a little, and disagree a lot. Positive views are responses of agree a lot or agree a little. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variable K4a from National Longitudinal Transition Study 2012 and variable np2R4a_a from National Longitudinal Transition Study-2. The universe is youth who were not homeschooled.

Table D-3. Percentages of youth with an IEP who agree that they feel safe in school, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	2012 (standard error)	2003 (standard error)	2012 (sample size)	2003 (sample size)
Youth ages 15 to 18							
IEP	2012-2003	88.6	93.2	0.85	1.09	3,590	2,610
AUT	ns	91.8	95.4	1.73	2.18	330	180
DB	ns	100	97.6	#	1.72	30	40
ED	ns	85.4	90	1.63	2.78	500	210
HI	ns	84.6	87.4	3.4	5.37	190	190
ID	ns	88.7	91.8	1.62	2.97	390	210
MD	ns	90	81.3	2.03	8.44	220	130
OI	ns	92.5	94.1	2.1	2.19	140	330
OHI	2012-2003	87.4	94.3	1.75	1.65	530	350
SLD	2012-2003	88.9	94.2	1.33	1.52	680	300
SLI	ns	91	92.9	1.6	2.05	340	300
TBI	ns	91.9	93.8	2.79	2.67	100	110
VI	ns	94.8	97.8	2.23	0.95	120	250
Youth ages 19 to 21							
IEP	†	89.6	—	1.72	—	460	—

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003 indicates a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Youth survey respondents, excluding proxies, were asked how strongly they agree with a statement about feeling safe at schools. The response categories were agree a lot, agree a little, disagree a little, and disagree a lot. Positive views are responses of agree a lot or agree a little. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variable K3e from National Longitudinal Transition Study 2012 and variable np2R3 from National Longitudinal Transition Study-2. The universe is youth who were not homeschooled.

Table D-4. Percentages of youth with an IEP who had items stolen from their locker, desk, or other place at school, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	2012 (standard error)	2003 (standard error)	2012 (sample size)	2003 (sample size)
Youth ages 15 to 18							
IEP	ns	21.4	25.9	1.08	2.5	3,460	2,620
AUT	ns	14.3	10.6	2.27	2.88	320	180
DB	ns	‡	21.3!	‡	7.88	‡	40
ED	ns	27.9	35.8	2.25	5.33	480	210
HI	ns	27	31.6	3.57	5.79	180	190
ID	ns	23.6	25.4	2.87	5.11	370	210
MD	2012-2003	14	32.3	2.52	7.72	210	130
OI	2012-2003	19.9!	6.7	6.36	1.54	130	330
OHI	ns	27.6	25.8	2.21	5.67	510	350
SLD	ns	19.2	25	1.79	3.73	660	310
SLI	ns	21.9	23.7	2.92	3.81	330	300
TBI	ns	24.6	15.8!	5.18	6.87	100	120
VI	ns	13	17.2	3.55	4.57	120	250
Youth ages 19 to 21							
IEP	†	20.2	—	3.01	—	380	—

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003 indicates a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Youth survey respondents, excluding proxies, were asked whether they had things stolen from their locker, desk, or other places at school during this school year. The item response rate for youth who had items stolen from their locker, desk, or other place at school is less than 85 percent for data in 2012. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variable K5e from National Longitudinal Transition Study 2012 and variable np2R6a_K4a from National Longitudinal Transition Study-2. The universe is youth who were not homeschooled.

Table D-5. Percentages of youth with an IEP who were teased or called names at school, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	2012 (standard error)	2003 (standard error)	2012 (sample size)	2003 (sample size)
Youth ages 15 to 18							
IEP	ns	31.2	37.4	1.26	2.97	3,460	2,620
AUT	ns	38.3	46.2	2.92	7.47	320	180
DB	2012-2003	‡	46.7	‡	9.96	‡	40
ED	2012-2003	41	57.1	2.8	4.39	480	210
HI	ns	36	41.7	4.27	6.05	190	190
ID	ns	40.7	37.4	2.91	5.63	370	210
MD	2012-2003	30.2	51.1	3.62	7.33	210	130
OI	ns	25.3	36.4	4.42	6.31	130	330
OHI	ns	37.8	45.4	2.6	6.78	510	350
SLD	ns	26.4	33	1.94	4.35	660	310
SLI	2012-2003	24.7	37.1	2.74	4.51	330	300
TBI	2012-2003	38.2	58.8	6.46	7	100	110
VI	ns	26.6	38.6	4.92	5.52	120	250
Youth ages 19 to 21							
IEP	†	25.8	—	3.17	—	380	—

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003 indicates a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Youth survey respondents, excluding proxies, were asked whether they teased or called names at school during this school year. The item response rate for youth who were teased or called names at school is less than 85 percent for data in 2012. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variable K5a from National Longitudinal Transition Study 2012 and variable np2R6d_K4d from National Longitudinal Transition Study-2. The universe is youth who were not homeschooled.

Table D-6. Percentages of youth with an IEP who participated in a school or non-school club or sports team in the past year, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	2012 (standard error)	2003 (standard error)	2012 (sample size)	2003 (sample size)
Youth ages 15 to 18							
IEP	2012-2003	74.3	60.9	1.09	2.75	4,180	2,630
AUT	2012-2003	75.2	50.8	2.41	7.34	460	180
DB	ns	74.9	85.2	10.41	5.86	50	40
ED	2012-2003	71.5	52.1	2.19	5.17	510	210
HI	ns	73.3	63.2	3.94	6.46	230	210
ID	2012-2003	70.9	47.8	2.13	5.73	530	200
MD	ns	68.6	68.4	3.01	6.38	370	130
OI	ns	71.5	69.6	4.32	4.36	190	330
OHI	ns	75.7	64.4	2.01	5.69	550	350
SLD	2012-2003	74.7	64.3	1.85	3.86	680	310
SLI	2012-2003	78.7	57.1	2.73	4.96	350	300
TBI	ns	71.9	56.8	5.47	6.71	120	120
VI	ns	85.2	76.6	3.5	4.91	120	250
Youth ages 19 to 21							
IEP	†	66.4	—	2.56	—	640	—

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003 indicates a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Youth survey respondents were asked whether they participated in any activities in school or outside of school in the past 12 months. In school activities include school sports team; music, dance, art, or theater; student government; academic subject matter club (math, science, computer); volunteer or community service group; vocational or career-focused student organization; or other school-sponsored clubs or activities. Activities outside of school include organized sports supervised by an adult; music, dance, art, or theater lessons; a religious youth group or religious instruction; math, science, or computer camps or lessons; volunteer or community service group; scouting or another group or club activity; and another camp or type of non-school activity. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variables M1_[1-7] and M2_[1-7] from National Longitudinal Transition Study 2012 and variables np2P5_J1 and np2P6_J2_I4 from National Longitudinal Transition Study-2. The universe is youth who were not homeschooled.

Table D-7. Percentages of youth with an IEP who participated in a school sport or club in the past year, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	2012 (standard error)	2003 (standard error)	2012 (sample size)	2003 (sample size)
Youth ages 15 to 18							
IEP	2012-2003	62.1	47.6	1.25	3.18	4,190	2,640
AUT	ns	59.4	44.4	2.79	7.56	460	180
DB	ns	73.4	55.9	10.66	9.4	50	40
ED	2012-2003	56.4	39.9	2.32	5.36	510	210
HI	ns	62.5	57.4	4.26	6.87	230	210
ID	2012-2003	55.9	35.5	2.25	5.74	530	200
MD	ns	54.1	53.7	3.28	6.99	370	130
OI	ns	60.3	53.3	5.44	5.71	190	330
OHI	ns	62	50.7	2.43	5.3	550	350
SLD	2012-2003	64.7	50.4	2.04	4.58	680	310
SLI	2012-2003	71.3	47.4	2.68	5.78	350	300
TBI	2012-2003	61.9	34.5	6.22	7.32	120	120
VI	ns	74	68.1	4.73	5.64	120	250
Youth ages 19 to 21							
IEP	†	54	—	2.67	—	650	—

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003 indicates a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Youth survey respondents were asked whether they participated in any of the following school activities outside of class in the past 12 months: music, dance, art, or theater; student government; academic subject matter club; volunteer or community service group; vocational or career-focused student organization; or other school-sponsored clubs or activities. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variables M1_1, M1_2, M1_3, M1_4, M1_5, M1_6, and M1_7 from National Longitudinal Transition Study 2012 and variable np2P5_J1 from National Longitudinal Transition Study-2. The universe is youth who were not homeschooled.

Table D-8. Percentages of youth with an IEP who participated in a non-school club or sports team in the past year, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	2012 (standard error)	2003 (standard error)	2012 (sample size)	2003 (sample size)
Youth ages 15 to 18							
IEP	2012-2003	53.5	38	1.27	3.1	4,330	2,720
AUT	2012-2003	58.5	30.2	2.68	6.05	470	190
DB	2012-2003	38.5	66.4	8.89	8.8	50	40
ED	2012-2003	50	25.6	2.44	3.59	530	220
HI	2012-2003	53.6	34.3	3.96	4.99	230	210
ID	2012-2003	49.5	29.7	2.43	5.44	540	220
MD	ns	50.2	40.9	3.99	7.23	380	140
OI	ns	52.4	45.4	4.63	5.68	200	340
OHI	2012-2003	57	37.5	2.24	4.59	580	370
SLD	2012-2003	52.3	41.8	2.11	4.63	700	320
SLI	2012-2003	57.9	34.7	3.27	3.5	370	320
TBI	ns	52.2	39.1	6.4	6.86	120	120
VI	2012-2003	61.8	37.1	5.58	4.91	130	260
Youth ages 19 to 21							
IEP	†	49.4	—	2.46	—	750	—

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003 indicates a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Youth survey respondents were asked whether they took part in any of the following non-school activities in the past 12 months: organized sport supervised by an adult; music, dance, art, or theater lessons; a religious youth group or religious instruction; math, science or computer camps or lessons; volunteer or community service group; scouting or another group or club activity; or another camp or type of out-of-school activity. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variables M2_1, M2_2, M2_3, M2_4, M2_5, M2_6, and M2_7 from National Longitudinal Transition Study 2012 and variable np2P6_J2_I4 from National Longitudinal Transition Study-2. The universe is youth who were not homeschooled.

Table D-9. Percentages of youth with an IEP who participated in a sports team in the past year, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	2012 (standard error)	2003 (standard error)	2012 (sample size)	2003 (sample size)
Youth ages 15 to 18							
IEP	ns	38.2	30.8	1.28	3.6	4,180	2,350
AUT	2012-2003	30.7	8.1	2.47	2.17	460	150
DB	ns	65.3	37.2!	11.56	13.89	50	20
ED	ns	31.2	25.9	2.29	4.34	510	210
HI	2012-2003	45.5	28.5	4.47	6.76	230	130
ID	2012-2003	35.2	13.9	2.37	3.88	530	180
MD	ns	39.4	33.9	3.13	9.19	370	110
OI	2012-2003	35.2	15.1	4.45	4.12	190	300
OHI	2012-2003	37.2	25.5	2.25	4.94	550	330
SLD	ns	40.8	35.5	2.22	5.22	680	300
SLI	2012-2003	50.8	25.5	3.07	4.26	350	280
TBI	2012-2003	34.3	16.6!	6.34	5.03	120	110
VI	ns	29.3	26.6	5.66	4.59	120	240
Youth ages 19 to 21							
IEP	†	33	—	2.62	—	640	—

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003 indicates a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Youth survey respondents were asked whether they participated in a sports team in school or outside of school in the past 12 months. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variables M1_1 and M2_1 from National Longitudinal Transition Study 2012 and variables np2P5_J1, np2P6_J2_I4, and np2P7a_J3a_04 from National Longitudinal Transition Study-2. The universe is youth who were not homeschooled.

Table D-10. Percentages of youth with an IEP who participated in a club in the past year, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	2012 (standard error)	2003 (standard error)	2012 (sample size)	2003 (sample size)
Youth ages 15 to 18							
IEP	2012-2003	62.6	40.3	1.34	3.2	4,180	2,350
AUT	2012-2003	69.9	35.9	2.63	8.21	460	150
DB	ns	63.5	57.6	13.38	12.02	50	20
ED	2012-2003	60.7	37.1	2.43	4.91	510	210
HI	2012-2003	63.9	37.2	3.95	6.27	230	130
ID	2012-2003	61.4	27.4	2.32	5.37	530	180
MD	2012-2003	57.8	38.2	3.59	7.75	370	110
OI	ns	64.1	56.9	4.97	5.79	190	300
OHI	2012-2003	64.6	43.9	2.48	6.96	550	330
SLD	2012-2003	61.3	42.5	2.32	4.61	680	300
SLI	2012-2003	63.6	37.2	3.52	4.22	350	280
TBI	2012-2003	65.2	44	5.88	7.4	120	110
VI	ns	75.5	65	5.62	5.73	120	240
Youth ages 19 to 21							
IEP	†	57.2	—	2.7	—	640	—

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003 indicates a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Youth survey respondents were asked whether they participated a club in school or outside of school in the past 12 months. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variables M1_[1-7] and M2_[1-7] from National Longitudinal Transition Study 2012 and variables np2P5_J1, np2P6_J2_l4, and np2P7a_J3a_04 from National Longitudinal Transition Study-2. The universe is youth who were not homeschooled.

Table D-11. Percentages of youth with an IEP who participated in a fine arts club or lesson in the past year, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	2012 (standard error)	2003 (standard error)	2012 (sample size)	2003 (sample size)
Youth ages 15 to 18							
IEP	2012-2003	25.6	10	1.1	1.76	4,180	2,350
AUT	2012-2003	36.8	6.8!	2.67	2.59	460	150
DB	2012-2003	34.1!	‡	14.04	‡	50	‡
ED	2012-2003	22.2	6.8!	1.91	2.95	510	210
HI	2012-2003	29.7	5.1!	3.49	2.41	230	130
ID	2012-2003	26.6	7.8!	2.09	2.89	530	180
MD	2012-2003	27.2	‡	2.68	‡	370	‡
OI	ns	24.1	20.7!	3.43	7.76	190	300
OHI	2012-2003	26.6	11.5!	2.01	4.87	550	330
SLD	2012-2003	23.3	10.7	1.79	2.62	680	300
SLI	2012-2003	27.5	9.4	2.87	2.32	350	280
TBI	2012-2003	26.1	8.5!	4.23	4.09	120	110
VI	2012-2003	52.2	26.6	5.89	5.41	120	240
Youth ages 19 to 21							
IEP	†	23.8	—	2.19	—	640	—

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003 indicates a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Youth survey respondents were asked whether they participated in a performing arts club in school or outside of school in the past 12 months. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variables M1_2 and M2_2 from National Longitudinal Transition Study 2012 and variables np2P5_J1, np2P6_J2_I4, and np2P7a_J3a_08 from National Longitudinal Transition Study-2. The universe is youth who were not homeschooled.

Table D-12. Percentages of youth with an IEP who participated in student government in the past year, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	2012 (standard error)	2003 (standard error)	2012 (sample size)	2003 (sample size)
Youth ages 15 to 18							
IEP	2012-2003	2.9	1.3!	0.37	0.41	4,190	2,350
AUT	2012-2003	3.3	‡	0.84	‡	460	‡
DB	ns	‡	‡	‡	‡	‡	‡
ED	2012-2003	3.2	‡	0.89	‡	510	‡
HI	ns	7.4!	‡	2.29	‡	230	‡
ID	2012-2003	3.6	‡	0.87	‡	530	‡
MD	ns	‡	8.8!	‡	4.28	‡	110
OI	ns	3.6!	1.1!	1.43	0.47	190	300
OHI	2012-2003	3.8	‡	0.89	‡	550	‡
SLD	ns	2.3	1.3!	0.6	0.62	680	300
SLI	ns	5.3	‡	1.38	‡	350	‡
TBI	ns	5.4!	‡	2.5	‡	120	‡
VI	ns	8.3!	4.4!	2.78	1.8	120	240
Youth ages 19 to 21							
IEP	†	3.4!	—	1.44	—	650	—

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003 indicates a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Youth survey respondents were asked whether they participated in student government in the past 12 months. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variable M1_3 from National Longitudinal Transition Study 2012 and variables np2P5_J1, np2P6_J2_I4, and np2P7a_J3a_09 from National Longitudinal Transition Study-2. The universe is youth who were not homeschooled.

Table D-13. Percentages of youth with an IEP who participated in an academic club or lesson in the past year, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	2012 (standard error)	2003 (standard error)	2012 (sample size)	2003 (sample size)
Youth ages 15 to 18							
IEP	2012-2003	9.4	1.1!	0.71	0.39	4,180	2,350
AUT	2012-2003	9	1.5!	1.41	0.67	460	150
DB	2012-2003	26.4!	‡	9.25	‡	50	‡
ED	2012-2003	9.3	‡	1.53	‡	510	‡
HI	2012-2003	15.4	‡	3.19	‡	230	‡
ID	2012-2003	10.5	‡	1.4	‡	530	‡
MD	2012-2003	8.5	‡	1.78	‡	370	‡
OI	2012-2003	9.8	2.5!	2.37	0.91	190	300
OHI	2012-2003	8.6	‡	1.38	‡	550	‡
SLD	2012-2003	9.1	‡	1.27	‡	680	‡
SLI	2012-2003	9.6	3.9!	1.75	1.8	350	280
TBI	2012-2003	13.7!	‡	4.82	‡	120	‡
VI	ns	10.3	4.2!	3.07	1.56	120	240
Youth ages 19 to 21							
IEP	†	5.9	—	1.19	—	640	—

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003 indicates a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Youth survey respondents were asked whether they participated in an academic or computer club in school or outside of school in the past 12 months. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variables M1_4 and M2_4 from National Longitudinal Transition Study 2012 and variables np2P5_J1, np2P6_J2_I4, and np2P7a_J3a_10 from National Longitudinal Transition Study-2. The universe is youth who were not homeschooled.

Table D-14. Percentages of youth with an IEP who participated in a volunteer group in the past year, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	2012 (standard error)	2003 (standard error)	2012 (sample size)	2003 (sample size)
Youth ages 15 to 18							
IEP	2012-2003	28.9	1.7!	1.34	0.81	4,180	2,350
AUT	2012-2003	25.9	‡	2.45	‡	460	‡
DB	ns	‡	‡	‡	‡	‡	‡
ED	2012-2003	28.2	‡	2.44	‡	510	‡
HI	2012-2003	27.4	‡	3.71	‡	230	‡
ID	2012-2003	20.8	‡	1.94	‡	530	‡
MD	2012-2003	20.5	‡	2.63	‡	370	‡
OI	2012-2003	21.4	1.5!	3.38	0.61	190	300
OHI	2012-2003	27.9	‡	2.2	‡	550	‡
SLD	2012-2003	30.7	‡	2.16	‡	680	‡
SLI	2012-2003	33.2	2.1!	3.47	0.99	350	280
TBI	2012-2003	32.5	‡	7.39	‡	120	‡
VI	2012-2003	35.1	4.2!	5.12	1.85	120	240
Youth ages 19 to 21							
IEP	†	24.2	—	2.33	—	640	—

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003 indicates a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Youth survey respondents were asked whether they participated in a volunteer group in school or outside of school in the past 12 months. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variables M1_5 and M2_5 from National Longitudinal Transition Study 2012 and variables np2P5_J1, np2P6_J2_I4, and np2P7a_J3a_11 from National Longitudinal Transition Study-2. The universe is youth who were not homeschooled.

Table D-15. Percentages of youth with an IEP who participated in a vocational or career club in the past year, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	2012 (standard error)	2003 (standard error)	2012 (sample size)	2003 (sample size)
Youth ages 15 to 18							
IEP	2012-2003	7	2.6	0.85	0.69	4,190	2,350
AUT	ns	7.5	‡	1.32	‡	460	‡
DB	2012-2003	20.4!	‡	7.4	‡	50	‡
ED	ns	5.4	4.4!	1.24	1.78	510	210
HI	2012-2003	6.4!	‡	2.21	‡	230	‡
ID	2012-2003	6.2	‡	1.17	‡	530	‡
MD	2012-2003	7.7	‡	1.57	‡	370	‡
OI	ns	5.3!	3.1!	2.29	1.21	190	300
OHI	2012-2003	7.4	2.5!	1.2	0.9	550	330
SLD	2012-2003	6.8	2.6!	1.3	1.01	680	300
SLI	ns	3.9	‡	1.08	‡	350	‡
TBI	ns	9.2!	‡	2.97	‡	120	‡
VI	2012-2003	10.6	‡	3	‡	120	‡
Youth ages 19 to 21							
IEP	†	9.4	—	1.58	—	650	—

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003 indicates a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Youth survey respondents were asked whether they participated in a vocational or career club in the past 12 months. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variable M1_6 from National Longitudinal Transition Study 2012 and variables np2P5_J1, np2P6_J2_I4, and np2P7a_J3a_16 from National Longitudinal Transition Study-2. The universe is youth who were not homeschooled.

Table D-16. Percentages of youth with an IEP who participated in a religious youth group in the past year, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	2012 (standard error)	2003 (standard error)	2012 (sample size)	2003 (sample size)
Youth ages 15 to 18							
IEP	ns	20.5	16.8	1.02	3.18	4,330	2,350
AUT	ns	23.6	16.7!	2.23	6.84	470	150
DB	ns	‡	17.5!	‡	7.12	‡	20
ED	2012-2003	18.6	11.1	1.9	2.86	530	210
HI	ns	22.4	15.5!	3.27	5.31	230	130
ID	ns	20.3	15.8!	1.84	4.79	540	180
MD	ns	17.2	18.6!	2.42	5.78	380	110
OI	ns	24.8	26.6	3.63	4.6	200	300
OHI	ns	23.3	25.3	2.09	4.96	580	330
SLD	ns	20	17.3	1.75	4.74	700	300
SLI	2012-2003	23.1	14.5	3.45	2.49	370	280
TBI	ns	21	28.5	4.15	7.21	120	110
VI	ns	31.5	24.2	5.32	4.69	130	240
Youth ages 19 to 21							
IEP	†	19.5	—	2.01	—	750	—

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003 indicates a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Youth survey respondents were asked whether they participated in religious youth group in the past 12 months. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variable M2_3 from National Longitudinal Transition Study 2012 and variables np2P5_J1, np2P7a_J3a_16, and np2P7a_J3a_02 from National Longitudinal Transition Study-2. The universe is youth who were not homeschooled.

Table D-17. Percentages of youth with an IEP who participated in another club or activity in the past year, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	2012 (standard error)	2003 (standard error)	2012 (sample size)	2003 (sample size)
Youth ages 15 to 18							
IEP	2012-2003	26.5	15.4	1.2	1.82	4,180	2,350
AUT	2012-2003	38.5	8.0!	2.62	2.63	460	150
DB	ns	35.3	36.4!	9.36	12.74	50	20
ED	ns	18.3	18.9	2.12	4.67	510	210
HI	2012-2003	28.7	15.7	3.64	4.45	230	130
ID	2012-2003	28.8	‡	2.17	‡	530	‡
MD	2012-2003	26.9	15.2!	3.03	4.93	370	110
OI	2012-2003	36.3	16.5	4.54	3.97	190	300
OHI	ns	26.3	15.9!	2.39	5.75	550	330
SLD	2012-2003	26.7	16	2.02	2.65	680	300
SLI	2012-2003	26.3	14.3	2.93	2.88	350	280
TBI	ns	28.4	23.1	4.61	6.81	120	110
VI	2012-2003	41.4	26	5.74	5.02	120	240
Youth ages 19 to 21							
IEP	†	23.3	—	2.39	—	640	—

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003 indicates a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Youth survey respondents were asked whether they participated in another type of in school or outside of school activity in the past 12 months. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variables M1_7, M2_6 and M2_7 from National Longitudinal Transition Study 2012 and variables np2P5_J1, np2P6_J2_l4, np2P7a_J3a_01, np2P7a_J3a_03, np2P7a_J3a_05, np2P7a_J3a_06, np2P7a_J3a_07, np2P7a_J3a_12, np2P7a_J3a_13, np2P7a_J3a_14, np2P7a_J3a_15, np2P7a_J3a_17, and np2P7a_J3a_18 from National Longitudinal Transition Study-2. The universe is youth who were not homeschooled.

Table D-18. Percentages of youth with an IEP who have repeated a grade, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	2012 (standard error)	2003 (standard error)	2012 (sample size)	2003 (sample size)
Youth ages 15 to 18							
IEP	ns	37.2	34.8	1.59	2.7	5,160	5,090
AUT	ns	23.8	19.3	2.23	2.58	540	610
DB	ns	44	43.1	11.4	6	60	90
ED	ns	34.9	30.1	2.37	3.42	650	370
HI	ns	30.2	28.3	3.31	3.62	290	460
ID	ns	44.9	43.3	2.61	3.33	630	440
MD	ns	29.2	27.8	3.2	2.82	440	510
OI	ns	22.7	24.9	3.09	3.11	240	540
OHI	ns	35.8	35.4	2.43	2.63	690	530
SLD	ns	41.1	35	2.33	4.19	850	440
SLI	ns	31.4	32.3	3.17	4.49	430	480
TBI	ns	28.8	28.6	4.53	3.8	150	210
VI	ns	19.5	21.9	3.51	3.18	140	400
Youth ages 19 to 21							
IEP	†	51.8	—	2.43	—	940	—

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003 indicates a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents were asked whether youth has ever been held back a grade in school since entering kindergarten. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variable B13 from National Longitudinal Transition Study 2012 and variable np1D7d from National Longitudinal Transition Study-2. The universe is youth who were enrolled in school.

Table D-19. Percentages of youth with an IEP who have received an out-of-school suspension, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	2012 (standard error)	2003 (standard error)	2012 (sample size)	2003 (sample size)
Youth ages 15 to 18							
IEP	ns	31.5	34.1	1.32	1.9	4,860	5,440
AUT	ns	19.5	22.3	1.8	2.78	510	650
DB	ns	‡	16.0!	‡	5.13	‡	100
ED	ns	67.6	75.3	2.47	3.16	600	400
HI	ns	18.9	24.8	2.64	2.73	270	490
ID	2012-2003	25.4	38.2	2.43	3.36	580	490
MD	ns	18.1	21.9	3.3	2.57	420	540
OI	ns	9.2	14.2	1.77	2.19	230	570
OHI	ns	38.8	39.2	2.24	2.96	660	570
SLD	ns	28.7	28.2	1.93	2.71	800	480
SLI	ns	20.3	22.8	2.43	3.43	410	520
TBI	ns	27.4	34.6	4.35	4.43	150	220
VI	2012-2003	5.0!	14.1	1.91	2.55	140	420
Youth ages 19 to 21							
IEP	†	23.9	—	1.92	—	890	—

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003 indicates a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents were asked whether youth has ever had an out-of-school suspension. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variable B5 and B15 from National Longitudinal Transition Study 2012 and variables np2D5d_Ever and np2D5e_Ever from National Longitudinal Transition Study-2. The universe is all youth.

Table D-20. Percentages of youth with an IEP who have been expelled from school, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	2012 (standard error)	2003 (standard error)	2012 (sample size)	2003 (sample size)
Youth ages 15 to 18							
IEP	ns	8.9	7.3	0.67	0.93	4,860	5,440
AUT	ns	3.6	2.5!	0.83	0.76	510	650
DB	ns	‡	‡	‡	‡	‡	‡
ED	ns	21.1	24	2.18	3.06	600	400
HI	2012-2003	5.7	2.5	1.42	0.67	270	490
ID	ns	6.9	7.7	1.21	1.94	580	490
MD	ns	3.6	3	0.86	0.9	410	540
OI	ns	‡	3.0!	‡	0.93	‡	570
OHI	ns	13.9	10.7	1.68	1.77	660	570
SLD	ns	7.2	4.8	1.1	1.24	800	480
SLI	ns	5.3	4.8	1.34	1.41	410	520
TBI	ns	‡	3.7!	‡	1.4	‡	220
VI	ns	‡	‡	‡	‡	‡	‡
Youth ages 19 to 21							
IEP	†	8	—	1.25	—	890	—

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003 indicates a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents were asked whether youth has ever been expelled from school. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variables B5 and B14 from National Longitudinal Transition Study 2012 and variables np2D5d_Ever and np2D5e_Ever from National Longitudinal Transition Study-2. The universe is all youth.

Table D-21. Percentages of youth with an IEP who have been arrested in the past two years, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	2012 (standard error)	2003 (standard error)	2012 (sample size)	2003 (sample size)
Youth ages 15 to 18							
IEP	ns	7.3	8.1	0.66	1.32	5,190	2,400
AUT	ns	1.0!	1.6!	0.42	0.66	540	450
DB	ns	‡	‡	‡	‡	‡	‡
ED	ns	21.4	30.6	2.16	5.45	650	140
HI	ns	2.9!	5.2!	0.99	1.76	290	250
ID	ns	4.6	3.6!	0.87	1.16	640	250
MD	ns	3.1!	2.7!	1.06	0.84	450	380
OI	ns	‡	1.6!	‡	0.71	‡	200
OHI	ns	8.6	13.9!	1.19	5	700	160
SLD	ns	6.2	4.9!	1.05	1.81	850	120
SLI	ns	4.3	9.3	1	2.61	430	170
TBI	ns	1.6!	‡	0.79	‡	150	‡
VI	ns	‡	‡	‡	‡	‡	‡
Youth ages 19 to 21							
IEP	†	6.8	—	1.13	—	960	—

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003 indicates a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents were asked whether youth has been arrested in the past two years. An arrest is any time someone is taken into custody by police or a legal authority. The item response rate for youth who have been arrested is less than 85 percent for data in 2003. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variable B16 from National Longitudinal Transition Study 2012 and variable np2J15a from National Longitudinal Transition Study-2. The universe is all youth.

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Appendix E. Detailed tables for chapter 5 of volume 3: Comparisons over time

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Table E-1. Percentages of youth with an IEP who received support services at school, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	1987 (average)	2012 (standard error)	2003 (standard error)	1987 (standard error)	2012 (sample size)	2003 (sample size)	1987 (sample size)
Youth ages 15 to 18										
IEP	2012-2003; 2012-1987	64.5	44.1	37.4	1.53	3.13	1.68	3,380	3,980	3,510
AUT	ns	80.3	85.9	—	2.25	2.64	—	440	470	—
DB	ns	93.8	92.6	91.1	4.29	3.8	5.42	50	80	20
ED	2012-2003; 2012-1987; 2003-1987	79	49.5	32	2.25	4.84	2.86	410	260	350
HI	ns	83.8	82.4	81.7	3.48	3.64	1.83	200	340	760
ID	2012-2003; 2012-1987	75.9	57.6	50.8	2.4	4.12	2.9	460	350	370
MD	2012-2003	90.7	80.3	87.4	2.07	3.21	2.67	350	480	270
OI	2012-1987; 2003-1987	84.8	76.4	61.9	3.97	2.65	3.63	160	470	340
OHI	2012-2003; 2012-1987	61.5	42.4	41.9	2.74	3.22	3.86	480	440	240
SLD	2012-2003; 2012-1987	52.1	35.7	32.2	2.79	4.38	2.53	440	310	490
SLI	2012-1987; 2003-1987	68.8	61.3	37.3	4.43	5.04	3.49	160	250	270
TBI	ns	66.4	56	—	7.23	4.91	—	110	170	—
VI	2012-1987; 2003-1987	69.1	73.4	49.9	6.19	3.58	3.73	100	360	410
Youth ages 19 to 21										
IEP	2012-1987	83.2	—	39.7	2.38	—	2.44	680	—	1,220

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003, 2012-1987, 2003-1987 indicate a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents were asked whether their children received the following support services in the past 12 months: tutoring or reader/interpreter services, speech or language therapy, audiology services, psychological or mental health counseling, physical or occupational therapy, orientation and mobility services, and special transportation. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variables D31h, D31i, D31j, D31k, D31l, D31n, D31o, D31q, and D31y from National Longitudinal Transition Study 2012, variables np2F1a_a, np2F1a_b, np2F1a_c, np2F1a_d, np2F1a_g, np2F1a_j, np2F1a_k, np2F1a_n, np2F1b_a, np2F1b_b, np2F1b_c, np2F1b_d, p2F1a_g, np2F1b_j, np2F1b_k, and np2F1b_n from National Longitudinal Transition Study-2, and variables Pw1_B24, Pw1_B25_03, Pw1_B25_04, Pw1_B09, Pw1_B10_01, Pw1_B10_02, Pw1_B14, Pw1_B15_01, Pw1_B15_02, Pw1_B29, Pw1_B30_01, Pw1_B30_02, Pw1_B19, Pw1_B20_01, Pw1_B20_02, Pw1_B33, Pw1_B34_01, PW1_B34_02, Pw1_B38, Pw1_B39_01, and Pw1_B39_02 from National Longitudinal Transition Study. The universe is youth who received special education at school.

Table E-2. Percentages of youth with an IEP who received tutoring services at school in the past year, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	1987 (average)	2012 (standard error)	2003 (standard error)	1987 (standard error)	2012 (sample size)	2003 (sample size)	1987 (sample size)
Youth ages 15 to 18										
IEP	2012-2003; 2012-1987	33.2	18.1	15.7	1.47	1.97	1.24	3,440	4,430	3,870
AUT	2012-2003	26.5	12.1	—	2.3	1.92	—	450	600	—
DB	2012-2003	55.3	23.4	35.0!	11.45	5.2	11.52	50	80	20
ED	2012-2003; 2012-1987	29.2	14.7	8.8	2.7	3.01	1.71	420	280	360
HI	ns	45.6	42.5	40.4	4.21	4.13	2.64	210	400	840
ID	2012-2003; 2012-1987	35.7	13.7	14.4	2.58	2.31	1.91	480	430	430
MD	2012-2003; 2012-1987	33.3	13.8	14.5	2.98	1.99	3.39	350	500	310
OI	2012-2003; 2012-1987; 2003-1987	29.3	10.9	18	3.9	1.73	3.05	170	490	380
OHI	2012-2003; 2012-1987	36.5	17.7	14	2.67	2.76	2.53	480	450	270
SLD	2012-2003; 2012-1987	33.6	19.7	17.3	2.66	3.11	1.95	440	340	520
SLI	2012-2003; 2012-1987	25.4	11.9	8.5	3.56	2.31	1.89	160	290	290
TBI	ns	33.8	18.7	—	7.2	3.21	—	110	180	—
VI	2012-2003; 2012-1987	36.3	21.4	21	5.41	4.4	3.11	110	380	450
Youth ages 19 to 21										
IEP	2012-1987	31.6	—	12.3	2.36	—	1.48	700	—	1,360

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003, 2012-1987, 2003-1987 indicate a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents were asked whether youth received tutoring or reader/interpreter services at school in the past 12 months. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variables D31h and D31i from National Longitudinal Transition Study 2012, variables np2F1a_j, np2F1a_k, np2F1b_j, and np2F1b_k from National Longitudinal Transition Study-2, and variables Pw1_B24, Pw1_B25_03, and Pw1_B25_04 from National Longitudinal Transition Study. The universe is youth who received special education at school.

Table E-3. Percentages of youth with an IEP who received psychological or mental health counseling services at school in the past year, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	1987 (average)	2012 (standard error)	2003 (standard error)	1987 (standard error)	2012 (sample size)	2003 (sample size)	1987 (sample size)
Youth ages 15 to 18										
IEP	2012-2003; 2012-1987; 2003-1987	27.9	13.3	7.7	1.27	2.25	0.86	3,470	4,450	3,860
AUT	2012-2003	34.2	16.4	—	2.59	2.47	—	450	600	—
DB	ns	12.2!	9.0!	‡	5.81	3.86	‡	50	80	‡
ED	2012-2003; 2012-1987; 2003-1987	62.3	29.3	17.7	2.74	4.38	2.29	420	280	360
HI	ns	17.4	12.7	12.4	2.93	2.21	1.71	210	410	840
ID	2012-2003; 2012-1987; 2003-1987	29.7	16.1	5.7	2.33	2.49	1.27	480	430	440
MD	2012-2003; 2012-1987	30.7	14.2	13.6	3.1	2.21	2.89	360	510	310
OI	2012-2003; 2012-1987	21.7	8.9	8.2	3.86	2.05	1.96	170	480	380
OHI	2012-2003; 2012-1987	33.1	15	9.1	2.4	2.48	2.48	480	450	270
SLD	2012-1987	16.5	9.9	6.5	1.86	2.91	1.3	450	350	520
SLI	2012-1987; 2003-1987	22.2	14.1!	2.3!	3.73	4.86	0.93	160	300	290
TBI	2012-2003	35.2	15.9	—	5.53	4.59	—	110	190	—
VI	ns	8.5!	12.3	6.8	2.56	3.01	1.51	110	380	450
Youth ages 19 to 21										
IEP	2012-1987	31.2	—	6.4	2.52	—	1.13	720	—	1,360

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003, 2012-1987, 2003-1987 indicate a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents were asked whether in the past 12 months youth received psychological or mental health counseling services at school. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variable D31j from National Longitudinal Transition Study 2012, variables np2F1a_c and np2F1b_c from National Longitudinal Transition Study-2, and variables Pw1_B14, Pw1_B15_01, and Pw1_B15_02 from National Longitudinal Transition Study. The universe is youth who received special education at school.

Table E-4. Percentages of youth with an IEP who received audiology services in the past year, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	1987 (average)	2012 (standard error)	2003 (standard error)	1987 (standard error)	2012 (sample size)	2003 (sample size)	1987 (sample size)
Youth ages 15 to 18										
IEP	2012-2003; 2012-1987	2.7	1.6	1	0.3	0.39	0.1	3,490	4,480	3,790
AUT	ns	1.9!	‡	—	0.68	‡	—	460	‡	—
DB	2012-2003; 2003-1987	62.9	37.6	87.1	10.47	6.21	6.21	50	80	20
ED	ns	‡	‡	‡	‡	‡	‡	‡	‡	‡
HI	2012-1987	58.3	52.1	44.7	4.41	3.87	2.55	210	400	830
ID	2012-2003; 2012-1987	5.2	‡	‡	1.13	‡	‡	490	‡	‡
MD	ns	6.6	4.5	6.7	1.42	1.21	1.61	360	510	290
OI	ns	‡	‡	‡	‡	‡	‡	‡	‡	‡
OHI	ns	2.2	‡	‡	0.66	‡	‡	490	‡	‡
SLD	ns	‡	‡	‡	‡	‡	‡	‡	‡	‡
SLI	ns	‡	‡	‡	‡	‡	‡	‡	‡	‡
TBI	ns	‡	‡	—	‡	‡	—	‡	‡	—
VI	ns	‡	‡	‡	‡	‡	‡	‡	‡	‡
Youth ages 19 to 21										
IEP	2012-1987	5	—	2.1	0.94	—	0.37	720	—	1,360

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003, 2012-1987, 2003-1987 indicate a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents were asked whether in the past 12 months youth received audiology services at school for hearing problems. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variable D31l from National Longitudinal Transition Study 2012, variables np2F1a_b and np2F1b_b from National Longitudinal Transition Study-2, and variables Pw1_B38, Pw1_B39_01, and Pw1_B39_02 from National Longitudinal Transition Study. The universe is youth who received special education at school.

Table E-5. Percentages of youth with an IEP who received speech or language therapy in the past year, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	1987 (average)	2012 (standard error)	2003 (standard error)	1987 (standard error)	2012 (sample size)	2003 (sample size)	1987 (sample size)
Youth ages 15 to 18										
IEP	2012-2003; 2012-1987	24.4	17.7	15.4	1.21	2.37	1.09	3,480	4,430	3,840
AUT	2012-2003	56.7	68.5	—	2.69	3.05	—	450	600	—
DB	ns	78.7	61.7	49.3	9.12	6.57	12.44	50	80	20
ED	2012-2003; 2012-1987	15	8.2	5	2.12	1.98	1.29	420	280	360
HI	ns	51.6	54.2	59.1	4.12	4.36	2.55	210	410	830
ID	2012-2003; 2012-1987	46.6	34.8	31.5	2.56	3.91	2.52	490	430	430
MD	ns	66.8	59.2	64.5	3.32	3.81	4.03	360	500	310
OI	ns	29.7	31.4	22.9	4.48	4.56	2.8	170	490	380
OHI	ns	11.8	14.9	13.8	1.59	2.35	2.64	480	450	270
SLD	ns	13.4	10.1	9.2	1.87	2.91	1.54	450	340	510
SLI	2012-1987; 2003-1987	52.8	54.2	31.4	4.53	4.6	3.24	160	290	280
TBI	2012-2003	35.4	19.2	—	5.26	3.22	—	110	190	—
VI	2003-1987	9.6!	21.9	9.9!	3.65	5.13	3.12	110	380	450
Youth ages 19 to 21										
IEP	2012-1987	43.6	—	17.5	2.47	—	1.6	710	—	1,360

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003, 2012-1987, 2003-1987 indicate a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents were asked whether in the past 12 months youth received speech or language therapy at school. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variable D31k from National Longitudinal Transition Study 2012, variables np2F1a_a and np2F1b_a from National Longitudinal Transition Study-2, and variables Pw1_B09, Pw1_B10_01, and Pw1_B10_02 from National Longitudinal Transition Study. The universe is youth who received special education at school.

Table E-6. Percentages of youth with an IEP who received physical or occupational therapy at school in the past year, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	1987 (average)	2012 (standard error)	2003 (standard error)	1987 (standard error)	2012 (sample size)	2003 (sample size)	1987 (sample size)
Youth ages 15 to 18										
IEP	2012-2003; 2003-1987	13.1	5.5	12.9	1	1.01	1.08	3,450	4,110	3,810
AUT	2012-2003	30.1	13.3	—	2.65	2.52	—	450	480	—
DB	2012-2003	29.4	58	57.3	8.02	6.7	11.93	50	80	20
ED	ns	8.6	4.6!	7	1.46	1.81	1.42	420	270	360
HI	2012-1987; 2003-1987	9.1	5.8!	22.9	2.52	2.26	2.21	210	360	840
ID	2012-2003; 2003-1987	26.3	10.5	26	2.34	1.9	2.34	480	370	420
MD	2012-2003	55	41.7	52.9	3.36	5.26	4.66	360	500	300
OI	2012-2003; 2012-1987	58.7	41.2	38.7	5.53	3.68	3.4	170	480	380
OHI	2012-1987; 2003-1987	5	5.0!	14.4	1.11	1.59	2.52	480	450	260
SLD	2012-1987; 2003-1987	4.5	‡	8.9	1.32	‡	1.61	440	‡	500
SLI	ns	6.7	‡	3.2!	2	‡	1.2	160	‡	280
TBI	2012-2003	25.7	11.2	—	5.11	3.16	—	110	180	—
VI	2012-1987; 2003-1987	53.5	49.8	29.4	6.24	4.45	3.45	110	370	450
Youth ages 19 to 21										
IEP	2012-1987	33.5	—	22.8	2.38	—	1.86	700	—	1,330

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003, 2012-1987, 2003-1987 indicate a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents were asked whether in the past 12 months youth received physical or occupational therapy at school, including orientation and mobility services. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variables D31n, D31o, and D31y from National Longitudinal Transition Study 2012, variables np2F1a_d, np2F1b_d, np2F1a_g, and np2F1b_g from National Longitudinal Transition Study-2, and variables Pw1_B29, Pw1_B30_01, Pw1_B30_02, Pw1_B19, Pw1_B20_01, and Pw1_B20_02 from National Longitudinal Transition Study. The universe is youth who received special education at school.

Table E-7. Percentages of youth with an IEP received special transportation assistance at school in the past year, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	1987 (average)	2012 (standard error)	2003 (standard error)	1987 (standard error)	2012 (sample size)	2003 (sample size)	1987 (sample size)
Youth ages 15 to 18										
IEP	2012-1987; 2003-1987	14.4	12.1	6.4	1	1.61	0.57	3,490	4,480	3,890
AUT	2012-2003	36.4	52.4	—	2.64	3.13	—	450	600	—
DB	2012-2003	31.2	55.7	38.4	8.21	6.67	10.88	50	80	20
ED	2012-1987; 2003-1987	19.5	17.1	1.5!	2.3	3.49	0.71	420	280	360
HI	2012-2003; 2012-1987	14.8	26.8	25.9	2.59	4.25	2.22	210	410	860
ID	2012-2003; 2012-1987	34	23.6	18.8	2.36	2.77	2.12	490	440	440
MD	ns	48.6	51.6	51.8	3.48	4.75	4.61	360	510	310
OI	2012-1987	55.2	44.5	41.2	5.62	3.47	3.25	170	480	390
OHI	2012-1987	6.4	9.1	12.1	1.09	1.52	2.13	490	450	270
SLD	ns	2.0!	5.7!	1.2!	0.68	2.5	0.56	450	350	510
SLI	ns	4.9!	9.0!	2.0!	2.16	3.93	0.85	160	300	280
TBI	ns	22.8	17.7	—	4.96	3.25	—	110	190	—
VI	2012-2003	25.2	38	28.3	4.98	4.11	3.61	110	380	450
Youth ages 19 to 21										
IEP	2012-1987	39.6	—	13.4	2.42	—	1.27	720	—	1,390

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003, 2012-1987, 2003-1987 indicate a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents were asked whether in the past 12 months youth received special transportation services at school because of a disability. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variable D31q from National Longitudinal Transition Study 2012, variables np2F1a_n and np2F1b_n from National Longitudinal Transition Study-2, and variables Pw1_B33, Pw1_B34_01, and PW1_B34_02 from National Longitudinal Transition Study. The universe is youth who received special education at school.

Table E-8. Percentages of youth with an IEP whose parent or another adult in the household attended a parent-teacher conference, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	2012 (standard error)	2003 (standard error)	2012 (sample size)	2003 (sample size)
Youth ages 15 to 18							
IEP	2012-2003	82.7	67	0.93	2.07	5,020	5,180
AUT	2012-2003	87	77.9	1.66	2.53	530	630
DB	2012-2003	83.7	62.5	8.12	5.28	60	90
ED	2012-2003	82.2	69.2	2.02	3.57	610	350
HI	2012-2003	82.1	67.1	2.73	4.08	280	470
ID	2012-2003	83.7	66.9	1.81	2.8	620	470
MD	2012-2003	84.3	63.5	2.01	3.16	430	510
OI	2012-2003	81.9	65.9	2.56	3.4	240	550
OHI	2012-2003	84.6	71.1	1.65	2.93	670	540
SLD	2012-2003	82.6	66.8	1.47	3.11	830	470
SLI	2012-2003	74.9	62.9	3.03	3.77	420	500
TBI	2012-2003	84.2	61.1	3.42	5.82	150	210
VI	2012-2003	82.5	56.5	3.61	4.08	140	400
Youth ages 19 to 21							
IEP	†	82.8	—	1.63	—	880	—

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003 indicates a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents were asked how often they or another adult in the household had gone to a parent-teacher conference since the start of the school year. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variables C1d and C2d from National Longitudinal Transition Study 2012 and variable np2E1B_d from National Longitudinal Transition Study-2. The universe is youth who were enrolled in school in a school setting.

Table E-9. Percentages of youth with an IEP whose parent or another adult in the household helped with homework at least once a week, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	2012 (standard error)	2003 (standard error)	2012 (sample size)	2003 (sample size)
Youth ages 15 to 18							
IEP	2012-2003	55.2	62.3	1.23	2.02	4,990	4,520
AUT	2012-2003	48	60	2.75	3.34	520	590
DB	ns	65.5	48	9.05	6.76	50	70
ED	ns	47.8	47.5	2.51	4.59	620	290
HI	ns	60.3	57.8	3.14	4.69	280	340
ID	2012-2003	58.9	69.5	2.2	2.8	620	430
MD	ns	56.2	50.8	3.14	3.76	420	450
OI	ns	61.6	62.2	3.93	4.16	230	500
OHI	ns	59.4	62.9	2.14	2.83	680	500
SLD	2012-2003	55.3	63.1	2.02	3.07	830	430
SLI	2012-2003	55.2	65.4	2.86	2.97	420	470
TBI	ns	61	60.4	4.48	6.3	140	190
VI	ns	59.9	53	5.29	4.83	130	270
Youth ages 19 to 21							
IEP	†	46.6	—	2.42	—	870	—

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003 indicates a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents, excluding proxies, were asked how often they or another adult in the household helped their child with homework during the school year. The response categories were five or more times a week, three to four times a week, one to two times a week, less than once a week, and never. The percentages are for responses of at least once a week. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variable C4 from National Longitudinal Transition Study 2012 and variable np2E6 from National Longitudinal Transition Study-2. The universe is youth who lived with parents at least some of the time, are not homeschooled, and did not live in a residential school.

Table E-10. Percentages of youth with an IEP whose parent or another adult in the household helped with homework at least once a week, by household income and year

Household income	2012	2003
1% to 185% of poverty level	55	66*
Above 185% of poverty level	55	58

*=p < .05 for comparison with 2012 estimate; !=estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents, excluding proxies were asked how often they or another adult in the household helped their child with homework during the school year. The response categories were five or more times a week, three to four times a week, one to two times a week, less than once a week, and never. The percentages are for responses of at least once a week. Averages are weighted. Low household income is household income below 185 percent of the federal poverty level, which was $22,350 in 2012, $18,100 in 2003, $11,000 in 1987 for a family of four living in the continental United States in 2012.

Source: Variable C4 from National Longitudinal Transition Study 2012 and variable np2E6 from National Longitudinal Transition Study-2. The universe is youth who lived with parents at least some of the time, were not homeschooled, and did not live in a residential school.

Table E-11. Percentages of youth with an IEP whose parent or another adult in the household helped with homework and who received tutoring, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	2012 (standard error)	2003 (standard error)	2012 (sample size)	2003 (sample size)
Youth ages 15 to 18							
IEP	2012-2003	21.7	13.1	1.21	2.08	3,290	3,720
AUT	2012-2003	13.9	8	1.98	1.7	430	550
DB	2012-2003	49.3	15.7	12.98	4.31	40	60
ED	2012-2003	19	9.8	2.39	2.73	390	220
HI	ns	28.7	28.7	3.91	4.13	200	290
ID	2012-2003	23.9	10.2	2.28	2.1	460	380
MD	2012-2003	21	7.6	3.14	1.75	340	420
OI	2012-2003	21.6	9.7	3.53	1.9	160	430
OHI	2012-2003	23.6	15.3	2.27	2.74	470	400
SLD	2012-2003	22.3	14.2	2.33	3.2	430	310
SLI	ns	16.3	9.3	2.85	2.31	160	270
TBI	ns	23.1!	12.1	7.28	3.22	100	160
VI	2012-2003	22.6	9.5	4.8	2.56	100	240
Youth ages 19 to 21							
IEP	†	17.6	—	2.02	—	640	—

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003 indicates a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents were asked were asked how often they or another adult in the household helped youth with homework during the school year and whether youth received tutoring services at school in the past 12 months. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variables C4 and D31 from National Longitudinal Transition Study 2012 and variables np2F1a_j, np2F1a_k, np2F1b_j, np2F1b_k, and np2E6 from National Longitudinal Transition Study-2. The universe is youth who lived with parents at least some of the time, were not homeschooled, did not live in a residential school, and were enrolled in special education at school.

Table E-12. Percentages of youth with an IEP whose parent or another adult in the household helped with homework or who received tutoring, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	2012 (standard error)	2003 (standard error)	2012 (sample size)	2003 (sample size)
Youth ages 15 to 18							
IEP	ns	68.3	70.3	1.53	2.13	3,290	3,720
AUT	ns	59.4	64.4	2.68	3.28	430	550
DB	ns	78.2	54.9	9.18	8.3	40	60
ED	ns	59.5	53	3.15	5.28	390	220
HI	ns	78.4	71	3.1	4.96	200	290
ID	ns	72.1	74.2	2.48	2.64	460	380
MD	2012-2003	67.7	55.1	3.31	3.93	340	420
OI	ns	72.8	64.8	3.84	4.85	160	430
OHI	ns	71.1	66.6	2.34	3.2	470	400
SLD	ns	70.1	72.7	2.78	3.25	430	310
SLI	ns	77.2	71.4	3.8	3.52	160	270
TBI	ns	73.5	70	5.36	5.48	100	160
VI	ns	69.5	63.9	5.87	4.77	100	240
Youth ages 19 to 21							
IEP	†	58.6	—	2.78	—	640	—

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003 indicates a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents were asked how often they or another adult in the household helped youth with homework during the school year or whether youth received tutoring services at school in the past 12 months. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variables C4 and D31 from National Longitudinal Transition Study 2012 and variables np2F1a_j, np2F1a_k, np2F1b_j, np2F1b_k, and np2E6 from National Longitudinal Transition Study-2. The universe is youth who lived with parents at least some of the time, were not homeschooled, did not live in a residential school, and were enrolled in special education at school.

Table E-13. Percentages of youth with an IEP whose parents or another adult in the household talked with them about school experiences, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	2012 (standard error)	2003 (standard error)	2012 (sample size)	2003 (sample size)
Youth ages 15 to 18							
IEP	ns	84.2	86.8	0.86	1.4	4,980	4,480
AUT	ns	85.5	84.3	1.9	2.1	520	580
DB	ns	78.4	84.9	9.18	6.37	60	70
ED	ns	85.3	85	1.57	3.39	600	290
HI	ns	84.3	90.1	2.45	2.31	280	340
ID	ns	80.2	80	1.95	3.04	620	430
MD	ns	82.6	84	2.19	3	420	440
OI	2012-2003	83.1	93.8	2.64	1.34	230	500
OHI	2012-2003	87.3	93.6	1.7	1.26	670	500
SLD	ns	83.3	87.6	1.58	1.97	830	430
SLI	ns	87.4	88.2	1.82	2.07	420	470
TBI	ns	87.2	92.9	3.2	2.77	150	190
VI	ns	93.3	87.8	2.35	3.57	140	260
Youth ages 19 to 21							
IEP	†	76.9	—	2.06	—	870	—

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003 indicates a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents, excluding proxies, were asked how often they or another adult in the household talked with the youth about his/her experiences in school. This table focuses on responses of regularly, versus occasionally, rarely, or not at all. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variable C3 from National Longitudinal Transition Study 2012 and variable np2E5a from National Longitudinal Transition Study-2. The universe is youth who lived with parents at least some of the time and were enrolled in school in a school setting.

Table E-14. Percentages of youth with an IEP whose parent or another adult in the household attended a general school meeting, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	2012 (standard error)	2003 (standard error)	2012 (sample size)	2003 (sample size)
Youth ages 15 to 18							
IEP	ns	73.8	74.2	1.14	1.55	5,020	5,170
AUT	ns	74.6	75.5	2.52	2.83	530	630
DB	ns	81.2	68	7.37	5.74	60	90
ED	ns	67.2	66.1	2.37	3.5	610	350
HI	ns	73.6	74	2.83	3.09	280	470
ID	ns	66	69.4	2.43	3.33	620	470
MD	ns	73	75.6	2.64	2.35	430	510
OI	ns	76.5	79	3.4	2.27	230	550
OHI	ns	74.5	76.3	1.99	1.95	670	530
SLD	ns	77	76.4	1.77	2.24	830	460
SLI	ns	75.2	70.8	2.55	2.76	420	500
TBI	ns	74.5	77.3	4.21	3.53	140	210
VI	ns	78.1	74.2	4.04	3.45	140	390
Youth ages 19 to 21							
IEP	†	67.4	—	2.13	—	890	—

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003 indicates a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents, excluding proxies, were asked whether they or another adult in the household attended a general school meeting since the start of the school year. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variables C1a and C2a from National Longitudinal Transition Study 2012 and variable np2E1B_a from National Longitudinal Transition Study-2. The universe is youth who were enrolled in school in a school setting.

Table E-15. Percentages of youth with an IEP whose parent or another adult in the household volunteered at school, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	2012 (standard error)	2003 (standard error)	2012 (sample size)	2003 (sample size)
Youth ages 15 to 18							
IEP	ns	21	19.6	1.03	1.93	5,020	5,200
AUT	ns	28.1	29.2	2.58	3.13	530	630
DB	ns	17.3!	27.8	5.54	5.58	60	90
ED	ns	15.5	13.8	1.52	2.46	610	360
HI	ns	21.8	24.9	2.97	3.63	280	480
ID	ns	18.5	16.3	1.95	1.9	620	470
MD	ns	26.5	25.9	2.69	3.46	430	510
OI	ns	34.3	28.1	4.35	3.15	240	550
OHI	ns	20.9	24.5	1.8	2.74	670	540
SLD	ns	20.2	19.3	1.64	2.73	830	470
SLI	ns	24.4	28.8	2.55	4.63	420	500
TBI	ns	23.3	23.3	4.21	3.66	150	210
VI	ns	32.5	28.2	4.83	4.41	140	400
Youth ages 19 to 21							
IEP	†	22.4	—	1.95	—	880	—

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003 indicates a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents were asked whether they or another adult in the household volunteered at school since the start of the school year. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variables C1c and C2c from National Longitudinal Transition Study 2012 and variable np2E1B_c from National Longitudinal Transition Study-2. The universe is youth who were enrolled in school in a school setting.

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Appendix F. Detailed tables for chapter 6 of volume 3: Comparisons over time

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Table F-1. Percentages of youth with an IEP who have met with school staff to develop a transition plan, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	2012 (standard error)	2003 (standard error)	2012 (sample size)	2003 (sample size)
Youth ages 15 to 18							
IEP	2012-2003	69.6	79.4	1.83	3.31	1,520	1,190
AUT	ns	62.9	74.7	4.16	8.13	190	100
DB	ns	50.5!	82.7	16.31	9.27	30	20
ED	ns	70.6	68.6	3.47	7.17	180	80
HI	2012-2003	71.1	87.6	5.84	4.64	80	90
ID	ns	66.3	63.9	3.94	6.99	230	100
MD	ns	52	70.2	4.8	9.15	180	70
OI	2012-2003	62.7	87.6	6.53	3.24	80	170
OHI	ns	74.6	78.7	3.71	7.24	180	170
SLD	2012-2003	72.1	83.3	3.53	4.15	200	130
SLI	ns	65.8	81.8	6.93	6.51	70	70
TBI	2012-2003	55.5	81.3	7.31	6.9	50	70
VI	ns	69.3	82.2	7.57	5.87	50	130
Youth ages 19 to 21							
IEP	†	71.1	—	2.6	—	580	—

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003 indicates a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Youth survey respondents were asked if they have met with adults at school to develop a transition plan (that is, goals for what they will do after high school and a plan for how to achieve them). Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variable L2 from National Longitudinal Transition Study 2012 and variable np2R7b_E2d from National Longitudinal Transition Study-2. The universe is youth who were enrolled in special education at school and are at least 17 years old.

Table F-2. Percentages of youth with an IEP whose parent or another adult in the household has met with school staff to develop a transition plan, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	2012 (standard error)	2003 (standard error)	2012 (sample size)	2003 (sample size)
Youth ages 15 to 18							
IEP	2012-2003	59.9	78.5	1.8	2.41	1,810	2,490
AUT	2012-2003	64.9	78.2	3.91	3.14	210	340
DB	ns	77.9	80	8.43	6.06	30	40
ED	2012-2003	66.3	79.1	3.22	3.8	210	150
HI	2012-2003	58	82.3	5.29	4.34	110	220
ID	2012-2003	65.2	78.3	3.44	3.28	260	250
MD	2012-2003	63.9	82.5	3.93	3.21	210	290
OI	2012-2003	60.7	85.2	5.07	2.47	100	280
OHI	2012-2003	56.1	84.7	3.66	2.89	220	260
SLD	2012-2003	56.4	77.9	3.42	3.56	240	190
SLI	2012-2003	53.5	72.1	5.68	4.86	80	140
TBI	2012-2003	51	79.8	8.67	5.16	70	110
VI	ns	66.5	80.9	7.71	3.54	60	220
Youth ages 19 to 21							
IEP	†	72.4	—	2.28	—	720	—

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003 indicates a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents, excluding proxies, were asked whether they or another adult in the household have met with teachers to develop a transition plan (that is, goals for what their child will do after high school and a plan for how their child will achieve them). Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variable E2 from National Longitudinal Transition Study 2012 and variable np2E2c from National Longitudinal Transition Study-2. The universe is youth who were enrolled in special education at school and are at least 17 years old.

Table F-3. Percentages of youth with an IEP (ages 17 or older) who attended an IEP meeting in the past two years, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	2012 (standard error)	2003 (standard error)	2012 (sample size)	2003 (sample size)
Youth ages 15 to 18							
IEP	ns	81.3	73.5	1.65	3.95	1,530	1,210
AUT	2012-2003	75.9	89.6	3.46	4.63	190	100
DB	ns	74.9	90	14.72	6.94	30	20
ED	ns	79.8	80.3	3.56	6.7	180	80
HI	ns	79.3	92.5	5.54	4.14	80	100
ID	ns	81.9	72.9	3.43	6	230	110
MD	ns	77.3	79.6	3.64	7.73	180	80
OI	ns	79.8	89.3	5.26	3.4	80	170
OHI	ns	80.8	84.6	3.47	4.2	180	170
SLD	ns	82.3	70.5	3.1	5.48	200	120
SLI	ns	84.9	80.1	4.44	5.88	70	70
TBI	ns	71.3	78.1	7.1	7.65	50	70
VI	ns	90.5	84.5	4.88	5.95	50	130
Youth ages 19 to 21							
IEP	†	80.3	—	2.43	—	590	—

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003 indicates a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Youth survey respondents were asked whether they attended an IEP meeting during the current or prior school year. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variable L1 from National Longitudinal Transition Study 2012 and variable np2R7a_E2b from National Longitudinal Transition Study-2. The universe is youth who were enrolled in special education at school and are 17 or older.

Table F-4. Percentages of youth with an IEP (ages 17 or older) whose parent or another adult in the household attended an IEP meeting in the past two years, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	2012 (standard error)	2003 (standard error)	2012 (sample size)	2003 (sample size)
Youth ages 15 to 18							
IEP	ns	91	89	1.03	2.15	1,820	2,580
AUT	ns	94	96.5	1.95	1.33	210	350
DB	ns	94.9	93.7	4	3.65	30	40
ED	ns	92.5	90.4	1.86	3.47	210	160
HI	ns	85.2	92.2	3.9	2.43	110	230
ID	ns	87.4	82.2	2.64	2.53	260	270
MD	ns	92.2	91.9	2.09	1.96	210	300
OI	ns	94.8	93.7	2.09	1.43	100	290
OHI	2012-2003	89.8	95.5	2.23	1.26	230	270
SLD	ns	91.8	89.5	2.02	2.94	240	190
SLI	ns	87.9	88.9	4.08	3.23	80	140
TBI	ns	81.9	90.3	6.48	2.99	70	120
VI	ns	95.3	87.5	3.41	3.02	60	220
Youth ages 19 to 21							
IEP	†	88.1	—	1.82	—	720	—

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003 indicates a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents were asked whether they or another adult in the household went to an IEP meeting during the current or prior school year. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variable E1 from National Longitudinal Transition Study 2012 and variable np2E2a from National Longitudinal Transition Study-2. The universe is youth who were enrolled in special education at school and are 17 or older.

Table F-5. Percentages of youth with an IEP (ages 17 or older) whose parent reported that they provided at least some input in IEP and transition planning, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	2012 (standard error)	2003 (standard error)	2012 (sample size)	2003 (sample size)
Youth ages 15 to 18							
IEP	2012-2003	60.9	68.9	1.78	2.76	1,700	2,200
AUT	ns	40.7	31.6	4.13	3.15	210	310
DB	ns	40.8!	55.2	15.42	8.35	30	40
ED	ns	65.2	68.4	4.2	4.64	200	120
HI	ns	73	73.3	4.97	4.38	90	200
ID	ns	44.5	44.1	3.67	4.11	240	210
MD	ns	37.2	33.2	4.31	3.95	200	260
OI	ns	66.4	60.9	6.37	5.36	90	260
OHI	ns	66.3	71.8	3.61	3.48	210	240
SLD	ns	67.4	76.8	3.5	3.86	220	160
SLI	ns	66.8	64.6	6.63	6.6	80	120
TBI	ns	66.7	58.4	7.92	5.68	60	100
VI	ns	79.1	71.2	6.2	5.27	60	190
Youth ages 19 to 21							
IEP	†	44.2	—	2.46	—	670	—

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003 indicates a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Parent survey respondents, excluding proxies, were asked to describe the youth's role in his/her IEP and transition planning. Response options were: took a leadership role, provided some input, was present but participated very little, or did not participate at all. At least some input is defined as providing some input or having a leadership role. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variable E5 from National Longitudinal Transition Study 2012 and variable np2E3b from National Longitudinal Transition Study-2. The universe is youth who were enrolled in special education at school, whose parent attended an IEP or transition planning meeting, and are 17 or older.

Table F-6. Percentages of youth with an IEP who have a paid job, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	2012 (standard error)	2003 (standard error)	2012 (sample size)	2003 (sample size)
Youth ages 15 to 18							
IEP	2012-2003	19.4	26.9	1.16	2.98	4,250	1,900
AUT	ns	6	6.6!	1.18	3.18	460	100
DB	ns	‡	‡	‡	‡	‡	‡
ED	ns	18.9	19.5	2.05	3.99	520	160
HI	2012-2003	13.8	35.2	2.47	7.11	230	110
ID	ns	10.9	15.9	1.72	4.31	540	140
MD	ns	11.5	14.0!	2.43	5.54	370	80
OI	ns	5.9!	‡	1.82	‡	190	‡
OHI	2012-2003	23.3	41.6	2.08	6.46	560	270
SLD	ns	22.7	29.1	1.99	4.5	700	240
SLI	ns	19.4	29	2.5	4.53	360	240
TBI	ns	18.6	37.1	4.23	8.91	120	90
VI	ns	11.7	21.6	3.28	4.6	120	190
Youth ages 19 to 21							
IEP	†	16.6	—	2.03	—	720	—

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003 indicates a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Youth survey respondents were asked if they currently have a paid job. The item response rate for youth who have a paid job is less than 85 percent for data in 2003. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variable N7 from National Longitudinal Transition Study 2012 and variables np2T3a and np2L3a from National Longitudinal Transition Study-2. The universe is youth who were enrolled in school in a school setting.

Table F-7. Percentages of youth with an IEP who had a paid or unpaid school-sponsored work activity in the past year, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	2012 (standard error)	2003 (standard error)	2012 (sample size)	2003 (sample size)
Youth ages 15 to 18							
IEP	ns	12.7	14.4	0.85	2.49	4,120	1,670
AUT	2012-2003	21.2	10.9!	2.24	4.47	450	100
DB	2012-2003	‡	44.6!	‡	14.92	‡	20
ED	ns	13.7	15.8!	1.61	4.76	500	140
HI	ns	14.6	10.9!	2.44	3.99	220	90
ID	ns	22.9	15.5	2.09	4.5	520	120
MD	ns	21.1	16.5!	2.72	5.06	360	80
OI	ns	11.5	‡	2.65	‡	190	‡
OHI	ns	9.9	8.4	1.37	2.15	540	240
SLD	ns	9.7	14.9	1.12	3.49	680	220
SLI	ns	6.7	6.8!	1.35	2.22	350	220
TBI	ns	17.9	26.6!	4.65	9.73	110	80
VI	ns	11.9	15.9	2.97	3.54	120	160
Youth ages 19 to 21							
IEP	†	33.1	—	2.41	—	620	—

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003 indicates a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Youth survey respondents were asked whether they took part in any school-sponsored work activities, such as a work-study or co-op job, an internship, or a school-based business in the past 12 months. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variable N1 from National Longitudinal Transition Study 2012 and variable np2T1a_L1a from National Longitudinal Transition Study-2. The universe is youth who were enrolled in school in a school setting.

Table F-8. Percentages of youth with an IEP who had a paid school-sponsored work activity in the past year, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	2012 (standard error)	2003 (standard error)	2012 (sample size)	2003 (sample size)
Youth ages 15 to 18							
IEP	ns	4.1	6.8	0.45	1.75	4,110	1,670
AUT	ns	5.9	4.6!	1.28	2.19	450	100
DB	ns	‡	‡	‡	‡	‡	‡
ED	ns	7.6	9.3!	1.47	4.24	500	140
HI	ns	6.6	‡	1.87	‡	220	‡
ID	ns	6.6	10.8!	1.3	3.89	520	120
MD	ns	7.6	6.7!	1.42	2.42	360	80
OI	ns	‡	‡	‡	‡	‡	‡
OHI	ns	3.2	3.3!	0.83	1.37	540	240
SLD	ns	3.1	6.4!	0.68	2.39	680	220
SLI	ns	3.1!	2.6!	0.97	1.22	350	220
TBI	ns	6.1!	‡	2.8	‡	110	‡
VI	ns	5.0!	10.1	2.06	3	120	160
Youth ages 19 to 21							
IEP	†	13.5	—	1.86	—	620	—

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003 indicates a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Youth survey respondents were asked if they whether they took part in any school-sponsored work activities, such as a work-study or co-op job, an internship, or a school-based business in the past 12 months and whether they were paid for that work. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variables N1 and N1b from National Longitudinal Transition Study 2012 and variables np2T1a_L1a, and np2T1c_L1c from National Longitudinal Transition Study-2. The universe is youth who were enrolled in school in a school setting.

Table F-9. Percentages of youth with an IEP who had an unpaid school-sponsored work activity in the past year, by age, disability group, and year

Age and disability group	Significantly different years	2012 (average)	2003 (average)	2012 (standard error)	2003 (standard error)	2012 (sample size)	2003 (sample size)
Youth ages 15 to 18							
IEP	ns	8.4	7.6	0.72	1.43	4,110	1,670
AUT	2012-2003	15.2	‡	2.1	‡	450	‡
DB	ns	‡	30.5!	‡	14.48	‡	20
ED	ns	5.7	6.5!	1.07	3.17	500	140
HI	ns	8	8.0!	1.84	3.92	220	90
ID	2012-2003	16.3	4.7!	1.76	2.1	520	120
MD	ns	13.5	9.8!	2.5	3.68	360	80
OI	ns	8.1	4.0!	2.06	1.47	190	230
OHI	ns	6.8	5.1	1.13	1.41	540	240
SLD	ns	6.3	8.5	0.84	2.04	680	220
SLI	ns	3.7	4.2!	1.04	1.37	350	220
TBI	ns	11.5!	13.6!	3.83	5.75	110	80
VI	ns	7.0!	5.8!	2.32	1.75	120	160
Youth ages 19 to 21							
IEP	†	19.6	—	2.17	—	620	—

AUT = Autism; DB = Deaf-blindness; ED = Emotional disturbance; HI = Hearing impairment; ID = Intellectual disability; MD = Multiple disabilities; OI = Orthopedic impairment; OHI = Other health impairment; SLD = Specific learning disability; SLI = Speech or language impairment; TBI = Traumatic brain injury; VI = Visual impairment.

ns=no significant differences; 2012-2003 indicates a statistically significant difference at $p < .05$ between study years using Wald tests; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; #=rounds to zero; †=not applicable; —=not available; ‡=reporting standards not met. The standard error represents more than 50 percent of the estimate.

Note: Youth survey respondents were asked if they whether they took part in any school-sponsored work activities, such as a work-study or co-op job, an internship, or a school-based business in the past 12 months and whether they were paid for that work. Averages and standard errors are weighted. Sample sizes are unweighted and rounded to the nearest 10.

Source: Variables N1 and N1b from National Longitudinal Transition Study 2012 and variables np2T1a_L1a, and np2T1c_L1c from National Longitudinal Transition Study-2. The universe is youth who were enrolled in school in a school setting.