NATIONAL CENTER FOR EDUCATION EVALUATION AND REGIONAL ASSISTANCE
Institute of Education Sciences

PREPARING FOR LIFE AFTER HIGH SCHOOL: THE CHARACTERISTICS AND EXPERIENCES OF YOUTH IN SPECIAL EDUCATION

A SUMMARY OF KEY FINDINGS FROM THE NATIONAL LONGITUDINAL TRANSITION STUDY 2012

Preparing youth with disabilities for successful futures is a longstanding priority for policymakers and educators. This priority is reflected in the federal *Individuals with Disabilities Education Act (IDEA)*, last updated in 2004. This brief summarizes findings from surveys of secondary school youth with disabilities and their parents collected for the National Longitudinal Transition Study (NLTS) 2012, which is being conducted as part of an assessment of IDEA. Key findings include the following:

(1) Compared with other students in 2012, youth with disabilities are more socioeconomically disadvantaged and less likely to have experiences and expectations that are associated with success after high school. For example, compared with their peers, youth with disabilities are more likely to live in low-income households and with parents receiving federal food benefits. Furthermore, youth with disabilities are more likely than other students to struggle academically and less likely to take steps to obtain postsecondary education and jobs.

(2) Over the past decade (2003-2012) there has been greater engagement and use of supports in school among youth with disabilities, but they are less likely than in the past to participate in some key transition activities. IDEA 2004 and its regulations emphasized providing supports for students with disabilities to make progress in school, equal opportunities to participate in school activities, and strategies to encourage successful transitions beyond high school.

(3) Among the disability groups in 2012, youth with intellectual disability, autism, deaf-blindness, multiple disabilities, and orthopedic impairments were found to be more at-risk in their preparation for life after high school.

Youth who receive special education services account for 12 percent of all students in public secondary schools in the United States. Since 1975, landmark federal legislation has mandated that children and youth with disabilities have access to a free, appropriate public education. Now known as IDEA, this federal legislation also authorized funding to help school districts nationwide provide services to meet these students' unique needs. Congress's most recent reauthorization to IDEA in 2004 emphasized preparing students with disabilities for postsecondary education, careers, and independent living. Under IDEA, an individualized education program (IEP) guides each student's educational and related services. Schools and families are expected to collaborate to develop IEPs and post-high school transition plans. Once students reach age 16, IEPs must include measureable postsecondary goals that reflect students' strengths, preferences, and interests.

Given these policies, there is continued interest in understanding the characteristics and experiences of youth with an IEP and how they have changed over time. Research beginning more than two decades ago found that many youth with an IEP struggled during and after high school, although the extent and nature of their challenges varied.[1] Since then, there have been important changes in the educational, social, and economic landscapes for all youth, not only those with an IEP. For example, schools and teachers face greater demands to help students progress

academically, and school climate is receiving greater public attention.[2] The nation is more racially and ethnically diverse, the economy is recovering from the Great Recession (2007-2009), and employers are placing greater value on postsecondary education.[3]

This brief synthesizes findings on the backgrounds and experiences of youth with an IEP from a three-volume report based on parent and youth surveys collected for the National Longitudinal Transition Study 2012.[4] The findings compare youth with and without an IEP, and highlight trends over time and differences across disability groups.

Study Design

The NLTS 2012 provides information on youth with disabilities to inform efforts to address their needs. Sponsored by the U.S. Department of Education (ED) under a congressional mandate to study IDEA 2004 and the students it serves, the NLTS 2012 is the third NLTS examining the characteristics, experiences, and outcomes of youth with disabilities. The NLTS 2012 includes a nationally representative sample of secondary school students (grades 7 to 12 and secondary ungraded classes), mostly comprised of youth with an IEP. The study surveyed about 13,000 parents and youth in 2012 or 2013, when nearly all were 13 to 21 years old.[5] Responses were obtained from 59 percent of parents and 49 percent of youth. Even with these response rates, when the data are appropriately weighted the findings represent the characteristics and experiences of the sample as a whole, including both those who did and did not respond to the survey. Special statistical analyses and an intensive follow up with a group of non-respondents confirm that the weights used are valid and minimize the potential for the findings to be distorted by non-response.[6]

The NLTS 2012 was designed to document how youth in special education are faring. Specifically, the NLTS 2012 allows for three types of comparisons. First, it permits direct comparisons of the backgrounds and experiences of youth with and without an IEP. Second, it allows for comparisons between youth with different disabilities, based on 12 federally recognized disability groups in IDEA (Figure 1). Third, when used with the prior NLTS2 surveys conducted in 2003, the NLTS 2012 provides information on trends for 15- to 18-year-olds with an IEP.[7]

Figure 1. National population percentages of youth ages 13 to 21 with an IEP in 2012, by disability group

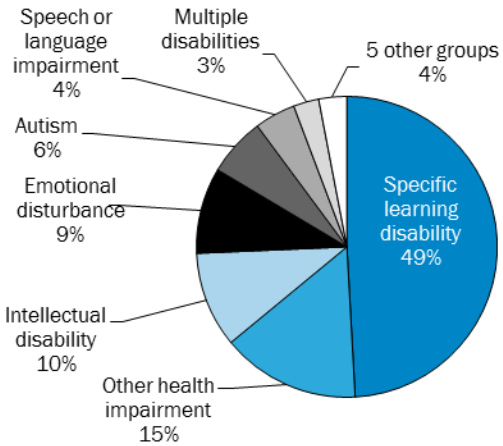


Figure reads: Half of youth ages 13 to 21 with an IEP (49 percent) have a specific learning disability, 1 of the 12 disability groups.
Note: The five other groups that are combined in this figure are youth with deaf-blindness, hearing impairment, orthopedic impairment, traumatic brain injury, and visual impairment.
Source: U.S. Department of Education, Office of Special Education Programs, IDEA Data Center.

The findings in this brief are based on these three types of comparisons, using group averages for youth enrolled in secondary school (Table 1). The first two types of comparisons typically include youth ages 13 to 21. For the third type of comparison (the trends between 2003 and 2012) only youth ages 15 to 18 can be studied because they are the group included in both the earlier NLTS2 in 2003 and the NLTS 2012.[8] Some comparisons are limited to a narrower age range, as indicated in the tables and figures that follow. Not all measures of background and experiences are available for all three types of comparisons. To call attention to differences that could be important to policy or how special education is implemented, the brief focuses on those that are both statistically significant (less likely due to random chance) and at least 5 percentage points in size.

Table 1. Types of comparisons in the brief and typical youth age ranges

Type of comparison	Year	Typical age range
Comparing youth with and without an IEP [a]	2012	13-21
Comparing disability groups to youth with an IEP overall [a]	2012	13-21
Comparing youth with an IEP to their predecessors [b]	2012, 2003	15-18

Table reads: The brief features three types of comparisons.

[a] The first two types of comparisons are between youth with and without an IEP and between disability groups and youth with an IEP overall. These comparisons involve youth in 2012 in the typical age range of 13 to 21.

[b] The third type of comparison examines trends between 2003 and 2012 for 15 to 18 year old youth with an IEP.

Drawing from the findings in the three published volumes, this summary focuses on four topics relating to key characteristics and experiences of secondary school youth with an IEP: (1) their activities in school and with friends, (2) academic supports received from schools and parents, (3) preparation for life after high school, and (4) information about their household, individual, and school characteristics.

Findings

Although both youth with and without an IEP feel positively about school, those with an IEP are less engaged despite improvement over the past decade.

Students' engagement at school can be crucial to their personal and academic development.[9] Perhaps for this reason, interest in fostering engagement has been growing, particularly for youth with disabilities. As of 2004, IDEA requires schools to support youth access to and participation in extracurricular sports and clubs and encourages them to apply discipline policies to students on a case-by-case basis, taking into consideration whether misconduct is related to the student's disability. Educators have been concerned that disciplinary actions, such as suspensions, might not always be appropriate and can lead to substantial time out of school.[10] In addition, over the past decade there has been greater awareness of bullying and the importance of school safety for all youth in response to highly publicized episodes of school violence and bullying of LGBT youth and youth with disabilities.[11]

- **Like their peers most youth with an IEP view school positively, reflecting improvements in their attitude toward school.** In 2012, nearly 70 percent of youth ages 13-21 both with and without an IEP agreed "a lot" that they felt safe in school (Table 2). At the same time, 56 percent of youth with an IEP and 61 percent without an IEP agreed a lot that they felt part of their school.[12] The percentage of youth feeling part of their school grew by more than 20 percentage

points between 2003 and 2012 (from 31 percent to 52 percent) among those ages 15-18 with an IEP, the only group for whom data are available in both years (Figure 2).

- **Participation in extracurricular activities is lower among youth with an IEP than among youth without an IEP, though it has increased over time.** Youth with an IEP ages 13-21 in 2012 were 17 percentage points less likely to participate in school sports or clubs than their peers (64 percent versus 81 percent) (Table 2). Examples of clubs include activities focused on the arts, academic subjects, student government, community service, and career and technical training. Participation rates for 15-18 year old youth with an IEP improved by 13 percentage points over the past decade; in 2003, 61 percent reported participating in a school or nonschool sport or club, compared with 74 percent in 2012 (Figure 2).
- **The suspension rate among youth with an IEP is twice that of other youth and, for the age group for whom trends can be measured, it has changed little over time**. In 2012, among those ages 13-21, 29 percent of youth with an IEP had ever been suspended, compared with 14 percent of youth without an IEP (Table 2). The proportion of youth with an IEP ages 15-18 who had been suspended has changed little from 2003 to 2012, according to parents (Figure 2).

Table 2. School attitudes and types of engagement in 2012, by IEP status for all youth still in school at ages 13-21

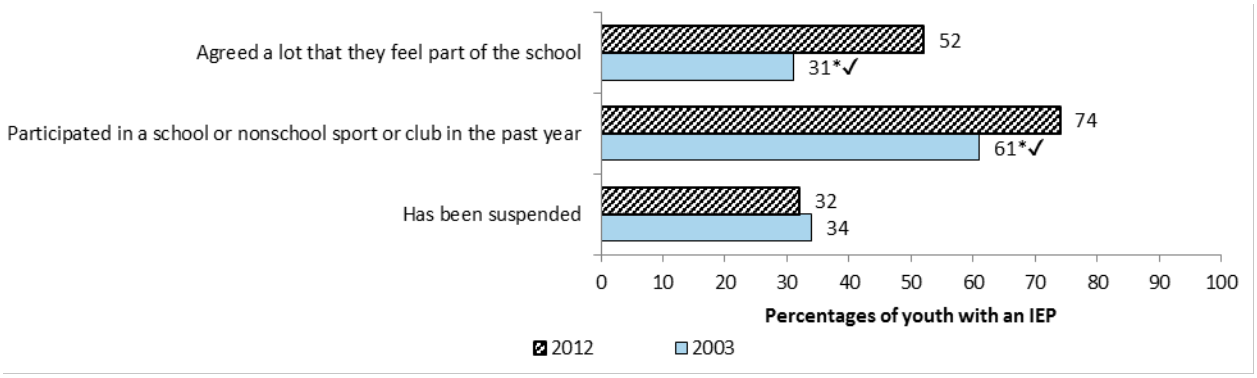
Measure	IEP (%)	No IEP (%)	Difference
Agreed a lot that they feel safe in school	68	69	-1
Agreed a lot that they feel part of the school	56	61	-5*
Participated in a school sport or club in past year	64	81	-17*✓
Has been suspended	29	14	15*✓

*=statistically significant difference ($p < .05$); ✓=statistically significant difference and at least 5.0 percentage points.

Table reads: Youth with an IEP and their peers in 2012 had similar attitudes about school but those with an IEP were less likely to participate in school sports or clubs (64 percent versus 81 percent) and more likely to have been suspended (29 percent versus 14 percent).

Source: NLTS 2012. Youth reported on the first three measures. Parents reported on the fourth measure.

Figure 2. School attitudes and types of engagement of youth with an IEP still in school at ages 15-18, in 2012 and 2003



*=statistically significant difference ($p < .05$); ✓=statistically significant difference and at least 5.0 percentage points.

Figure reads: From 2003 to 2012, the proportion of youth with an IEP ages 15 to 18 who agreed at lot that they feel part of the school increased from 31 percent to 52 percent. The proportion involved in a school or nonschool sport or club increased from 61 percent to 72 percent. One-third in both years had ever been suspended.

Source: NLTS 2012 and NLTS2. Youth reported on the first two measures. Parents reported on the third measure.

Youth with an IEP struggle more academically than their peers and are less likely to receive help from school staff outside regular hours; yet the receipt of support services at school has grown.

Schools play an important role in helping youth with disabilities succeed academically. Since the No Child Left Behind Act was enacted in 2002, federal education policy has promoted academic proficiency for all students, including those with an IEP whose average achievement has historically lagged that of their peers. IDEA has supported this goal since its inception by ensuring that students have access to special education and related services designed to meet their unique learning needs and improve their academic competencies. In addition, IDEA's emphasis on parental involvement, starting in 1997, encourages schools to engage parents in discussions about their children's education, their IEPs, and ways to support them both at school and at home.

- **Youth with an IEP are more likely than their peers to report struggling academically, but less likely to get academic help from school staff outside regular school hours.** Those with an IEP ages 13-21 were 13 to 16 percentage points more likely than their peers without an IEP to report that class work is hard to learn (54 percent versus 38 percent), that they have trouble keeping up with homework (47 percent versus 33 percent), and that they need more help from teachers (50 percent versus 37 percent) (Table 3). Despite these indications of academic difficulties, youth with an IEP were 6 percentage points less likely than other youth to report receiving academic help from schools outside the regular school day (72 percent versus 78 percent).

Table 3. Academic challenges and supports in 2012, by IEP status for all youth still in school at ages 13-21

Measure	IEP (%)	No IEP (%)	Difference
Class work is hard to learn	54	38	16*✓
Has trouble keeping up with homework	47	33	14*✓
Needs more help from teachers	50	37	13*✓
Received academic help outside regular school hours in school year	72	78	-6*✓

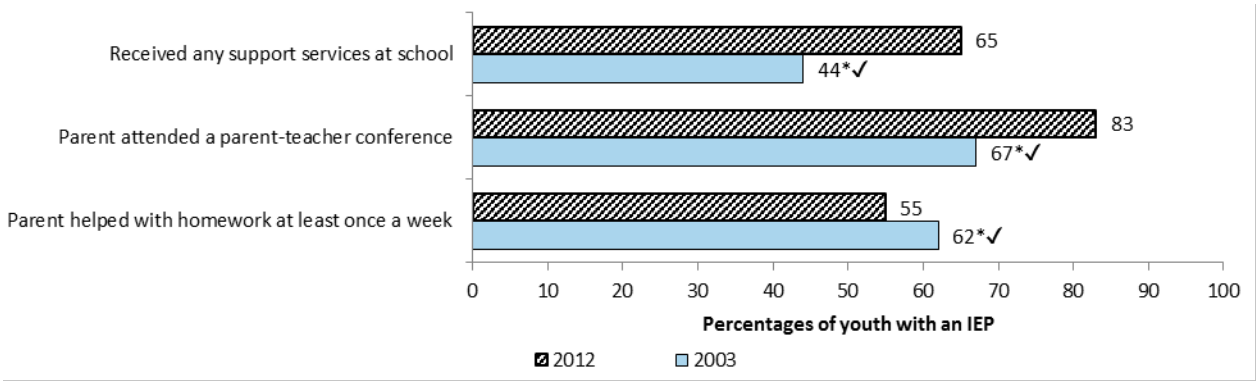
*=statistically significant difference ($p < .05$); ✓=statistically significant difference and at least 5.0 percentage points.

Table reads: Youth with an IEP ages 13-21 were more likely than their peers in 2012 to struggle with academics (for example, 54 percent reported class work being hard to learn versus 38 percent of their peers). They were less likely to report receiving academic help outside regular school hours (72 percent versus 78 percent).

Source: NLTS 2012 data. Youth reported on the measures.

- **Receipt of school-provided support services has grown among youth with an IEP, particularly tutoring, reader, and interpreter services, as well as counseling services.** The proportion of youth with an IEP ages 15-18 using any support services at school increased from 44 percent to 65 percent between 2003 and 2012, according to parents (Figure 3). These support services often offered to youth with disabilities include tutoring, reader, or interpreter services; speech and language therapy; audiology services; psychological and mental health counseling; occupational therapy; and special transportation services. The largest growth was in the receipt of tutoring, reader, or interpreter services (from 18 percent to 33 percent), and psychological and mental health counseling (from 13 percent to 28 percent) (Figure 4).

Figure 3. Supports provided at school and at home for youth with an IEP still in school at ages 15-18, in 2012 and 2003

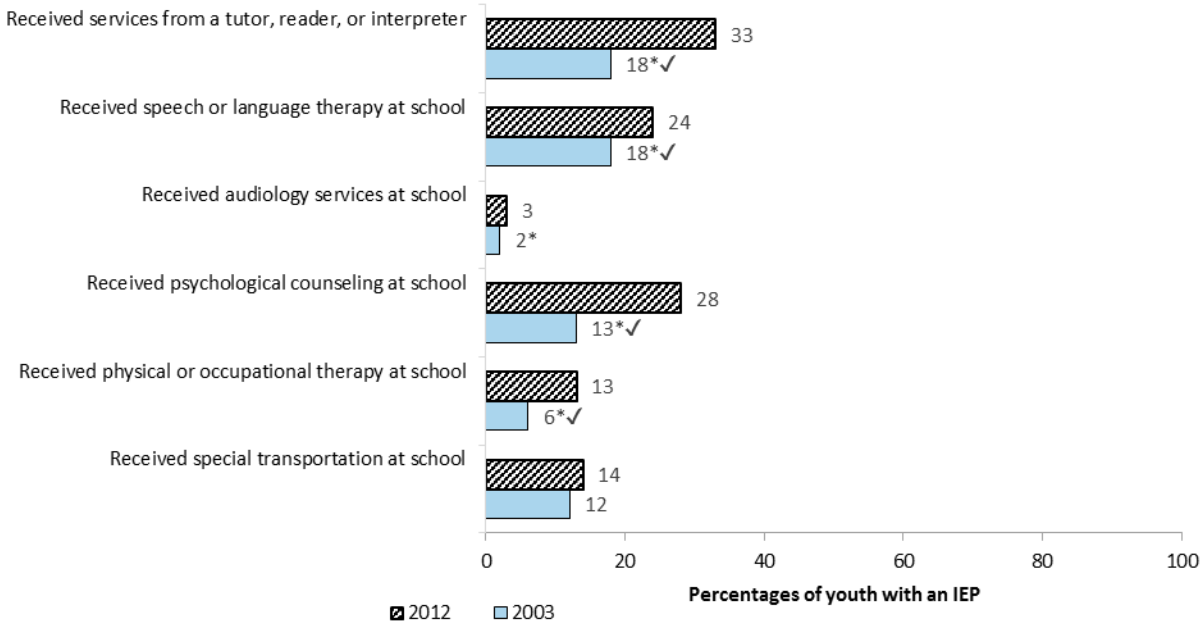


*=statistically significant difference ($p < .05$); ✓=statistically significant difference and at least 5.0 percentage points.

Figure reads: From 2003 to 2012, the proportion of youth with an IEP ages 15 to 18 who received a support service at school grew from 44 percent to 65 percent. The proportion of their parents who attended a parent–teacher conference in the past school year grew from 67 percent to 83 percent. The proportion of parents who provided weekly homework help declined from 62 percent to 55 percent.

Source: NLTS 2012 and NLTS2 data. Parents reported on the measures. Receipt of any support services at school was limited to youth whose parents reported that they received special education in the past year.

Figure 4. Supports received at school for youth with an IEP still in school at ages 15-18, in 2012 and 2003



*=statistically significant difference ($p < .05$); ✓=statistically significant difference and at least 5.0 percentage points.

Figure reads: From 2003 to 2012, the proportion of youth with an IEP ages 15 to 18 who received services from a tutor, reader, or interpreter grew from 18 percent to 33 percent. The proportion of youth who received speech or language therapy at school increased from 18 percent to 24 percent. The proportion of youth who received audiology services at school increased by 1 percentage point. The proportion of youth who received psychological or mental health counseling at school increased from 13 percent to 28 percent. The proportion of youth who received physical or occupational therapy (including orientation and mobility services) at school increased from 6 percent to 13 percent. There was no change in the percentage of youth who received special transportation at school.

Source: NLTS 2012 and NLTS2 data. Parents reported on the measures. Receipt of any support services at school was limited to youth whose parents reported that they received special education in the past year.

- **Parents of youth with an IEP are more likely to provide some forms of academic support to their children than are other parents, but the trends in this support over the past decade have been mixed.** In 2012, parents of youth with an IEP ages 13-21 were more likely than other parents to attend parent–teacher conferences (84 percent versus 65 percent) and help their children with homework weekly (62 percent versus 54 percent) (Table 4). However, they were 6 to 13 percentage points less likely than other parents to attend a school event (58 percent versus 71 percent) or volunteer at school (22 percent versus 28 percent). For parents of youth with an IEP ages 15-18, attendance at parent–teacher conferences grew by 16 percentage points between 2003 and 2012 (from 67 to 83 percent), though the proportion providing weekly homework help declined by 7 percentage points (from 62 to 55 percent) (Figure 3).

Table 4. Supports provided by parents during the school year in 2012, by IEP status for all youth still in school at ages 13-21

Measure	IEP (%)	No IEP (%)	Difference
Parent attended a parent–teacher conference	84	65	19*✓
Parent helped with homework at least once a week	62	54	8*✓
Parent attended a school or class event	58	71	-13*✓
Parent volunteered at school	22	28	-6*✓

*=statistically significant difference ($p < .05$); ✓=statistically significant difference and at least 5.0 percentage points.

Table reads: Parents of youth with an IEP ages 13-21 were more likely than other parents in 2012 to attend parent-teacher conferences (84 percent versus 65 percent) and help with homework (62 percent versus 54 percent), but less likely to attend school functions (58 percent versus 71 percent) and volunteer at school (22 percent versus 28 percent).

Source: NLTS 2012. Parents reported on the measures.

Youth with an IEP lag their peers in preparing for college, careers, and independent living, and are less likely than in the past to participate in key transition activities.

Students can prepare for the transition to adult life by undertaking activities such as applying to college or gaining work experience during high school. IDEA lays a foundation for these efforts by requiring schools to invite youth with an IEP who are at least 16 years old and their parents to discuss goals for life after high school and develop a plan for reaching those goals. IDEA 2004 increased this emphasis on transition planning, mandating that their postsecondary goals be concrete and measurable. Research suggests that the process of helping youth formulate and pursue transition goals might improve their outcomes later in life.[13]

- **Compared with other students, youth with an IEP are less likely to take steps to prepare for postsecondary education, and their parents are less likely to expect they will live independently.** In 2012, youth with an IEP (ages 16 and older) were nearly 30 percentage points less likely to report having taken a college entrance or placement test (42 percent versus 70 percent) and almost 20 percentage points less likely to have taken a high school course for college credit (9 percent versus 28 percent) (Table 5). Similarly, while more than three-quarters of youth with an IEP (ages 13-21) reported that they expect to obtain postsecondary education, this rate was 18 percentage points lower than the rate for youth without an IEP (76 percent versus 94 percent). Parents of youth with an IEP were also 18 percentage points less likely than other parents to expect their children to live independently by age 30 (78 percent versus 96 percent).

- **Paid work experience is less common for youth with an IEP relative to their peers and relative to the past decade.** Youth with an IEP ages 13-21 were 10 percentage points less likely than youth without an IEP in 2012 to report having had any paid work experience in the past year, school sponsored or otherwise (40 percent versus 50 percent) (Table 5). Among youth with an IEP ages 15-18 there was little change over time in school-sponsored work activities (14 percent in 2003 and 13 percent in 2012) but the proportion in other types of jobs declined by 8 percentage points (from 27 percent to 19 percent) (Figure 5).

Table 5. Transition activities and expectations for life after high school in 2012, by IEP status for all youth still in school at ages 13-21

Measure	IEP (%)	No IEP (%)	Difference
Has taken a college entrance or placement test (ages 16 and older)	42	70	-28*✓
Has taken a high school course for college credit (ages 16 and older)	9	28	-17*✓
Youth expects to obtain postsecondary education	76	94	-18*✓
Parent expects youth to be living independently at age 30	78	96	-18*✓
Paid work experience in the past year	40	50	-10*✓

*=statistically significant difference ($p < .05$); ✓=statistically significant difference and at least 5.0 percentage points.

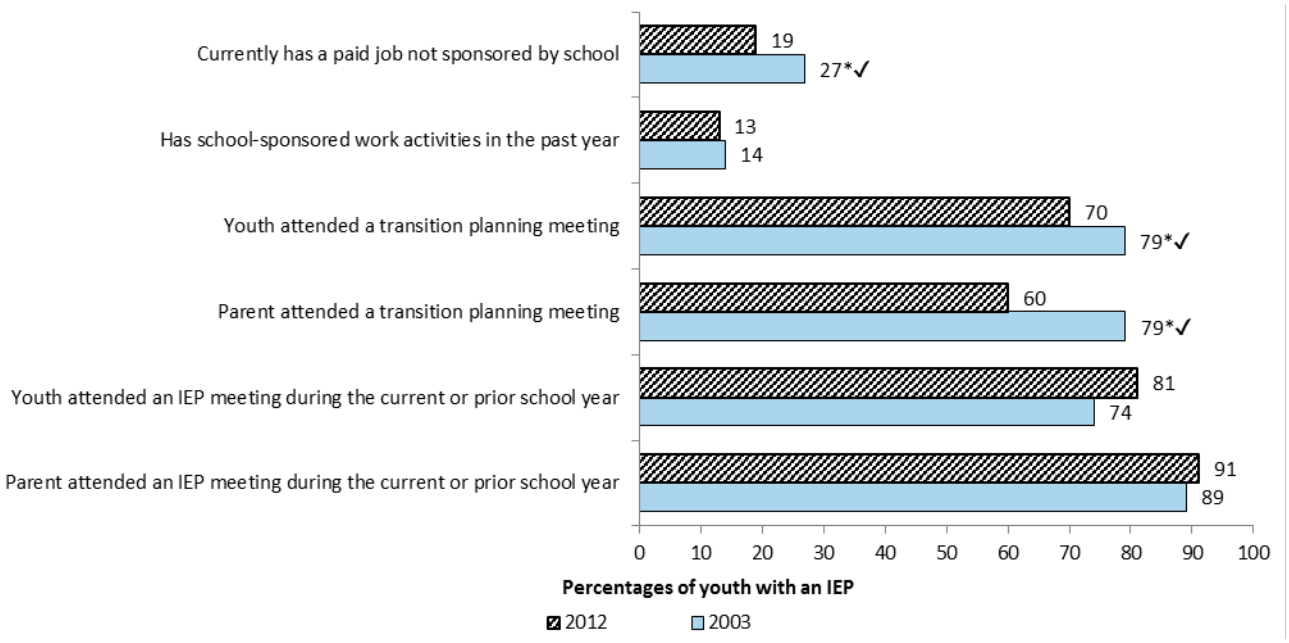
Table reads: Youth with an IEP ages 13 to 21 in 2012 had lower expectations and lagged their peers in preparing to transition from high school. For example, they were less likely than youth without an IEP to expect to obtain postsecondary education (76 percent versus 94 percent).

Note: The questions about college placement exams and taking courses for college credit were asked to youth ages 16 and older.

Source: NLTS 2012. Youth reported on all but the fourth measure, which was parent-reported.

- **Youth with an IEP and their parents are less likely than a decade ago to participate in transition planning but just as likely to have recently attended an IEP meeting.** From 2003 to 2012, the proportion of youth (ages 17 and 18) and their parents who reported having met with school staff to discuss post-high school transition plans declined nearly 10 percentage points for youth (from 79 percent to 70 percent) and 20 percentage points for parents (from 79 percent to 60 percent) (Figure 5). However, reported participation rates in IEP meetings did not decline.

Figure 5. Work experience and transition activities for youth with an IEP, still in school at ages 15-18, in 2012 and 2003



*=statistically significant difference ($p < .05$); ✓=statistically significant difference and at least 5.0 percentage points.

Figure reads: From 2003 to 2012, the proportion of youth (ages 15 to 18) reporting that they currently had a paid nonschool job declined from 27 percent to 19 percent, but rates of having school-sponsored work did not change (14 percent and 13 percent). The proportion of 17 and 18 year old youth and their parents who reported having attended a transition-planning meeting declined for both youth (from 79 percent to 70 percent) and parents (from 79 percent to 60 percent). IEP meeting participation rates in the past two years did not decline.

Note: Questions about attending IEP and transition-planning meetings were asked only to youth ages 17 and 18, and their parents as IDEA requires schools invite youth 16 years and older and their parents to participate in transition planning discussions.

Source: NLTS 2012 and NLTS2. Youth reported on all but the fourth and sixth measures, which were parent-reported. The last four measures were limited to youth whose parents reported that the youth received special education in the past year.

Youth with an IEP in 2012 are more socioeconomically disadvantaged than other youth and youth with an IEP in the past; however, their gender, racial, and ethnic makeup has not changed.

The characteristics of youth with an IEP provide important context for understanding their educational experiences and their later success. Research generally shows an association between lower socioeconomic status and lower rates of high school completion, college enrollment, and employment.[14] Lower levels of academic performance and attainment of boys and of youth from certain racial-ethnic minority groups suggest they may face different challenges than their counterparts, regardless of whether they have a disability.[15]

- **The proportion of youth with an IEP living in socioeconomically disadvantaged households is larger than among their peers and has increased in the past decade.** Compared with their peers in 2012, youth with an IEP ages 13-21 were 12 percentage points more likely to live in low-income households[16] (58 percent versus 46 percent) (Table 6). Their parents were also more likely than other parents to report having recently received federal food benefits through the Supplemental Nutrition Assistance Program (SNAP) (35 percent versus 26 percent) and more likely to not have paid jobs (20 percent versus 13 percent). Compared with 2003, youth with an IEP ages 15-18 in 2012 were nearly 5 percentage points more likely to have a parent who did not have a paid job (from 15 percent to 20 percent) (Figure 6). In addition, their households were twice as likely in 2012 as in 2003 to have recently received SNAP benefits (33 percent versus 16 percent).

Table 6. Socioeconomic backgrounds in 2012, by IEP status for all youth still in school at ages 13-21

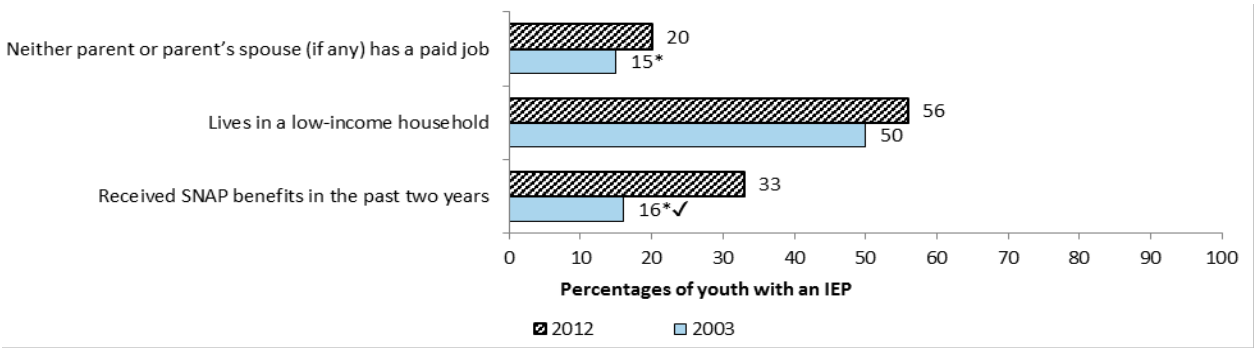
Measure	IEP (%)	No IEP (%)	Difference
Neither parent or parent's spouse (if any) has a paid job	20	13	7*✓
Lives in a low-income household	58	46	12*✓
Received SNAP benefits in the past two years	35	26	9*✓

*=statistically significant difference ($p < .05$); ✓=statistically significant difference and at least 5.0 percentage points.

Table reads: Youth with an IEP ages 13 to 21 were more socioeconomically disadvantaged than youth without an IEP in 2012. For example, 58 percent lived in a low-income household compared with 46 percent of youth without an IEP.

Source: NLTS 2012. Parents reported on the three measures.

Figure 6. Socioeconomic backgrounds of youth with an IEP still in school at ages 15-18, in 2012 and 2003



*=statistically significant difference ($p < .05$); ✓=statistically significant difference and at least 5.0 percentage points.

Figure reads: From 2003 to 2012, the proportion of youth with an IEP (ages 15 to 18) without a working parent increased nearly 5 percentage points (from 15 to 20 percent). About half of youth with an IEP in both years lived in low-income households. Household receipt of federal food benefits in the past two years doubled from 2003 to 2012 among all youth with an IEP (from 16 percent to 33 percent).

Source: NLTS 2012 and NLTS2. Parents reported on the three measures.

- **Youth with an IEP are more likely to be male and black than other youth, and their gender, racial, and ethnic makeup has been stable over the past decade.** Two-thirds of youth with an IEP ages 13-21 were male in 2012, compared with 49 percent of their peers (Table 7). They were also more likely to be black (19 percent versus 14 percent), and about as likely to be Hispanic. Among youth with an IEP ages 15-18 in both 2003 and 2012, two-thirds were male, one-fifth were black, and one-fifth were Hispanic (Figure 7).

Table 7. Demographic characteristics in 2012, by IEP status for all youth still in school at ages 13-21

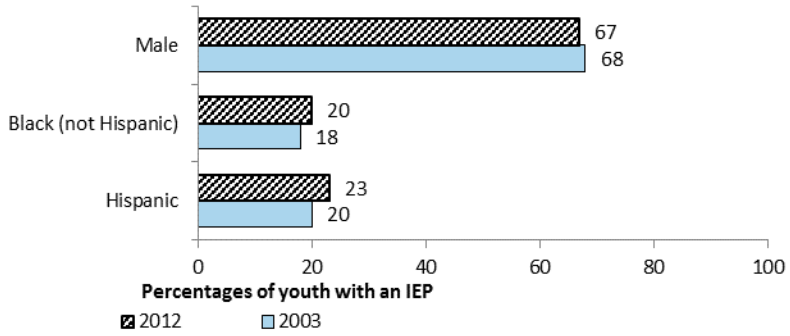
Measure	IEP (%)	No IEP (%)	Difference
Male	67	49	18*✓
Black (not Hispanic)	19	14	5*
Hispanic	24	25	-1

*=statistically significant difference ($p < .05$); ✓=statistically significant difference and at least 5.0 percentage points.

Table reads: Youth with an IEP ages 13 to 21 in 2012 were more likely than their peers to be male (67 percent versus 49 percent) and black (19 percent versus 14 percent), but not Hispanic (24 percent and 25 percent)

Source: NLTS 2012. The three measures were reported by districts and confirmed by parents.

Figure 7. Demographic characteristics of youth with an IEP still in school at ages 15-18, in 2012 and 2003



*=statistically significant difference ($p < .05$); ✓=statistically significant difference and at least 5.0 percentage points.

Figure reads: About two-thirds of youth with an IEP (ages 15 to 18) in both 2003 and 2012 were male. The proportions of all youth with an IEP who were black and who were Hispanic have also been stable (each are about one in five).

Source: NLTS 2012 and NLTS2. The three measures were reported by districts and confirmed by parents.

Among disability groups, youth with autism, deaf-blindness, intellectual disability, multiple disabilities, and orthopedic impairments are most at risk for not transitioning successfully beyond high school; over the past decade youth with emotional disturbance and intellectual disability have experienced the most progress.

Youth with an IEP include students with diverse abilities, disabilities, and needs. As a reflection of this diversity, IDEA recognizes 12 disability groups, and requires schools to meet the needs of individual students within each group through their IEP. Because efforts to develop and identify effective service approaches often target specified disabilities, it is useful to explore the experiences of youth in each disability group, particularly indicators linked with success after high school. An analysis of such measures can reveal which disability groups have experienced progress and which groups remain most at risk for difficulty transitioning to post-high school life.

- **Youth with autism, deaf-blindness, intellectual disability, multiple disabilities, and orthopedic impairments are less likely than all youth with an IEP to have experiences that are linked to success after high school, but have advantages in other areas.** In 2012, youth in these five disability groups lagged behind youth with an IEP overall in the extent to which they were preparing to become more independent. For example, according to their parents, youth in these disability groups were less likely to perform "activities of daily living well" (typical teenage tasks such as fixing meals, doing laundry, and buying things they need in a store), with the proportion in each group ranging from 17 percent (for youth with autism) to 25 percent (youth with deaf-blindness and youth with intellectual disability) compared to 46 percent for all youth with an IEP (Table 8). The percentage of youth in these disability groups with paid work experience ranged from 20 to 32, compared to 40 percent of youth with an IEP overall. But youth in some of these groups also had advantages relative to all youth with an IEP. For example, youth with deaf-blindness were more likely than youth with an IEP overall to participate in sports or clubs (81 percent versus 64 percent). Youth with autism, intellectual disability, multiple disabilities, and orthopedic impairments were less likely to be suspended than all youth with an IEP (the percentage never suspended ranges from 78 to 91 percent, compared to 71 percent for youth with an IEP overall).

Table 8. Percentages of youth with an IEP overall and with specified disabilities who have experiences linked with post-high school outcomes, in 2012 for all youth still in school at ages 13-21

Measure	IEP (%)	Autism (%)	Deaf-blindness (%)	Intellectual disability (%)	Multiple disabilities (%)	Orthopedic impairment (%)
Performs activities of daily living well	46	17*✓	25*✓	25*✓	20*✓	23*✓
Got together with friends weekly	52	29*✓	16*✓	42*✓	35*✓	36*✓
Participated in a school sport or club in past year	64	59*	81*✓	57*✓	53*✓	59
Never suspended	71	80*✓	‡	78*✓	83*✓	91*✓
Has taken a college entrance or placement test (ages 16 and older)	42	29*✓	30!	24*✓	16*✓	31*✓
Had paid work experience in the past year	40	23*✓	23*✓	32*✓	22*✓	20*✓
Parent expects youth to be living independently at age 30	78	49*✓	67	46*✓	35*✓	55*✓

*=statistically significant difference relative to IEP estimate ($p < .05$); ✓=statistically significant difference and at least 5.0 percentage points; !=interpret data with caution. 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.

Table reads: Youth with autism, deaf-blindness, intellectual disability, multiple disabilities, and orthopedic impairments were less likely than youth with an IEP overall in 2012 to have several experiences linked with post-high school outcomes, although all but youth with deaf-blindness (where data could not be reported) were less likely to be suspended.

Note: The question about taking college placement exams was asked to youth aged 16 and older. Performing activities of daily living refers to fixing own meals, doing laundry, cleaning own room, buying needed things at the store, and going to places outside the home without help.

Source: NLTS 2012. Youth reported the first, second, fourth, and fifth measures. Parents reported the third, sixth, and seventh measures.

- **There were improvements for youth with emotional disturbance and intellectual disability over the decade.** From 2003 to 2012, youth ages 15-18 in these two groups made progress in key measures of engagement and support. For instance, rates of participation in school sports and clubs for youth with emotional disturbance and intellectual disability increased at least 16 percentage points – from 40 to 56 percent and from 36 to 56 percent, respectively (Table 9). The parents of youth in these groups also reported increases in the proportion of their children receiving tutoring, reader, or interpreter services—increasing by 14 percentage points for those with emotional disturbance (from 15 to 29 percent) and 22 percentage points for those with intellectual disabilities (from 14 to 36 percent). Youth with emotional disturbance were also more likely to perform typical teenage activities of daily living well than was the case a decade ago (12 percent in 2012 versus 5 percent in 2003). Among youth with intellectual disabilities, the proportion who were not suspended increased from 62 percent to 75 percent, but they were less likely than before to get weekly homework help from their parents (59 percent in 2012 versus 70 percent 2003).

- **Reduction in transition preparation activity was most common for youth with hearing impairments.** From 2003 to 2012, transition activities inside and outside of school declined for youth with hearing impairments. The proportion of youth with hearing impairments ages 17-18 who reported meeting with school staff to discuss their transition plans decreased from 88 percent to 71 percent (Table 9). In addition, the proportion of youth with hearing impairments ages 15-18 who were employed in a paid job (excluding jobs sponsored by school) declined from 35 percent to 14 percent.

Table 9. Experiences linked with post-high school outcomes for youth with emotional disturbance, intellectual disability, and hearing impairments still in school at ages 15-18, in 2012 and 2003

	Emotional disturbance		Intellectual disability		Hearing impairments	
Measure	2003 (%)	2012 (%)	2003 (%)	2012 (%)	2003 (%)	2012 (%)
Participated in a school sport or club in past year	40*✓	56	36*✓	56	57	62
Never suspended	25	32	62*✓	75	75	81
Received school tutoring, reader, or interpreter services	15*✓	29	14*✓	36	43	46
Parent helped with homework at least once a week	48	48	70*✓	59	58	60
Youth attended a transition planning meeting (ages 17 and 18)	69	71	64	66	88*✓	71
Has a paid job not sponsored by school	19	19	16	11	35*✓	14
Performs all five daily living activities (ages 15 and 16)	5 *✓	12	10	11	19	19

*=statistically significant difference ($p < .05$); ✓=statistically significant difference and at least 5.0 percentage points.

Table reads: Youth with emotional disturbance and intellectual disability ages 15 to 18 had multiple positive trends in experiences listed in the table while those with hearing impairments had multiple negative trends.

Note: Performing activities of daily living refers to fixing own meals, doing laundry, cleaning own room, buying needed things at the store, and going to places outside the home without help. The set of measures in this table is not the same as in Table 8 because some measures in Table 8 are not available for over-time comparisons.

Source: NLTS 2012 and NLTS2. Youth reported on the first, fifth, and sixth measures. Parents reported on the other measures. Receipt of school tutoring and attendance at a transition planning meeting were limited to youth whose parents reported that the youth received special education services in the past year.

Endnotes

[1] Newman, L., Wagner, M., Cameto, R., Knokey, A. M., & Shaver, D. (2010). *Comparisons across time of the outcomes of youth with disabilities up to 4 years after high school. A report of findings from the National Longitudinal Transition Study (NLTS) and the National Longitudinal Transition Study-2 (NLTS2)* (NCSER 2010-3008). Menlo Park, CA: SRI International; Wagner, M., Newman, L., D'Amico, R., Jay, E. D., Butler-Nalin, P., Marder, C., et al. (1991). *Youth with disabilities: How are they doing?* Menlo Park, CA: SRI International.

[2] Dee, T. S., Jacob, B., & Schwartz, N. L. (2013). The effects of NCLB on school resources and practices. *Educational Evaluation and Policy Analysis*, *35*(2), 252–279; Thapa, A., Cohen, J., Guffey, S., & Higgins-D'Alessandro, A. (2013). A review of school climate research. *Review of Educational Research, 83*(3), 357–385.

[3] Colby, S. L., & Ortman, J. M. (2015). *Projections of the size and composition of the U.S. population: 2014 to 2060*. Washington, DC: U.S. Department of Commerce, Economics and Statistics Administration, U.S. Census Bureau; Oreopoulos, P., & Petronijevic, U. (2013). Making college worth it: A review of the returns to higher education. *The Future of Children, 23*(1), 41–65; Oreopoulos, P., von Wachter, T., & Heisz, A. (2012). The short- and long-term career effects of graduating in a recession. *American Economic Journal: Applied Economics, 4*(1), 1–29.

[4] Lipscomb, S., Haimson, J., Liu, A. Y., Burghardt, J., Johnson, D. R., & Thurlow, M. L. (2017a). *Preparing for life after high school: The characteristics and experiences of youth in special education. Findings from the National Longitudinal Transition Study 2012. Volume 1: Comparisons with other youth: Full report* (NCEE 2017-4016). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance; Lipscomb, S., Haimson, J., Liu, A. Y., Burghardt, J., Johnson, D. R., & Thurlow, M. L. (2017b). *Preparing for life after high school: The characteristics and experiences of youth in special education. Findings from the National Longitudinal Transition Study 2012. Volume 2: Comparisons across disability groups: Full report* (NCEE 2017-4018). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance; Liu, A. Y., Lacoe, J., Lipscomb, S., Haimson, J, Johnson, D. R., & Thurlow, M. L. (2018). *Preparing for life after high school: The characteristics and experiences of youth in special education. Findings from the National Longitudinal Transition Study 2012. Volume 3: Comparisons over time: Full report* (NCEE 2018–4007). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance.

[5] The brief refers to 2012 because the NLTS 2012 is representative of secondary school students in that year, although the findings are based on survey responses from both 2012 and 2013. The study collected half of all survey responses in each year. The vast majority of youth (97 percent) were aged 13-21 at the time of the survey.

[6] Burghardt, J., Haimson, J., Liu, A. Y., Lipscomb, S., Potter, F., Waits, T., & Wang, S. (2017). *National Longitudinal Transition Study 2012 design documentation* (NCEE 2017-4021). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance.

[7] NLTS 2012 will also follow youth through high school and beyond, relying on administrative data to examine high school completion and college participation rates.

[8] For more detail, see the NLTS 2012 Design Documentation [Burghardt, J., Haimson, J., Liu, A. Y., Lipscomb, S., Potter, F., Waits, T., & Wang, S. (2017). *National Longitudinal Transition Study 2012 design documentation* (NCEE 2017-4021). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance] and the technical appendix of Volume 3 [Liu, A. Y., Lacoe, J., Lipscomb, S., Haimson, J, Johnson, D. R., & Thurlow, M. L. (2018). *Preparing for life after high school: The characteristics and experiences of youth in special education. Findings from the National Longitudinal Transition Study 2012. Volume 3: Comparisons over time: Full report* (NCEE 2018–4007). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance].

[9] Anderson, A. R., Christenson, S. L., Sinclair, M. F., & Lehr, C. A. (2004). Check & Connect: The importance of relationships for promoting engagement with school. *Journal of School Psychology, 42*, 95–113; Sinclair, M. F., Christenson, S. L., & Thurlow, M. L. (2005). Promoting school completion of urban secondary youth with emotional or behavioral disabilities. *Exceptional Children, 71*(4), 465–482; Juvonen, J., Espinoza, G., & Knifsend, C. (2012). The role of peer relationships in student academic and extracurricular engagement. In Christenson, S. L., Reschly, A. L., Wylie, C. (Eds.), *Handbook of Research on Student Engagement*, 387–401. New York: Springer-Verlag; Wang, M. T., & Eccles, J. S. (2012). Adolescent behavioral, emotional, and cognitive engagement trajectories in school and their differential relations to educational success. *Journal of Research on Adolescence, 22*(1), 31–39.

[10] Sullivan, A. L., Van Norman, E. R., & Klingbeil, D. A. (2014). Exclusionary discipline of students with disabilities: Student and school characteristics predicting suspension. *Remedial and Special Education, 35*(4), 199–210; Zablocki, M., & Krezmien, M. P. (2013). Drop-out predictors among students with high-incidence disabilities: A National Longitudinal Transitional Study 2 Analysis. *Journal of Disability Policy Studies*, *24*(1), 53–64.

[11] Cornell, D. G., & Mayer, M. J. (2010). Why do school order and safety matter? *Educational Researcher, 39*(1), 7–15.

[12] For both those with and without an IEP, the percentages who agreed at least "a little" with these two statements exceeded 80 percent.

[13] Mazzotti, V. L., Rowe, D. A., Sinclair, J., Poppen, M., Woods, W. E., & Shearer, M. L. (2015). Predictors of post-school success: A systematic review of NLTS2 secondary analyses. *Career Development and Transition for Exceptional Individuals, 39*(4), 196–215; Test, D. W., Mazzotti, V. L., Mustian, A. L., Fowler, C. H., Kortering, L., & Kohler, P. (2009). Evidence-based transition predictors for improving post school outcomes for students with disabilities. *Career Development for Exceptional Individuals, 32,* 180–181.

[14] Newman, L., Wagner, M., Knokey, A.-M., Marder, C., Nagle, K., Shaver, D., Wei, X., (with Cameto, R., Contreras, E., Ferguson, K., Greene, S., & Schwarting, M.) (2011). *The post-high school outcomes of young adults with disabilities up to 8 years after high school: A report from the National Longitudinal Transition Study-2 (NLTS2)* (NCSER 2011-3005). Menlo Park, CA: SRI International; Aud, S., KewalRamani, A., & Frohlich, L. (2011). *America's youth: Transitions to adulthood* (NCES 2012-026). Washington, DC: U.S. Department of Education, National Center for Education Statistics; Fryer Jr, R. G., & Katz, L. F. (2013). Achieving escape velocity: Neighborhood and school interventions to reduce persistent inequality. *The American Economic Review*, *(103)*3, 232–237; Schifter, L. A. (2016). Using survival analysis to understand graduation of students with disabilities. *Exceptional Children, 82*(4), 479–496; Wagner, M. M., Newman, L. A., & Javitz, H. S. (2014). The influence of family socioeconomic status on the post–high school outcomes of youth with disabilities. *Career Development and Transition for Exceptional Individuals, 37*(1), 5–17.

[15] Freeman, C. E. (2004). *Trends in educational equity of girls and women* (NCES 2005-016). Washington, DC: U.S. Department of Education, National Center for Education Statistics; DiPrete, T. A., & Buchmann, C. (2013). *The rise of women: The growing gender gap in education and what it means for American schools*. New York, NY: Russell Sage Foundation; Reardon, S. F. (2015, February). The Educational Opportunity Monitoring Project. Stanford University, Center for Education Policy Analysis. Retrieved from http://cepa.stanford.edu/educational-opportunity-monitoring-project/achievement-gaps/race/.

[16] A low-income household is defined as having an annual income below 185 percent of the federal poverty level.

For more information on the full study, please visit:

https://ies.ed.gov/ncee/projects/evaluation/disabilities_nlts2012.asp

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